

CPA Common Final Examination

BOARD OF EXAMINERS' REPORT

PART A — The Day 2 and Day 3 Report

September 2019 Examination

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THE BOARD OF EXAMINERS' REPORT ON THE SEPTEMBER 2019 COMMON FINAL EXAMINATION

OBJECTIVES OF THE REPORT

The objective of this report is to explain the Common Final Examination (CFE) process and to assist the profession in improving the performance of candidates on the CFE.

The report sets out the responsibilities of the Board of Examiners, the methods used for guide setting and marking the CFE, and the results of the marking process. The report also includes recommendations to candidates from the Board of Examiners.

The September 2019 CFE Report is presented in two parts: Part A is the Day 2 and Day 3 Report and Part B is the Day 1 report.

The appendices provide more detailed information on the design, guide setting, and marking of the CFE, as well as the board's expectations of candidates on the simulations. Readers are cautioned that the marking guides were developed for the entry-level candidate and that, therefore, all the complexities of a real-life situation may not be fully reflected in the content. The CFE report is not an authoritative source of GAAP.

Since the objective of this report is to explain the standard CFE process and to assist the profession in improving future candidate performance, this report is focused on the normal marking process. The Board of Examiners has also issued a separate document that summarizes the marking process and additional steps taken to evaluate candidates' responses due to disruptions involving the September 2019 Common Final Examination. *A Summary of the Board of Examiner's Report, 2019 Common Final Examination*, can be found on the CPA Canada website¹.

RESPONSIBILITIES OF THE BOARD OF EXAMINERS

The Board of Examiners (BOE or the board) comprises a chair, a vice-chair, and sixteen members appointed by the provincial bodies.

The board's responsibilities, as set out in its terms of reference, include the following:

- Setting the CFE in accordance with the *CPA Competency Map* (the *Map*) and other directions from the Professional Education Management Committee;
- Submitting the CFE and the marking guides to the provincial bodies for review;
- Marking the candidates' responses and recommending to the provincial bodies the pass or fail standing that should be given to each candidate; and
- Reporting annually on the CFE to various CPA committees and the provincial bodies, in such form and detail and at such time as is satisfactory to them.

1 <https://www.cpacanada.ca/en/members-area/profession-news/2019/september/cfe-exam-2019>

The chair is responsible for the supervision of the evaluation process. A CFE subcommittee, made up of 10 members of the board, is actively involved in the preparation of the CFE simulations, the preliminary marking guides, and the setting of the initial passing profile. Selected members of that subcommittee participate in the Preliminary Evaluation Centre where the marking guides are tested against candidate responses and finalized, and in the start-up of the marking centre. The BOE chair and vice-chair provide oversight throughout the entire marking process. The full board is responsible for determining the passing standard.

THE CFE

Preparation and Structure of the CFE

The board staff works in conjunction with authors to ensure that simulations presented to the board achieve the overall intent and design objectives set by the board, while adhering to the competencies and the proficiency levels specified in the *Map*.

The full board provides guidance as to the content and nature of simulations to be included on the examination. It also reviews and refines these simulations to make up the three-paper evaluation set.

Nature of the Simulations

The CFE comprises a set of simulations that are both essential and effective in evaluating the candidates' readiness to enter the profession:

Day 1 – The first paper is a four-hour examination consisting of a single simulation that is linked to the Capstone 1 group case. There are two versions of the linked cases. Version 1 is linked to the most current Capstone case and is written by first time writers and by repeat writers who chose to attempt the new case rather than Version 2 of the previous Capstone case. Version 2 is written by repeat writers and candidates who deferred and are writing Version 2 as their first attempt.

Day 2 – The second paper is a five-hour case, with four different roles and requirements. Additional information tailored to each role is provided in four separate appendices.

Day 3 – The third paper, is a four-hour paper, consisting of three multi-competency area simulations.

Assessment Opportunities

The board applies competency-based marking procedures that enable it to decide which candidates demonstrate readiness to enter the profession.

Assessment Opportunities are designed to answer the question, "What would a competent CPA do in these circumstances?" To attain a pass standing, candidates must address the issues in the simulations that are considered significant.

Appendix A contains a comprehensive description of the evaluation process.

Marking Guides

Marking centre leaders and assistant leaders provide valuable input during the testing and setting of the marking guides, before live marking begins. The board chair, the vice-chair, selected board member(s) and senior evaluations staff hold meetings with the leaders and their assistants during both the guide-setting and the marking processes. See **Appendix B** for the Day 1 simulations that appeared on the 2019 CFE and **Appendix C and D** for the Day 2 and Day 3 simulations and marking guides. The marking results for Day 2 and Day 3, by Assessment Opportunity, appear in the statistical reports found in **Appendix E** of this report. See Part B of the CFE Report for details on Day 1, HEVW Version 1 and Version 2.

Day 1 – The marking guide is designed to assess the candidate on the stages of the CPA Way: 1) situational analysis; 2) analysis of the major issues; 3) conclusions and advice; and 4) communication. Based on these four summative assessments, the candidate's response is then holistically judged to be either a passing or a failing response.

Day 2 and Day 3 – Marking guides are prepared for each simulation. Besides identifying the Assessment Opportunities, each marking guide includes carefully defined levels of performance to assist markers in evaluating a candidate's competence relative to the expectations set out by the board when developing the passing profile for a competent CPA.

Five categories of performance are given for each Assessment Opportunity. The candidate's performance must be ranked in one of the five categories:

- Not Addressed
- Nominal Competence
- Reaching Competence
- Competent
- Competent with Distinction

Setting the Passing Standard

The board chair and vice-chair participate in the monitoring of live marking. Near the completion of the marking process, the CFE subcommittee satisfies itself that the markers applied the marking guides as intended by the board.

In determining which candidates pass the CFE, a candidate is judged in relation to the board's pre-established expectations of an entry-level chartered professional accountant. Any changes to the initial profile that were made throughout guide-setting and the marking centre are ratified by the full board. In setting the passing profile, the board considers the following:

- The competency area requirements described in the *Map*
- The level of difficulty of each simulation
- The level of difficulty of each Assessment Opportunity
- The design and application of the marking guides
- Comments from leaders and assistant leaders regarding any marking difficulties encountered or any time constraints noted
- Possible ambiguity of wording or of translation
- Input on critical decision factors from an independent board of three CPAs who review the fair pass package

The Decision Model

The purpose of the CFE is to assess whether candidates possess the competencies required of an entry-level CPA through a written evaluation that is common to all CPAs. Each day of the CFE is unique and is designed specifically to assess different skills:

- Day 1 is linked to the Capstone 1 group case work. It assesses the candidates' ability to demonstrate professional skills. It is independent from Day 2 and Day 3.
- Day 2 is the **depth** test. It assesses technical **depth** in one of four unique roles (that reflect the four CPA elective choices) and provides **depth** opportunities in the common core competency areas of Financial Reporting and/or Management Accounting. Candidates pre-select one role and respond from that role's perspective.
- Day 3 supplements the **depth** test in the common core areas of Financial Reporting and/or Management Accounting. It is also the **breadth** test for all common core competency areas.

Candidates must pass all three days in order to qualify for entry to the profession. Those seeking licensure must obtain depth in Financial Reporting and in the Assurance Role.

Day 1

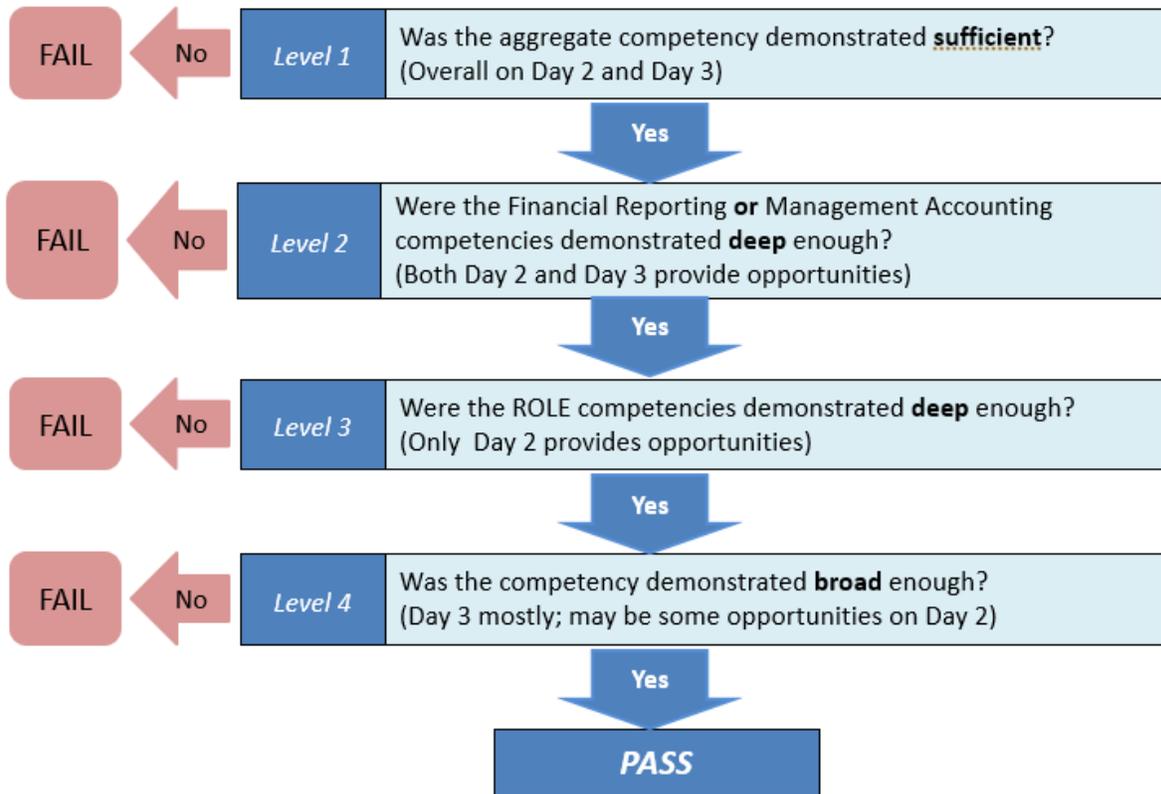
Day 1 is assessed independently from Day 2 and Day 3. A pass or fail decision is made based on a holistic assessment of the candidates' performance in applying the CPA Way to demonstrate essential professional skills.

Day 2 and Day 3

The decision model used by the board is presented in Exhibit I. Four key decision points, or levels, are applied in reaching a pass or fail decision, as follows:

1. The response must be **sufficient**; i.e., the candidate must demonstrate competence in the Assessment Opportunities presented on Day 2 and Day 3 (Level 1).
2. The response must demonstrate **depth** in the common core area of Financial Accounting or Management Accounting (Level 2).
3. The response must demonstrate **depth** in the pre-selected elective role (Level 3).
4. The response must demonstrate **breadth** across all competency areas of the *Map*, at a core level, by not having avoided a particular technical competency area (Level 4).

EXHIBIT I
DAY 2 AND 3 PASS/FAIL ASSESSMENT MODEL



Approving the Results

The CFE subcommittee reviews and approves the marking results for each simulation. Day 1 is assessed separately from Day 2 and Day 3.

Day 1 – The CFE subcommittee discusses the profiles for both the marginally passing and marginally failing candidates to confirm that the board's pre-established passing profile has been appropriately applied by the markers.

Day 2 and Day 3 – As part of the development process, the CFE subcommittee sets preliminary requirements for the three levels (tests of depth and breadth) being assessed on the Day 2 and Day 3 simulations. After the marking is completed, the board reviews and finalizes those requirements. The board establishes the Level 1 (sufficiency) requirement for the combined Day 2 and Day 3 simulations.

During the approval process, the board continues to consider whether the results could be affected by any inconsistency in the evaluation or the board's processes.

Reporting

In reaching its decision, the board determines which candidates pass on a national basis only, without regard to provincial origin or language. Similarly, the detailed comments are based on analyses of the performance of all candidates.

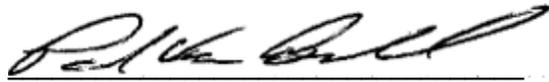
The board reports the following information by candidate number:

- Overall pass/fail standing and pass/fail standing for each of Day 1 and of Day 2 and Day 3 combined.
- A pass/fail standing for Day 1.
- A pass/fail standing for Level 1, Sufficiency. A decile ranking is provided for failing candidates.
- A pass/fail standing for Level 2, Depth in Financial Reporting and/or Management Accounting.
- A pass/fail standing for Level 3, Depth in Role.
- A pass/fail standing for Level 4, Breadth in all technical competency areas.

Thank You

All board members wish to express their warm and sincere appreciation for the outstanding energy, support, and commitment of the small group of Board of Examiners staff members whose dedication and talent contributed in large measure to the achievement of our objectives and the fulfilment of our responsibilities.

We also wish to acknowledge the contributions made by the provincial reviewers, markers, authors, translators, and editors. The commitment, energy, and skill demonstrated by all the markers were outstanding, resulting in the sound application of marking procedures and producing an appropriate evaluation of the candidates. Everyone's commitment to the quality and fairness of the process is appreciated.



Paul Van Bakel, CPA, CA
Chair
Board of Examiners



D. Jordan Oakley, CPA, CA
Vice Chair
Board of Examiners

A MESSAGE TO CANDIDATES

To attain a pass standing, candidates needed to achieve a “Pass” on Day 1 and on Day 2 and Day 3 combined to demonstrate sufficient competence in all areas, plus meet the two depth standards and the breadth standards.

INTRODUCTION

The September 2019 CFE Report, Part A and Part B combined, present detailed information on all candidates' performance for all the examination cases, except for the Day 1 linked case, Marmani Version 1. Commentary on the performance of candidates on Marmani Version 1 is provided in a summary format only, since detailed commentary on Marmani will only be provided after Version 2 is written in September 2020. The simulations, marking guides, marking results, and Board of Examiners' comments on the rest of the examination are found in this document (Part A of the CFE Report). Similar information on Day 1 (HEVW Version 1 and Version 2) can be found in Part B of the CFE Report.

The intent of this message from the BOE is to draw attention to the most common detracting characteristics observed in candidates' responses to the September 2019 CFE in order to help candidates improve their performance on future CFEs. The comments are based on feedback of the marking teams who marked the entire candidate population. The BOE's comments on the September 2019 CFE are limited to the broad themes noted by the markers. Those seeking the more detailed, AO by AO commentary on candidates' performance should refer to the BOE's comments in Appendix F of Part A or Appendix H of Part B of the CFE Report.

There were significant challenges faced by many of the candidates at the September 2019 CFE writing centres. More detail on the nature of the issues encountered and the steps that the BOE took to ensure that the responses were evaluated fairly can be found in the *Summary of the Board of Examiners' Report* issued in January 2020. The BOE is impressed by the resilience of candidates who wrote the CFE in September 2019. They demonstrated the true qualities of a CPA and performed to the best of their ability when presented with unexpected events. The BOE commends candidates for responding to the simulations thoughtfully and professionally, despite the challenges they faced.

Nature of the CFE

The design of the CFE is such that each day of the examination allows candidates to demonstrate a different skill set. Day 1 allows candidates to demonstrate their high-level professional skills, such as critical analysis, decision-making, and professional judgment, as well as communication. Day 2 allows candidates to demonstrate their technical competence in the common Financial Reporting and Management Accounting competencies and in their chosen role, which ties to one of the four elective areas. Day 2 typically, but not always, directs candidates to the work to be done and is not designed to be time constrained, allowing candidates to demonstrate depth. Day 3 allows candidates to demonstrate depth in the common Financial Reporting and Management Accounting competencies and provides multiple opportunities to demonstrate breadth in all the core technical competency areas. Day 3 is less directive and more integrative than Day 2. It is also time constrained, requiring candidates to prioritize their time per issue.

Strengths and Weaknesses

Time Management

The Day 1 portion of the CFE allowed ample time to read the case and consider the issues. Both the V1 and V2 cases required time to integrate the various parts of the case to be able to identify the underlying strategic issues. The board was pleased by the fact that the majority of candidates appeared to manage their time well on both Day 1 cases and left themselves sufficient time to consider the interrelationships between the issues and draw appropriate, integrative, conclusions.

On both V1 and V2, the Board noted that some candidates chose not to provide a situational analysis at all, proceeding immediately to their issue analysis. These candidates sometimes failed to discuss relevant considerations and trends in their analysis of the issues. Candidates are encouraged to take the time to perform a situational analysis, as it is an important step in assessing the critical changes. In the BOE's view, and as evidenced in some responses, there is a risk of missing key elements when skipping the situational analysis entirely.

The Day 2/Day 3 portion of the 2019 CFE required candidates to manage their time carefully. The Board saw evidence of time management issues on both Day 2 and Day 3.

On Day 2, many candidates spent a disproportionate amount of time addressing the common AOs compared to the role AOs. The teams noted several rushed and very short responses in the role section compared to the common section. The number of pages spent on the role AOs was sometimes as much as two-thirds less, suggesting that some candidates spent too much time on the six common AOs, and ran out of time on their role AOs. This was commonly seen in the Day 2 Finance, Taxation and Performance Management role responses. The BOE believes this was related to the fact that, for the first time on the CFE, the six common AOs contained an equal number of Management Accounting and Financial Reporting AOs and that candidates could easily spend excessive time on the quantitative Management Accounting AOs if they failed to balance and manage their time per AO properly.

Candidates are reminded that there needs to be a balance between the time spent on the common AOs, and the role AOs and that spending too much time on any one AO can hurt performance on another AO. Candidates should bear in mind that when the BOE designs the Day 2 case, it anticipates candidates spending more time on the role AOs than on the common AOs, as they are needed for the depth in role test, which is only on Day 2. In this case, it was important to manage the amount of time spent on the common AOs, to ensure sufficient time remained to address the seven role AOs in sufficient depth.

The Board noted a higher number of candidates skipping or hardly addressing AOs on Day 3 in 2019 than in 2018, which resulted in a higher percentage of Not Addressed (NA) and Nominal Competence (NC). The Board noted that in some cases, the AOs that were skipped on Case 1 and Case 2 were often those that were rated more difficult, suggesting that pressed for time, candidates chose to address the easier AOs first. The AO that was most often skipped was the Assurance AO on Day 3, Case 3 (Tiny). This may have been a conscious choice on the part of the candidates due to being time constrained, as there was also evidence of rushed or brief responses on one or two AOs on that same simulation. Day 3, Case 1 (SGF) was the longest of the three simulations and had eight AOs to address within the allotted 90 minutes, requiring strong time management skills. If candidates went over the suggested time on Case 1, they would have had difficulty making that time up since Day 3 is designed to be time constrained. The higher percentage of NA and NC suggests to the Board that candidates still need to improve their time management skills. The Board continues to encourage candidates to attempt all of the AOs because the CFE has not only depth and breadth tests but also a sufficiency score, which is impacted by skipping issues. The Board also notes, again, that it is important to use the suggested times as a guide to help manage the time spent per AO.

Lack of Support/Generic Discussions

A deficiency that was raised by the board in the 2018 *Message to Candidates* was also apparent in the 2019 responses, across all three days. Some candidates continue to list case facts, typically in point form, without elaborating on why these facts are relevant to their discussion or explaining the relationship to the point being argued. Typically, these candidates were able to sort the case facts into a list of pros, and cons for a decision like AO#4 (Second Optometrist) on Day 3, Simulation 2, but failed to explain why they were categorized as such from a strategic/governance perspective. Similarly, they listed the facts in different categories as part of Day 3, Simulation 3, AO#5 (SWOT), without further explanation. On Day 2, Taxation, AO#11 (Employee Residence), candidates listed the case facts under headings, sometimes under “arguments for resident / arguments for non-resident” and sometimes under “primary tie / secondary tie” but provided little or no explanation as to whether those facts indicated that Amber would be resident or not, or why.

Candidates must ensure that they answer the questions “Why?” or “So what?” when they make any point using case facts. Simply repeating case facts without any further explanation, even if it is in a logical format, is insufficient. The Board is interested in understanding a candidate’s logic and is looking for evidence of the analysis and professional judgment that has been applied in reaching a conclusion.

The Board also noted that some candidates drew conclusions on an analysis that failed to integrate the case facts, resulting in a superficial and generic analysis of the issues and unsupported conclusions. On Day 2, PM role, AO#13 (Departmental Performance Evaluation) some candidates' discussion of the current 360-degree performance evaluation system provided a list of indicators or objectives that were entirely generic. For example, for the Research and Development department, although Elcar's development team works on a direct material (battery) and not on the finished product (car), they recommended performance indicators such as "number of new products developed." Day 2, Taxation, AO#10 (CEO Compensation), is an example of where candidates provided unsupported conclusions, using a "yes/no" or "taxable/ not taxable" list without further explanation. As was noted in 2018, candidates are again reminded that a competent response on the CFE requires supported arguments and defensible positions that are case specific.

There were instances where candidates copied information from the *Handbook* but did not apply that information to the case facts. These "stand-alone" cut and pastes, frequently seen on Day 3, Case 1, AO#6 (NPO Contributions), and Day 3, Case 3, AO#3 (Grant), did not add value to a candidate's response. This is because the role of the CPA is to advise clients on the application of standards. Simply providing the standard is not sufficient. The BOE is interested in seeing the application of the accounting principles, as evidence of understanding by the candidate of the decision-making elements that were considered. The BOE finds more value in a discussion of the fundamental underlying accounting principles than with a cut and paste of the *Handbook* that has no supporting explanation. Candidates are reminded that the *Handbook* is a resource tool to be used to help explain their position and not a stand-alone component of a competent response.

Irrelevant Discussions/ Misinterpretation of the Required

Similar to prior years, there were instances of candidates providing irrelevant discussions, misreading or misinterpreting the requires. The BOE intentionally reduced the level of direction to some of the issues, which may have resulted in some candidates having more difficulty identifying the correct issue and relevant case facts to discuss on this examination.

On Day 1, Version 2 some candidates thought the heirloom vegetable business was an issue to be analyzed in depth rather than seeing that it was a clue to the broader governance issue. A discussion of expanding the vegetable growing was not intended as a stand-alone strategic decision as there were few case facts presented to analyze and a significant amount of time should not have been spent on this issue.

On Day 2 and Day 3, some candidates tried to find a home for new standards or changes in legislation that did not have a place in the case. For example, in the Day 2, Taxation role, class 14.1 discussions were attempted. And, on Day 3, candidates often tried to discuss the IFRS new lease standard instead of the ASPE lease discussion that was requested on Simulation 1, AO#7 even though the case was clearly in an ASPE context.

The following are some examples of where candidates misinterpreted the requirements. On Day 2, Common AO#3 (Reporting Improvements), some candidates provided a variance analysis of the existing report instead of commenting on ways to improve the reporting. On Day 2, Assurance role, AO#11 (Provincial Grant), some candidates provided special reporting options for the provincial grant agreement. Denise did not ask for this to be provided, and in fact had explicitly stated that she wanted procedures related to an audit report on compliance with an agreement. Therefore, candidates who chose to discuss the various options, such as a Section 9100 report or a review on compliance with agreement, spent time discussing a topic that provided very little value.

Also on Day 2, Assurance role, AO#13 (Environmentally Responsible Actions) some candidates seemed to have misinterpreted the required and/or their role entirely for this AO, taking on an internal role rather than the role of an external auditor and discussed measures that could be implemented to ensure that Elcar meets the statements. Others discussed how Elcar could demonstrate that they have met these statements, and some suggested changes to the statements so that Elcar could more easily meet them. These discussions did not address the required. On Day 2, PM role, AO#7 (Comparison of Actual Performance to 2016 Proposal), some candidates mistakenly performed a financial analysis to determine whether Elcar had performed well during this period. Others mistakenly analyzed whether the plan itself was realistic, not realizing that it was historical, having been presented to NHC three years ago. Others revisited the original plan in order to improve it retroactively, which was not what was requested. On Day 3, Simulation 2, AO#3 (KPIs), rather than provide KPIs and valid metrics to assess the performance of VEC, some candidates provided actual-to-budget variance analysis or key success factors.

The Board believes it is an essential CPA skill to be able to analyze and integrate the information presented to identify what is and isn't relevant to the issues raised in the case. Candidates are reminded to read the required carefully, and to take the necessary time, and use their judgment to decide whether a discussion is pertinent to the issues at hand or to their role.

Blending Technical Knowledge and Enabling Skills

Most candidates were able to demonstrate an appropriate level of technical knowledge throughout Day 2 and Day 3 of the CFE. However, they performed better on the more straight-forward and routine issues presented, with some candidates avoiding the more difficult issues.

The BOE consciously includes more challenging and unique topics, like the artwork in the Assurance role, the cash flow projection and cost-cutting in the Performance Management role, the cryptocurrency in the Taxation role, and the NPO contributions on Day 3, Simulation 1, in order to present situations for candidates to demonstrate judgment, and their ability to draw on first principles to work through an issue where there is no clear guidance, or an issue they have never seen before. Although there is no doubt that success on the CFE requires a strong foundation of technical knowledge to clearly demonstrate competence, the ability to handle new and difficult issues is critical. With technical knowledge changing at a faster and faster pace, it is important for candidates to be able to draw on first principles, explore alternatives, and use their professional judgment and common sense to tackle the issues presented. The BOE will continue to present new and challenging topics on the CFE and encourages candidates to use their enabling skill set to respond to the issues.

Day 1

See Part B of the CFE report for comments on HEVW Version 1 and Version 2.

Comments Specific to Day 1 (Marmani, Version 1)

Most candidates dedicated the first section of their response to a situational analysis. Most used their situational analysis later in their response, making links back to the work they did while analyzing the specific issues or within their conclusions. Some candidates chose not to provide a situational analysis and proceeded directly to their issue analysis and as a result missed key elements in their discussion of the issues.

There were three major issues that candidates were expected to analyze from both a strategic and operational perspective: 1) sell or expand Adaptive 2) expand Athleisure into online sales, and 3) hire Matthew and his team to manage the Athleisure Division. There was one additional, minor issue, the sales team compensation issue, that candidates should have also discussed, but in less depth. Candidates were expected to provide an in-depth, qualitative discussion of each of the major issues while also showing an acceptable level of numeracy skill in their discussion of these issues. Candidates were also expected to identify the management time constraint and consider how it affected each decision, and how each decision would affect Marmani on a more holistic level.

Overall, most candidates did a good job of analyzing the issues to be addressed that were presented in the case. There were three main differentiating factors that separated strong candidates from weak candidates in terms of their analysis. First, strong candidates tended to provide balanced discussions for each issue analyzed whereas weak candidates tended to lean toward either just the pros or just the cons of each issue. Second, strong candidates provided the implications of the case facts that they included within their analysis. Weak candidates tended to simply list case facts without providing the “so what?” Third, strong candidates highlighted and discussed the qualitative points that were most critical to the decision at hand, such as, for example, the management time constraint. Strong candidates recognized this critical issue and assessed how each decision would affect the constraint.

Most candidates concluded that it was not realistic for Marmani to expand either Adaptive or Athleisure, let alone both, if the company did not hire additional management. Most candidates recognized that Matthew and his team were not a good fit for Marmani and therefore recommended against hiring Matthew and his potential management team. Many candidates recommended an alternate approach, expanding both divisions, since both expansions aligned with the company’s mission and vision and appeared to be lucrative, and hiring additional management to alleviate the burden on the current team.

Most candidates approached their response in a coherent and organized fashion. Only a few candidates struggled to effectively communicate their ideas. These candidates tended to use poor sentence structure, confusing syntax and an unorganized response approach.

Additional Day 2 and Day 3 Comments

None provided. See Appendix F of Part A or Appendix H of Part B of the CFE Report for more detailed commentary.

APPENDIX A

**EXAMINATION DESIGN, MARKING GUIDE DEVELOPMENT, AND MARKING
OF THE COMMON FINAL EXAMINATION**

CFE Design

Day 1 is one four-hour case that is linked to the Capstone 1 case, which is worked on in groups for eight weeks prior to the CFE. When writing the Day 1 case, candidates are allowed access to their Capstone 1 case but not their group's answer or any sample response. The Day 1 case is designed to assess the enabling (professional) skills. Candidates are directed to *not* perform any detailed technical analysis, but rather to target a “board room and senior management” level of discussion, with high-level analytics. There are two versions of the Day 1 case. Candidates pre-select the version they will write.

Day 2 is one four-hour case that candidates are given five hours in which to respond. The extra hour gives candidates time to filter and find the information that they need to answer *their* role requirements from within the common information presented. Day 2 is designed to assess the technical competencies in **depth** (Level 2 and Level 3). Candidates pre-select a role (Assurance, Finance, Taxation, or Performance Management). All candidates work with the same case — it has a common section and four sets of appendices containing additional information applicable to each of the four unique roles. The required tasks, regardless of the role, are clearly directed unless there is an undirected/enabling issue in the case that the board expects candidates to identify on their own. Day 2 evaluates the competencies listed in the *CPA Competency Map* mostly in the elective area and in common Financial Reporting and/or Management Accounting areas in **depth**. The role **depth** test (Level 2) may also include coverage of other competency areas from the common core.

Day 3 is a four-hour examination containing a mix of small cases (60 to 90 minutes each) that evaluate the common core competencies only. The Day 3 cases provide additional opportunities for **depth** in Financial Reporting and Management Accounting and all the **breadth** opportunities for all the technical competency areas. Cases are time constrained, and they are designed to cover different competency areas within each case. A higher level of integration and judgment is required on Day 3 of the CFE than in the core modules, although the technical competencies are tested at the common core level of expectation.

The assessment opportunities on the Day 2 case are given mark values such that each of Day 2 and Day 3 are weighted equally.

The Development of Marking Guides and the Provincial Review Centre

Approximately three months prior to the Common Final Examination booklets being published, provincial reviewers meet to examine the simulations and the preliminary marking guides. The provincial reviewers' comments are then considered by the board when it finalizes the examination set and again when the senior markers review the marking guides in the context of actual responses.

The September 2019 CFE Marking Centre

From the marker applications received, approximately 280 individuals were chosen to participate in the September 2019 CFE marking centre. The criteria for selection included marking experience, motivation, academic achievement, work experience, personal references, and regional representation. The marking was supervised by the CPA Canada Evaluations and International Assessment full-time board staff (6 staff).

The Day 1 Marmani Version 1 linked case was marked by a team of 30 people in Montreal from October 9 to October 22, 2019. The Day 1 HEVW Version 2 linked case was marked remotely by a five-member team from September 25 to October 17, 2019.

The Day 2 Common assessment opportunities were marked by a separate team from the role teams. Day 2 Common was marked in Montreal by a team of 61 people from October 8 to 22, 2019. Day 2 Assurance was marked by a team of 54 people in Montreal from October 8 to October 22, 2019. Day 2 Performance Management was marked by a team of 20 people in Montreal from October 9 to October 20, 2019. The other two Day 2 roles (Taxation and Finance) were marked by a total of 13 people, remotely, from September 27 to October 7, 2019, immediately following the preliminary evaluation centre. All three Day 3 cases were marked remotely from October 11 to October 28, 2019. The Day 3 simulations were marked by a total of 97 people.

Before the marking centre, the members of the CFE subcommittee, staff, leaders, and assistant leaders attended a five or six-day preliminary evaluation centre (PEC). Participants reviewed the marking guides, applied them to randomly selected candidate responses, and made necessary revisions to the marking guidelines, taking into account the written comments on the marking guides received from provincial reviewers.

At the beginning of the marking centre, the leaders and assistant leaders presented the marking guides to their teams, while staff, the BOE chair, the vice-chair and select BOE members supervised. The teams undertook a two-phase test-marking procedure prior to actual marking. Phase one consisted of marking guide familiarization, during which markers applied the marking guide to copies of candidates' responses and collectively reviewed their results. Phase one thus ensured that all markers understood the issues in the marking guide and the basis on which to apply each expectation level. Phase two consisted of an expanded test marking of several responses to establish marker congruence.

After the training and test-marking phases, and only when marker congruence was achieved, live marking commenced. All teams, for all days, had a leader, and anywhere from one to six assistant leaders, and had both French-speaking and English-speaking markers. Each team had one or more markers who marked in both languages.

The board strives for the highest possible marking consistency and quality control. Leaders and assistant leaders, therefore, devoted much of their time to cross-marking and other monitoring activities. Markers' statistics were reviewed to ensure that marking remained consistent throughout the centre. Based on analysis of the statistics, leaders reviewed and, if necessary, re-marked papers to ensure that the assessment opportunities were marked fairly for all candidates. Bilingual markers marked papers in both languages, and their results were compared to ensure that the marking was consistent in both languages.

Borderline Marking (Day 1)

Each candidate's paper was marked once. All candidates' responses that were assessed as clear fail, marginal fail, and marginal pass were marked a second time by the team leader, an assistant team leader or a senior marker. Clear pass results were also audited to ensure accuracy of marking.

Double Marking (Day 2)

Each candidate's Day 2 paper was marked independently by two different markers. If the two initial markings differed on any assessment opportunity, an arbitrator (the leader, the assistant leader, or a senior marker) compared the two initial markings and determined the final result.

As an added measure to ensure that markers were consistently applying the marking guide, a two-day rule exists that results in the second round of marking not beginning until two days have elapsed since the first marking. Adherence to this rule ensures that any movement in the application of the marking guides due to marker interpretations during the first two days of live marking are stabilized before the second marking and arbitration procedures begin.

Borderline Marking (Day 3)

Day 3 was marked using a borderline model. All Day 3 responses were marked once and then the Day 2 and Day 3 results were combined. All failing candidates who passed the Day 2 role test, had their Day 3 response marked a second time by an independent marker, and any differences between the first and second markings were arbitrated by a leader or senior marker.

Subsequent Review of Results and Request for Performance Analysis

Failing candidates may apply for a review and remarking of their examination results and/or a performance analysis for either Day 1, or Day 2 and Day 3, or for all three days.

Review and Remarking Approach

Great care is exercised in the original marking and tabulating of the papers and results. The following review and marking procedures are applied to all three papers constituting the Common Final Examination.

Under the supervision of the chair of the Board of Examiners, as well as CPA Canada Evaluations and International Assessment staff, the responses are reviewed by the leaders and assistant leaders who did the original marking. The leaders and assistant leaders read the responses and compare them to the marking guides used at the marking centre. In reviewing candidates' results, two aspects are considered. First, it must be determined that the basis of marking the papers has been consistent with that accorded other candidates who wrote the examination. Second, all responses reviewed are subjected to a careful check to ensure the markers have indicated that consideration has been given to all material submitted by the candidate.

The results are then tabulated and the decision made regarding whether any candidates have been treated unfairly and should be granted a pass on the examination.

The review and remarking results are then forwarded to the provincial bodies for notification of the candidates.

APPENDIX B

SEPTEMBER 11, 2019 – DAY 1 SIMULATIONS

See Part B of CFE report for the marking guides for HEVW version 1 and version 2. (The marking guide for the Marmani Version 1 simulation will not be disclosed until version 2 of the case is written, which will be in September 2020.)

**COMMON FINAL EXAMINATION
SEPTEMBER 11, 2019 – Day 1**

Case (MARMANI-Version 1)

(Suggested time: 240 minutes)

It is now June 18, 2022, and you, CPA, continue to work as Marmani's corporate controller. Currently, Marmani is thriving. Roberto ultimately decided against the sale of the company and operations were instead expanded into the athleisure apparel industry. To accommodate the additional production demands of the new Athleisure product line, Marmani purchased a new production facility in Richmond, British Columbia. Marmani now operates with two divisions: Adaptive and Athleisure.

The introduction of a digital marketing campaign for Athleisure resulted in rapid growth in that division. The formation of a dedicated, in-house sales force for the Adaptive division has also proven successful.

Marmani secured a long-term debt agreement with Hurley Bank of Canada with the terms and covenant that were first discussed with them. Combined with Marmani's strong earnings and cashflows, Marmani is in a more secure financial position than it has ever been. Marmani's goal remains to increase annual revenues by between 8% and 10%. The management team remains the same.

Marmani revised both its vision and mission statements to emphasize its dedication to quality and environmental sustainability.

"Our vision is to be a leader in the apparel industry by creating products that, through sustainable business practices and a commitment to quality, perform beyond the expectations of our customers and make people's lives better."

"We accomplish our vision by designing and selling functional and attractive clothing with materials and production practices that adhere to the tenets of long-term sustainability and quality."

The athleisure industry segment has grown considerably in the past three years and industry experts are forecasting a high growth trend for at least the next five years. However, competition within the segment has become fierce. The popularity of online shopping has led many companies to offer an online marketplace in order to remain competitive. Based on industry research, the online market for athleisure clothing currently generates \$800 million in annual revenue globally, having grown at an exceptionally rapid pace compared to other retail segments. The current growth rate of 15% per year for online sales is predicted to continue for the next five years.

With a large portion of the Canadian population being 65 or older, the adaptive clothing industry is also growing, and this is expected to continue. Only a few of Marmani's competitors have started to recognize this opportunity. As a result, competition within this market is slowly growing.

The Canadian economy is strong and consumer confidence is high.

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APPENDIX I
TRANSCRIPT OF MANAGEMENT MEETING – JUNE 18, 2022

Roberto: Thank you for joining me today. I called this meeting because, like most of you, I am overwhelmed. I just cannot believe the rapid growth we have experienced. Who would have thought that our athleisure products would be so popular? I am so proud of all of you and thank you for your hard work. However, we have some major decisions to make. First, what is our next step with the adaptive apparel line? Sonya, can you give us an update?

Sonya: Well, Roberto, to be honest, I have been spending so much time on the designs for Athleisure that I haven't had the opportunity to do much on Adaptive.

Wayne: I can attest to the same thing, Roberto. The Athleisure division has absorbed all our attention, and because of that, the Adaptive division is in a decline. Products are still selling but we are nowhere near our annual revenue growth target. This past month, adaptive apparel sales have decreased for the first time. I am starting to become concerned. We need to do something to reverse this trend.

Roberto: Witherspoon's is still interested in Adaptive and has again submitted an offer to purchase the division. They have increased the offer and I want to reconsider it. Their offer seems reasonable. When we were securing financing through Hurley in November 2020, Hurley's valuers assessed the value of Adaptive, as a stand-alone division, to be approximately \$28.5 million.

Sonya: Roberto, you know my passion lies in adaptive apparel. If we were to sell Adaptive, I would reconsider my future with Marmani. I want to work on designs that make a difference in people's lives.

Roberto: We would hate to lose you, Sonya, as you are such an important part of our management team. And if we sell to Witherspoon's, most of our Adaptive employees may be terminated, which is hard for me to accept. But I am not sure there is another viable option.

Sonya: My preference is to stay. I believe adaptive apparel still presents an opportunity to increase Marmani's revenue. We could expand our adaptive apparel product line. We need to develop new designs and offer new products. If we refocus our attention on the Adaptive division, I have no doubt that we can turn it around while also making a real difference.

APPENDIX I (continued)
TRANSCRIPT OF MANAGEMENT MEETING – JUNE 18, 2022

CPA: I will look at the options for the Adaptive division. By the way, what was done regarding the sales staff issue? While doing some analysis of Adaptive's sales, Ronald found a large increase in returns for one salesperson. He said he informed the sales manager, Rory, so that he could deal with it. I assume Rory told you, Karen, about the issue and how he resolved it.

Karen: He did, but he gave me the impression he took care of what he considered to be a minor issue, so I didn't investigate any further. CPA, could there be concerns of a broader nature here?

CPA: I'll review Rory's email more closely and let you know .

Roberto: Karen, prior to our meeting, you mentioned that you wanted to discuss something.

Karen: Yes. I want to explore the idea of offering our athleisure products online. We are overlooking a huge opportunity. Sonya, I'm sorry, but I think Marmani would be far better off directing more resources towards Athleisure than towards Adaptive. I would even suggest that we focus all our attention on Athleisure.

As the largest growth segment of the apparel industry, the athleisure segment is flourishing. If our objective is growth, why not focus on this segment? The research clearly supports higher growth in it than in the adaptive apparel segment.

In addition, Marmani's digital presence has expanded since we adopted a digital marketing strategy. Athleisure has become a recognized brand online. We could increase revenue even more with online sales, which our customers now expect. If we are to compete in today's world successfully, we need online sales!

Roberto: What kind of earnings do you expect from an online marketplace for our athleisure wear?

Karen: The potential is huge. According to the expert I have been working with, our market share could be anywhere between 1% and 4.5% of the global market. We could maybe get around 3% of the market share.

APPENDIX I (continued)
TRANSCRIPT OF MANAGEMENT MEETING – JUNE 18, 2022

Roberto: Karen, you know I am conservative and 3% seems aggressive to me, especially since we would be competing with some of the biggest brands in the segment.

Karen: I am surprised that you would doubt the potential of our Athleisure brand, especially after the explosive growth we have been experiencing. Admittedly, there is risk because of how competitive the marketplace has become, making it impossible to be more definitive with our market share estimate.

Sonya: And what about our IT situation? We upgraded for digital marketing, but we lack the infrastructure to support online sales. I hear about disasters with online sales all the time on the news. We could be putting clients' confidential, personal information at risk, for example.

Roberto: CPA, please analyze Karen's proposal. Although it may be unrealistic, the ideal would be to both rejuvenate Adaptive and expand into online sales of athleisure wear.

Wayne: That would be difficult. We would risk overextending ourselves. Ever since the Athleisure division was created, we have been overworked. Personally, I am exhausted. I think we can all agree that we need to lighten our workload.

Sonya: I agree with you, Wayne. We cannot keep up this pace. Roberto, what was the name of the guy you met a couple of weeks ago at that business conference, the one you were so impressed by?

Roberto: His name is Matthew Mondoux. I was really impressed by his self-confidence and his interest in Marmani. He seemed willing to come work for us and even proposed bringing in a whole managerial team for the Athleisure division. He was confident that he could find the right people very quickly, using his many contacts in the industry. He promised to present some proposed plans for Athleisure. I just received them but haven't had a chance to consider them yet.

Sonya: I think expanding our management team could really help us.

Karen: I agree, and our earnings in Athleisure are fantastic, so we can certainly afford to hire additional staff.

APPENDIX I (continued)
TRANSCRIPT OF MANAGEMENT MEETING – JUNE 18, 2022

Wayne: Just because we can afford it does not mean it is a good idea. The success of Marmani is a direct result of the decisions made by us. Bringing in a new team makes me nervous. If the new manager and the new team we hire do not perform to our expectations, it could undo Marmani's hard-earned success. What do we know about Matthew?

Roberto: Matthew's online profile speaks for itself. He has extensive experience and a proven record, which should reduce the risk. And the reality is that we need help now. The timing of his offer to help seems perfect. If we hire him, the current burden being placed on all of you would be lifted.

Karen: I agree that we need more help, but we should be cautious. Our Athleisure brand is built on quality and sustainability. I worry about Matthew maintaining our quality standards. I did an online search after you first mentioned his name, and I discovered a few things.

Roberto: Really? What did you find?

Karen: Well, does Matthew plan to expand Athleisure by outsourcing our production to Vietnam? If he uses the same overseas facility that he has in the past, we may have a problem. That facility has previously used questionable business practices.

Roberto: Matthew has been so successful! I can't believe he would jeopardize that in any way. CPA, please look at Matthew's profile and plans for Athleisure and at Karen's findings, and provide your opinion.

CPA: Of course.

Roberto: We have a lot more to consider than I thought and the decisions we make cannot be made in isolation. To ensure Marmani's future, we must have a coherent strategy. Let's reconvene next week. With CPA's input, we should be better able to make good decisions about the issues we are facing.

APPENDIX II
NOTES ON WITHERSPOON'S OFFER

Prepared by Roberto Marmani

Witherspoon's has expressed renewed interest in acquiring the Adaptive division. The offer is for \$30 million. The only other change to the offer is that my commitment to stay with the company after the sale has been reduced to three months.

Because Witherspoon's does not want a long, complex process, the deal is structured so that the sale of the Adaptive division would be simple and quick. The offer expires in two weeks.

APPENDIX III ADAPTIVE APPAREL EXPANSION

Prepared by Sonya Valencia

If we refocus our attention on it, the Adaptive division can be so much more successful than it is now. We have not released new designs or products in years. I have some new designs ready, and am working on other plans for new, innovative product designs that I am confident will revive Adaptive's sales.

Expanding our product line will most likely require our management team to be dedicated full-time to the project. The biggest obstacle at this point is the production facility in Toronto.

We can only expand our product line and continue to meet our high-quality standards efficiently if we put state-of-the-art equipment in Toronto, like we did in Richmond. I think that equipment is largely responsible for Athleisure's success. In order to produce and quickly change our designs, we will need to invest an estimated \$5 million in specialized, advanced production equipment, a new design lab and a new IT system.

Realistically, it will take a year to make these changes. Once we introduce our new products, I expect annual revenue from them to be \$9 million. Following that, I expect our total revenue will increase by at least 5% per year, which is a conservative estimate. I also have other design ideas, and after the upgrade to our production facility, Adaptive will produce some truly innovative products. Therefore, there is even greater growth potential!

With the upgrade to our production facility, our gross profit percentage should increase significantly.

After the upgrades are completed, my estimates translate into an after-tax operating cash flow of approximately \$70 million in total for the Adaptive division for five years of operation, and a net present value of approximately \$35 million for that period, net of the initial \$5 million investment. I used the 15% discount rate that we typically apply.

**APPENDIX IV
EMAIL FROM SALES MANAGER (RORY)**

June 10, 2022

To: Ronald
Re: Sales staff member
From: Rory

Thanks for making me aware of a potential issue with one of our new internal salespeople. I have since discovered that this salesperson has been artificially inflating their earned commission by making sales to retailers that they knew would be returned. I discovered three orders, coincidentally made with the same retailer, that came back shortly after the product was sold.

Our current compensation policy does not deduct returns from a salesperson's earned commission of 2% on the value of each contract that they conclude between Marmani and any retailer. Returns are common in this industry. I strongly believe it would be unreasonable to penalize our sales staff, who work very hard to secure business for us, each time a product is returned.

I don't think we should overreact to this isolated incident. At this point, it appears to be limited to one salesperson. I spoke to the person in question, which should suffice.

All my attention has been on supporting our new sales team, to ensure its success. Let's keep the focus on that, and consider this issue resolved.

APPENDIX V
POTENTIAL ONLINE MARKETPLACE FOR ATHLEISURE WEAR

Prepared by Karen Zenkovic

Competition online is fierce. I know it is a risk, but based on the strength of our brand, I believe that we can successfully compete in the world of online sales. Marmani has never been in direct competition with the big, global brands, but Marmani's size could work to its advantage. Consumers are increasingly looking for unique styles, which we can provide. Our products are of higher quality and are more exclusive. This exclusivity allows us to target niche markets that the big brands, who mass produce their products, cannot reach effectively.

Because Athleisure's current production facility is nearing capacity, we will need an additional facility to service an online marketplace. I have assumed that we will lease and renovate that facility to meet our needs, at an estimated total cost of \$4.25 million, including information technology development and infrastructure.

I have assumed that our margins will be lower; based on my research, variable costs of 60% should be achievable. We will make up the decline in margin with more volume in sales, resulting in higher profits. Our fixed costs should be about \$750,000 per year.

APPENDIX VI
SUMMARY ON MATTHEW AND HIS PLAN FOR ATHLEISURE

Prepared by Roberto Marmani

Matthew's online profile is impressive. Here are some highlights I noted:

- Matthew has managed three separate apparel brands, each time achieving financial success.
- In only three years, Matthew took a company from having virtually no sales or brand recognition to being valued at over \$500 million. That company's success is attributed to its online sales.
- Matthew was able to take an unprofitable apparel company from losing market share to once again being a successful company. In this case, his strategy was to drastically reduce costs. He outsourced the brand's production to an overseas facility in Vietnam (Viet BDG) and was able to reduce the cost of materials by changing suppliers.

One of Matthew's references described him as a "natural born leader," "tenacious and confident" and "tech savvy."

Here are some of the key items from the plan that Matthew submitted:

- Given that the Richmond facility is nearing capacity, all new production demands will be outsourced to Asia. Matthew has suggested moving all Athleisure production to Asia. According to Matthew, the more that Athleisure utilizes his connections in Asia, the more that production costs will be reduced.
- Matthew suspects that Marmani is currently paying too much for the fabrics that it uses for Athleisure products. Matthew has contacts within the textile industry and would likely change suppliers.
- Matthew's plan includes the introduction of many new products that will appeal to a wider consumer market, thereby increasing sales.
- Matthew's colleagues include a designer who has extensive experience in the apparel industry. This designer's products are mass produced and sold all over the country. He expects this designer will join the Athleisure division.
- Based on outsourcing production and changing suppliers, total production costs should decrease by nearly 30%. At the same time, given an expanded product line and aggressive expansion into new markets, revenue is projected to increase by 40% annually.
- While he does not outline the details, Matthew recommends stock option plans for all senior managers, enabling them to purchase shares based on the increase in revenue.

APPENDIX VII
KAREN'S FINDINGS

Prepared by Karen Zenkovic

Viet BDG has a very poor reputation and has been accused of serious violations. Two years ago, Viet BDG was reprimanded for its facility being an unhealthy workplace. Apparently, the facility has since improved, but I couldn't find anything to confirm or deny any improvements.

Although Matthew has indeed successfully managed several apparel companies, those companies all manufactured products that we would expect to see in department stores: low-quality, low-priced clothing.

One of the companies Matthew worked for is being sued by a designer for copyright violations.

It appears that Matthew has frequently changed employers, and that his colleagues often follow him.

**COMMON FINAL EXAMINATION
SEPTEMBER 11, 2019 – Day 1**

Case (HEVW-Version 2)**(Suggested time: 240 minutes)**

In February 2018, Bennett & Robertson LLP (BR) completed a consulting engagement for Heartbreak Estates Vineyard & Winery Ltd. (HEVW). At that time, Andrew and Jenny were considering how to best proceed with developing their business.

It is now March 2021, and Jean Bennett, the partner in charge of the initial engagement for the Heartwoods, received a phone call, asking for BR's help again.

The developments with respect to issues addressed in the initial engagement are summarized below:

Area	Action
Vineyard	<ul style="list-style-type: none"> • In November 2018, terminated the farmer's lease. • Planted vines on 10 acres of previously-leased land in 2019 and 10 acres in 2020, with the remainder to be planted in 2021. • Cultivating heirloom and exotic vegetables as a cash crop until all the vines are planted.
Niagara College	<ul style="list-style-type: none"> • In July 2018, signed agreement with Niagara College (NC). • NC financed and managed construction of the facility. • Building was completed in March 2019, the first viticulture cohort started in September 2019 and winemaking is scheduled to start in September 2021.
Winery	<ul style="list-style-type: none"> • Decided to build a winery but have deferred starting construction. • Continue to use County Winery (CW) as a virtual winery and Andrew is still the resident winemaker.
Distribution	<ul style="list-style-type: none"> • All sales are through CW, the wine club and local restaurants.
Accounting system	<ul style="list-style-type: none"> • Implemented an accounting system and performance measures as per BR recommendations. • Jenny left her bartending job and has been working full-time at HEVW, performing administrative and accounting functions. She took some marketing and accounting courses at NC.
Other	<ul style="list-style-type: none"> • No additional financing was obtained. • A Board of Directors was formed with John, Andrew, and Jenny Heartwood, a banker, an Agriculture and Agri-Food Canada researcher, and an NC representative.

After her meeting with the Heartwoods, Jean provides you with a transcript of the meeting (Appendix I) and other information she has gathered. She asks you to draft a report to the client addressing the strategic issues, and any other issues of significance you identify.

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**APPENDIX I
TRANSCRIPT OF CLIENT MEETING**

Andrew: It is nice to see you again, Jean. When we started our business, we had no idea that there would be so much involved and so many decisions to make. Our goals haven't changed. We are still committed to growing the finest grapes, producing premium wine, attracting people to our region and providing a comfortable living for our family.

Jenny: We have moved forward in several areas but there always seem to be new and exciting opportunities in our region. The basics of the industry are the same, with distribution channels, licensing and regulations still important considerations. As expected, customers are increasingly interested in the story behind the wine. The LCBO's publicly available information provides useful data on the trends in the industry. It says millennials and baby boomers are the top wine consumers, at 36% and 33% respectively. LCBO is also very active in social media venues these days—I read that there are over one million visits to its website per year, 15,000 twitter followers and over 150,000 Facebook followers. It is important that we keep up with developments in the industry.

Vineyard discussion

John: I was pleased with the decision to give priority to establishing the vineyard. Planting the grapes in phases was a good idea because it required less cash up front and means that replacement of the vines, which last 20 years, will be staggered. The grants received and operating cash flow provided adequate financing for the vineyard. The free student labour from NC has come in handy, and Andrew and Jenny have been working long hours without much financial reward.

Andrew: We decided to plant four varieties of grapes, Pinot Noir and Cabernet Franc in the red category and Pinot Gris and Chardonnay in the white category. Assuming all goes well in terms of weather and other factors, yields are estimated to increase from the current 2,200 cases to 2,900 cases of wine in 2022, 5,100 in 2023, 7,800 in 2024, 9,300 in 2025 and full production of 10,000 cases in 2026.

APPENDIX I (continued)
TRANSCRIPT OF CLIENT MEETING

Jenny: Rather than leave the fields idle as we phase in our vines, we partnered with Hearty Kitchens and planted vegetables. We sell the produce to local restaurants, since there are so many new ones, to local consumers and at farmers' markets. This has been surprisingly lucrative, providing close to \$65,000 in cash flow last year! We are contemplating continuing this initiative and planting fewer grapes.

John: Really? Why? This is a wine business, not a vegetable business.

Niagara College discussion

Andrew: We entered into an agreement with NC (Appendix II). I felt I had to take advantage of this once-in-a-lifetime opportunity; if not, I was certain someone else would. I was excited about the benefits to us.

However, the final agreement was substantially different from the original proposal. We felt pressured to agree to NC's terms, even though some were undesirable. I wonder whether we acted too quickly.

Student numbers are higher than anticipated and are projected to keep increasing, which is presenting challenges. It means more work in terms of my teaching duties, more students in the vineyard and more NC staff making site visits. Some of the students and instructors are not as careful as they should be and have damaged the plants. Though inconvenient, I feel the need to be present when they are onsite. And, they sometimes arrive unannounced.

Having students work in our vineyard has had mixed results—a small number of the students are terrific, most are average and some create more work than they accomplish. If I was hiring, I could be more selective, but the agreement stipulates that I use them all.

Some of the changes to the final agreement were better for us. For example, instead of us building the facilities as initially proposed, we contributed the land and the college provided the buildings and equipment, including classroom space, the greenhouse, laboratory and waste-water treatment plant. We did not have to arrange any financing or assume any risk associated with the buildings.

APPENDIX I (continued)
TRANSCRIPT OF CLIENT MEETING

Andrew: The students' union recently challenged the status of unpaid work terms, stating that students are employees and should be paid. NC has agreed and is in the process of making changes to the arrangements with students. As free labour was part of our contract, NC has requested that we renegotiate the terms of our agreement.

Jenny: I was planning to use the NC space to offer wine appreciation courses and special sessions to our wine club members and other customers, and to offer sessions on grape-growing to hobby farmers in our area. However, I am still waiting for approval from NC, who are insisting this is a violation of our non-competition clause. I am also concerned that, if classes are added to accommodate the increase in students, we will have less opportunity to offer our own courses and other activities.

Andrew: I have arranged a meeting with NC and would like your suggestions about changes we should try to negotiate.

John: There have been some benefits from our association, such as the helpful ideas that have emerged from the research projects. However, having the NC representative on our board makes for lengthy discussions, which interferes with the operation of our business. We might be better off without these complications. While renegotiating is an option, we'd like to consider the implications of cancelling the agreement.

Jean: We'll look at your different options.

Winery discussion

Jenny: Andrew studied to be a winemaker and does not want to just grow grapes. We decided to build a winery, and had preliminary designs drawn up. I am researching suppliers of environmentally-friendly equipment. As we needed to focus on other critical aspects of our business, we have not yet started construction. Now we are reconsidering the need to build. Jeremy Stiles, CW's owner, has decided to sell his winery and semi-retire. He plans to continue growing and harvesting grapes. A large, commercial winery has made an offer but Jeremy would prefer that ownership remain local and has also made us an offer. He has provided a framework for an agreement (Appendix III). The terms look very favourable. We must decide soon.

APPENDIX I (continued)
TRANSCRIPT OF CLIENT MEETING

Andrew: Capacity at CW is 20,000 cases, which is significantly higher than the winery we would build. It is quite successful and if we purchase it, we would be producing for CW, Black Label Vineyards and potentially others, which would provide us with much needed cash flow. Alternatively, by building our own winery, we will have full control over the use of its productive capacity, as we won't be committed to producing for others. There will be no issue with producing our own wine.

John: Purchasing CW's winery will cost more than building our own winery as planned, but it will present additional opportunities. As well as bottling wine for other vineyards, the wines we bottle could be sold in the retail store at CW's winery and bring in additional profit.

Andrew: I know the facilities and staff at CW well. The equipment is dated and less efficient, but reliable. The staff are experienced, which is important with winemaking. It could be a challenge to get staff for our own new winery. The environmental impact that a business makes is becoming more important in our industry.

John: Andrew, I understand that you want to build an up-to-date, gravity-fed winery, but perhaps that is overly ambitious. Some of the technology is unproven. I think there are many advantages to buying instead of building.

Andrew: Jeremy has always been quite involved in the winery. Even though I am the resident winemaker, he still makes the final decisions. He has offered to help after the sale, at no charge. I am a bit concerned about whether Jeremy will be able to step back and let me take over. The draft agreement also requires us to produce wine for Jeremy and honour CW's contract with Black Label Vineyards.

I don't want to borrow any additional money against my interest in the family farm. If we buy CW's winery, we won't need a loan and won't be paying interest.

John: If you choose to build, the financing from Farm Plus Financial (Farm Plus) is still available. The terms provided by Farm Plus are unchanged except that the option to postpone principal payments has been removed. The estimated cost to build a winery with a 10,000-case capacity was \$1.2 million in 2018.

APPENDIX I (continued)
TRANSCRIPT OF CLIENT MEETING

Jenny: CW's licences, including all LCBO permits, can be transferred to HEVW, which would save a lot of work. CW is not an estate winery and sells VQA and non-VQA wines. The challenge will be to rebrand it as HEVW so it is not forever known as CW. And what about all the time and money we have invested in the new winery, getting plans drawn up and researching equipment? Do we just ignore that and start over with this new plan?

Jean, can you help us compare the two options? Please suggest changes to Jeremy's proposal that you think are warranted. The price is fixed but he might accept other changes.

Jean: We'll do a preliminary analysis of the financing aspects of buying CW's winery compared to building your own, and explain the other factors you need to consider in making your decision.

Wine bar discussion

Jenny: Our association with NC has led us to an exciting opportunity with Sara Sherbini, who recently graduated from NC's culinary program. To pursue her passion for culinary arts, Sara plans to open a wine bar. We discussed her ideas (Appendix IV) and her business plan (Appendix V). Her enthusiasm is contagious! Although we only met recently, Sara and I have much in common, and I want to do this to support her and our local community.

Having Sara establish her wine bar at HEVW will attract customers and, with her social media presence, will help increase our brand awareness. We will provide space, either as part of our new winery if we decide to build it, or in a new building on HEVW property if we purchase CW. Sara knows we have been growing vegetables and asked for a "restaurant garden." I am not sure exactly what she has in mind, but I don't think it will require a significant amount of space.

Andrew: This seems like a lot of work to me. I know you think you can handle it, Jenny, but I also thought that about the college. I am not sure we should embark on yet another new venture.

APPENDIX I (continued)
TRANSCRIPT OF CLIENT MEETING

Jenny: Sara would handle the operational and marketing duties and I would just handle the administrative tasks. I expect we can save money by sharing HEVW's accounting and merchant payment systems.

Because they can access our wine directly, the wine bar will not have to carry much inventory, which should make cash flow easier for Sara. She tells me she already has project financing in place.

The wine bar will be a separate business and Sara needs to be the sole owner so she can access funding from the Youth Ventures Fund. She has suggested paying HEVW a percentage of profits.

John: I understand that you think partnerships and collaborations are the way of the future, but I am concerned that it might divert HEVW from its primary goals of growing premium grapes and producing award-winning wines. With these partnerships, who is really in charge?

Andrew: Jean, what do you think of this wine bar opportunity?

With so many decisions to make, I am not sure where we start. Each decision seems to depend on or impact another. Can you help us sort this out by suggesting where to start, and by setting priorities?

Jean: Of course.

APPENDIX II
CONTRACT TERMS BETWEEN NIAGARA COLLEGE
AND HEARTBREAK ESTATES VINEYARD & WINERY LTD.

- | | |
|-------------------|--|
| Term | <ul style="list-style-type: none">• 25 years |
| Academic | <ul style="list-style-type: none">• All aspects of the academic program will be the sole responsibility of NC.• Andrew Heartwood will teach one course per semester in each program (viticulture and winemaking) and will be paid on a per-section basis at the instructors' set rate, being \$10,500 in 2018. If student numbers increase so that more than one section of a course is required, Andrew will teach all sections, and be paid \$10,500 per section.• Students will complete their work term in HEVW's vineyard and winery without compensation.• HEVW will provide students with access to its vineyard and winery operations, and allow onsite visits by faculty and staff to ensure academic standards are met. |
| Capital | <ul style="list-style-type: none">• Facilities construction will be managed and financed by NC.• Ownership of the buildings will transfer to HEVW at the end of the contract.• HEVW will provide five acres of land for the building site and experimental vineyards. |
| Operations | <ul style="list-style-type: none">• HEVW will not compete with NC in offering vineyard and winery classes.• Use of the facilities for non-academic purposes will be managed jointly by Andrew Heartwood and a representative of NC. HEVW will be charged an hourly fee for this use.• NC will promote HEVW on its website and in advertising related to the applicable programs.• HEVW will identify itself in all promotional material and on labels as a "Niagara College Teaching Winery."• NC will provide access to its commercialization services, such as advertising and marketing plan, international marketing and e-commerce, on a cost-recovery basis.• HEVW will allow access to its vineyard and winery for collaborative research with other faculties at NC and allow installation of VineAlert monitors by the Canadian Food and Wine Institute's research division, and consent to the regular collection, transmission and publication of data from the monitors via the internet to NC and to HEVW's computer system or portable devices.• HEVW will make an ongoing commitment to invest in innovation and technology and comply with sustainability objectives of NC, which include LEED buildings and no use of herbicides, and will complete sustainability reports, such as water usage, as requested by NC.• HEVW will provide NC's research and industry liaison with a seat on HEVW's board.• NC will provide HEVW with regular communications on provincial and federal government innovation and research grants and will provide support for HEVW's grant applications, on a cost-recovery basis. |

**APPENDIX III
FRAMEWORK FOR AN AGREEMENT WITH COUNTY WINERY**

1. Production:
 - a) HEVW will produce wine for CW at the current production level of 10,000 cases per year, for an \$80,000 annual fee plus variable bottling costs, for five years (2021 to 2025 inclusive).
 - b) HEVW will honour CW's contract with Black Label Vineyards to produce 3,500 cases per year (2021 to the end of 2025, when the contract expires).

Capacity (in cases)	20,000
Production commitments through 2025:	
County Wine	10,000
Black Label Vineyards	3,500

2. Sales:
 - a) CW wine will continue to be sold in the onsite retail store.
 - b) CW will pay a 10% commission to HEVW.
3. Employees:
 - a) Current employees will be retained, with no changes to their terms of employment.
4. Payments:
 - a) Total payment will be \$2.7 million, in monthly instalments of \$15,000 for 15 years.
5. Assets:
 - a) Ownership of assets, the winery building, parking lot and all equipment will transfer when the final payment is made.
 - b) The winery portion of CW's land will be leased by HEVW for \$1 per year.
6. Other:
 - a) The winery will be called "Heartbreak Vineyard & Winery at County Estates."
 - b) Until final payment is received, Jeremy Stiles will have a seat on HEVW's board.

APPENDIX IV
JENNY'S NOTES FROM DISCUSSIONS WITH SARA SHERBINI

Sara envisions a truly unique wine bar with great food and wine, a relaxed atmosphere and outstanding service. She also sees pop-up bars playing a key role in the business. Pop-ups are temporary locations of a business used to create excitement and generate awareness of something new and different, and Sara says they are quite popular with NC students. The pop-up locations would provide additional revenue and would introduce new customers to the wine bar and HEVW. We can widen our customer base by reaching consumers who might not usually drink Canadian wine. By having pop-ups in many different locations, we can introduce the wine bar and new wines to so many potential new customers!

At the pop-ups, we can offer discount coupons for the wine bar and HEVW's retail store, and perhaps free samples. We can have pop-ups at festivals and special events. We could also have customer appreciation nights for our wine club members, and to try to attract new members. As we earn a high margin on pop-up sales, added promotion will be beneficial.

Sara plans to try out new menu items at the pop-ups to gauge customer reaction, and thinks we could also do this with new wines. She sees the potential for significant profits. I get the sense that Sara understands controlling costs. She suggests we use student interns from NC's culinary program, as we do in the vineyard and will do in the winery. She has been going to vintage sales to look for unique furnishing and fixtures.

Sara is keen to promote the wine bar and HEVW on Instagram and through other social media venues. The wine bar will sell our wine and other wines that Sara and I approve for sale, including wines that HEVW potentially produces for other vineyards. The option to sell their wines could be an incentive for other vineyards to use our services.

Sara thinks that joint promotions with NC and its culinary program might also be possible. She also proposes that HEVW open an online wine store, selling gift certificates to the wine bar, our wines, wine glasses, wine racks and assorted accessories bearing our logo.

Sara is eager to get started and suggests we start with pop-ups, including one onsite at our vineyard, until the building is ready.

APPENDIX V EXCERPTS FROM WINE BAR BUSINESS PLAN PROPOSAL

Vision

To operate a business that is respectful of the environment, puts people first and contributes to the community.

Mission

- *To serve delicious food, incorporating fresh local ingredients paired with wine produced onsite and from neighbouring vineyards.*
- *To provide outstanding customer experiences.*
- *To treat staff with respect, giving them autonomy and control of decisions.*
- *To be fiscally responsible, generating the maximum revenue, keeping costs as low as possible and generating above-average profit.*

Description

- We will operate a wine bar with a tapas menu featuring organic, sustainable, local produce.
- We will be located at a restaurant onsite at HEVW, and set up various pop-up locations across southeastern Ontario, focusing on locations where young people gather, such as university and college campuses.
- Staff will be well trained and have expert knowledge of the food.
- The atmosphere will complement the food.
- We will support artists from Prince Edward County and all of southern Ontario by hosting performances by musicians and displaying the work of visual artists.
- We will support the community and will participate in charitable events.
- We will offer wine appreciation sessions and tasting specials.
- We will offer special events for wine club members.
- We will be open from noon to 10:00 pm daily.

APPENDIX V (continued)
EXCERPTS FROM WINE BAR BUSINESS PLAN PROPOSAL

Projected Financial Information
Net Income Year 1

	<u>HEVW Site</u>	<u>Pop-ups</u>	<u>Total</u>
Revenue			
Food	\$ 540,000	\$ 48,000	\$ 588,000
Wine	540,000	72,000	612,000
Total	<u>1,080,000</u>	<u>120,000</u>	<u>1,200,000</u>
Gross margin	486,000	57,600	543,600
Salaries and benefits	194,400	11,520	205,920
Other operating costs	<u>97,200</u>	<u>0</u>	<u>97,200</u>
Net income	<u>\$ 194,400</u>	<u>\$ 46,080</u>	<u>\$ 240,480</u>

Notes:

1. Food margins average 30%.
2. Wine margins average 60%.
3. Restaurant salaries are normally 35% of food revenues but Sara plans to pay more than the industry average to reflect how much she values good staff.
4. Pop-up salaries are lower, as Sara will be the chef and will use casual staff, with no benefits.
5. Projection assumes no salaries for Sara or Jenny.
6. Projection assumes no occupancy costs, as space is provided by HEVW.
7. Projection assumes an average of two pop-ups per month and revenues of \$5,000 per pop-up.

Startup costs, not included in the income projection, are as follows:

Working capital	\$ 10,000
Kitchen equipment	150,000
Furnishings and fixtures	30,000
Glassware and cutlery	10,000
Uniforms and linens	5,000
Other	<u>5,000</u>
	<u>\$ 210,000</u>

APPENDIX V (continued)
EXCERPTS FROM WINE BAR BUSINESS PLAN PROPOSAL

Financing sources are as follows:

Government youth ventures loan	\$ 150,000
Family and friend loans	60,000
	<hr/>
	\$ 210,000
	<hr/> <hr/>

APPENDIX C

**SEPTEMBER 12, 2019 – DAY 2
SIMULATION AND MARKING GUIDES**

**COMMON FINAL EXAMINATION
SEPTEMBER 12, 2019 – Day 2**

Case

Assume the pre-selected role in which you will be formulating your response. Answer all requireds as specifically directed in your role. Within the requireds for each role, candidates are directed to look at specific additional appendices, which are unique to each role. Use only the information you have been directed to refer to.

Information that is common to all roles is presented in the “Common Information” section. Additional information, customized to each role, is presented in the “Specific Information” section.

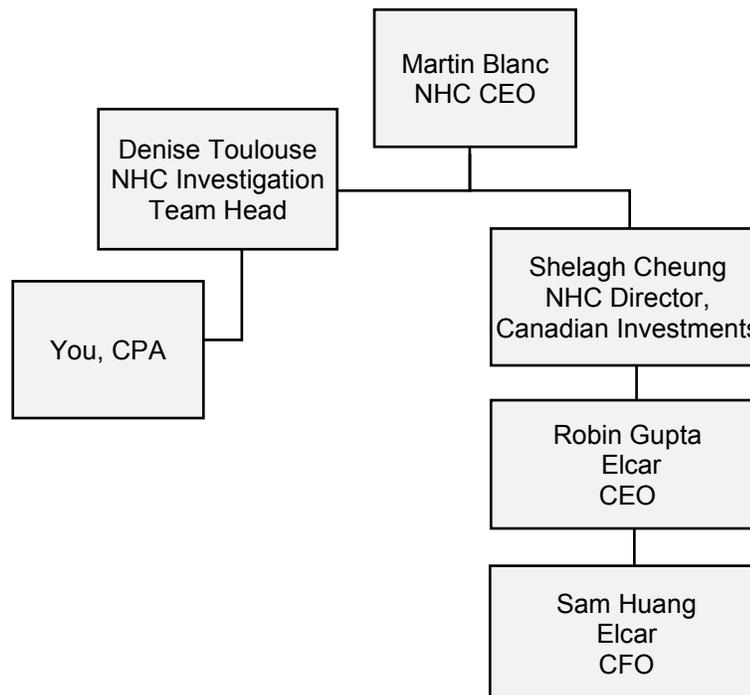
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BACKGROUND COMMON INFORMATION FOR ALL ROLES

NHC is a U.S. company owned by entrepreneur Martin Blanc. NHC has investments in diverse technology companies, one of which is a 100% interest in Elcar Inc. (Elcar), a Canadian manufacturer of electric cars. Due to the risk of the investment, NHC has set the desired after-tax return on investment for Elcar at 25%. NHC's objective is for Elcar to either be sold or to eventually produce a steady cash flow.

The following describes the oversight roles for Elcar:



Oversight of Elcar's operations is the responsibility of Shelagh Cheung, NHC's director of Canadian investments, who has a master's degree in biology. There is no formal oversight or approval of Elcar's policies by NHC. Robin Gupta is Elcar's only board member and CEO. He has held the CEO position for three years and has a background in research and technical innovation. Shelagh has a monthly phone call with Robin and receives Elcar's monthly financial statements and a key measures report prepared by Sam Huang, Elcar's CFO. Sam has many years of financial experience but no formal accounting designation. Because Robin prefers to spend money on product development rather than on overhead expenses, Elcar's accounting department is small.

BACKGROUND (continued)
COMMON INFORMATION FOR ALL ROLES

Generally, Shelagh performs a brief review of Elcar's monthly reporting package and then archives it. She reviewed and approved the 2019 annual budget. Shelagh has been ill for the past two months and has just returned to work.

It is now June 22, 2019. Historically, NHC has provided funding to Elcar in exchange for common shares. The forecast that Elcar prepared back in 2018 had predicted over \$1 million of pre-tax income for the year ended May 31, 2019. Unfortunately, the year-end results are a loss, despite vehicle sales of 812 units for the fiscal year, at an average sales price of \$37,806.

NHC has an investigation team that reports directly to NHC's CEO. Headed by Denise Toulouse, the team is comprised of four Canadian CPAs and two other employees. It performs periodic reviews of NHC's investees and, where possible, provides advice in order to improve performance.

REQUIREMENTS FOR YOUR ROLE
(READ ONLY THE ONE SPECIFIED FOR YOUR PRE-SELECTED ROLE)

ASSURANCE REQUIREMENTS

You, CPA, are a member of the special investigation team currently working onsite at Elcar's facility. As part of its work, the team generally performs the same steps, but Denise has added some requests specific to Elcar's circumstances.

Platinum is a high-value, key component in Elcar's battery manufacturing. Therefore, Denise asks you to perform a variance analysis between budgeted and actual platinum costs and to report your findings.

Elcar committed to purchase a quantity of parts from K3Press Corporation (K3Press), which in hindsight is excessive. Denise asks you whether Elcar should be advised to cancel the contract. She asks for both quantitative and qualitative support.

Denise noted NHC's frustration with Elcar's reporting package. She asks you to review the key measures report that Elcar provides to NHC, recommend improvements, and make suggestions that would allow NHC to better monitor Elcar's financial results and would assist NHC in its decision to further fund Elcar.

Given Elcar's small accounting department, Denise is concerned with some financial reporting issues. Specifically, she would like you to assess the accounting for the foreign currency transactions, the revenue from car sales made under the new marketing program, the K3Press contract, the future dismantling of Elcar's battery construction facility and the recently acquired high-value artwork.

Being the sole shareholder, NHC is considering waiving the requirement to have Elcar audited by external auditors, even though Elcar has had external audits since NHC acquired it. Denise has been asked to perform the equivalent of an external year-end financial statement audit for the year ended May 31, 2019, following *Canadian Auditing Standards*. Therefore, Denise asks you to draft an audit planning memo. She also asks you to document the audit procedures that you recommend be undertaken for the areas in which errors or control deficiencies have been found.

Given that Elcar obtained a line of credit this year from a bank that requires financial statements from Elcar, Denise wants to ensure that Elcar's going concern assumption has been properly assessed. As a result, Denise has obtained Elcar's updated cash flow forecast and asks you to describe what audit procedures the team should perform on it.

Effective this year, the provincial government requires an audit report on compliance with an agreement that Elcar has with the government. In order to prepare Elcar's management team, Denise asks you to document the procedures that an external auditor will need to perform for this engagement.

**REQUIREMENTS FOR YOUR ROLE
(READ ONLY THE ONE SPECIFIED FOR YOUR PRE-SELECTED ROLE)**

ASSURANCE REQUIREMENTS (continued)

In order to suggest improvements, an assessment of the internal control deficiencies is a standard part of the team's work. Denise asks you to discuss any control deficiencies related to the platinum inventory, as well as those you identify from your review of Elcar's activities.

Denise noted that Elcar's management wants to be able to state on its website that its "environmentally responsible actions" have been verified by an independent party. For each statement made on the website, she would like you to indicate whether it can be independently verified and explain how it could be verified, or describe the challenges the statement may pose in terms of independent verification.

In addition to the common appendices (I to III), information provided in Appendix IV (Assurance) is relevant for your analysis.

REQUIREMENTS FOR YOUR ROLE
(READ ONLY THE ONE SPECIFIED FOR YOUR PRE-SELECTED ROLE)

FINANCE REQUIREMENTS

You, CPA, are a member of the special investigation team currently working onsite at Elcar's facility. As part of its review, the team generally performs the same steps, but Denise has added some requests specific to Elcar's circumstances.

Platinum is a high-value, key component in Elcar's battery manufacturing. Therefore, Denise asks you to perform a variance analysis between budgeted and actual platinum costs and to report your findings.

Elcar committed to purchase a quantity of parts from K3Press Corporation (K3Press), which in hindsight is excessive. Denise asks you whether Elcar should be advised to cancel the contract. She asks for both quantitative and qualitative support.

Denise noted NHC's frustration with Elcar's reporting package. She asks you to review the key measures report that Elcar provides to NHC, recommend improvements, and make suggestions that would allow NHC to better monitor Elcar's financial results and would assist NHC in its decision to further fund Elcar.

Given Elcar's small accounting department, Denise is concerned with some financial reporting issues. Specifically, she would like you to assess the accounting for the foreign currency transactions, the revenue from car sales made under the new marketing program, the K3Press contract and the future dismantling of Elcar's battery construction facility.

To determine Elcar's funding needs, Denise asks you to analyze and comment on the assumptions used in the latest forecast prepared by Elcar as part of its most recent funding request, and to calculate Elcar's cash position at the end of each fiscal year from 2020 to 2023.

Denise asks you to describe the actions NHC could recommend to Elcar if NHC decides not to fund Elcar. She wonders whether Elcar has other financing options that could be considered or whether Elcar could reduce its need for external financing by decreasing certain operating costs.

One of the options is to bring in a new equity investor, who would purchase newly issued shares of Elcar. Denise wants to know what percentage of Elcar would have to be sold to cover Elcar's cash requirements (based on a discounted cash flow valuation using the existing forecast, without consideration of other financing or operational changes), and the qualitative impact of this financing strategy on NHC. In addition, she asks you to prepare a second valuation of Elcar, using an asset-based approach, to support a possible sale of a percentage of Elcar.

**REQUIREMENTS FOR YOUR ROLE
(READ ONLY THE ONE SPECIFIED FOR YOUR PRE-SELECTED ROLE)**

FINANCE REQUIREMENTS (continued)

Sam has asked NHC to help evaluate a grant offer that Elcar recently received from the provincial government. Denise directs you to provide an analysis of the proposed grant and to recommend whether to accept this offer.

Denise asks you to provide a capital budgeting analysis of the possible purchase of a battery-testing device, and to determine whether it can be justified for Elcar.

Shelagh is concerned about the impact of platinum price increases on Elcar's future financial position. She would like you to review possible platinum price hedging strategies, including futures, options or acquiring a mine (see offer), but not to discuss any related accounting issues.

In addition to the common appendices (I to III), information provided in Appendix IV (Finance) is relevant for your analysis.

**REQUIREMENTS FOR YOUR ROLE
(READ ONLY THE ONE SPECIFIED FOR YOUR PRE-SELECTED ROLE)**

PERFORMANCE MANAGEMENT REQUIREMENTS

You, CPA, are a member of the special investigation team currently working onsite at Elcar's facility. As part of its review, the team generally performs the same steps, but Denise has added some requests specific to Elcar's circumstances.

Platinum is a high-value, key component in Elcar's battery manufacturing. Therefore, Denise asks you to perform a variance analysis between budgeted and actual platinum costs and to report your findings.

Elcar committed to purchase a quantity of parts from K3Press Corporation (K3Press), which in hindsight is excessive. Denise asks you whether Elcar should be advised to cancel the contract. She asks for both quantitative and qualitative support.

Denise noted NHC's frustration with Elcar's reporting package. She asks you to review the key measures report that Elcar provides to NHC, recommend improvements, and make suggestions that would allow NHC to better monitor Elcar's financial results and would assist NHC in its decision to further fund Elcar.

Given Elcar's small accounting department, Denise is concerned with some financial reporting issues. Specifically, she would like you to assess the accounting for the foreign currency transactions, the revenue from car sales made under the new marketing program, the K3Press contract and the future dismantling of Elcar's battery construction facility.

Elcar last requested funding from NHC in late fiscal 2016. At that time, Elcar's management provided a proposal and a four-year forecast. Denise asks you to review the proposal Elcar provided to NHC to support the 2017 cash injection, and to comment on Elcar's actual performance relative to that initial proposal.

In order to further assess the current situation, Denise would like you to discuss the risks that Elcar is facing and suggest how to mitigate them.

**REQUIREMENTS FOR YOUR ROLE
(READ ONLY THE ONE SPECIFIED FOR YOUR PRE-SELECTED ROLE)**

PERFORMANCE MANAGEMENT REQUIREMENTS (continued)

NHC would like its investees to maintain a minimum cash balance of \$3 million at the end of each month. Elcar has recently submitted its six-month cash flow forecast. Denise would like you to review it and make any changes you believe are necessary. If, while reviewing the forecast, you notice any areas where Elcar could reduce costs, you are asked to note them.

Sam told Denise they are investigating paying the vehicle and battery assembly employees strictly by piecework. Denise asks you to analyze this form of compensation and provide your recommendation.

In addition, Denise wants a quantitative and qualitative analysis of the electric bicycle proposal, and a recommendation on whether to pursue the venture.

Denise asks you to recommend changes that would improve the governance and oversight of Elcar by NHC. This includes possible changes to the Board of Directors, structure or policies and processes.

Denise believes that Elcar's performance could be improved if each department had better performance indicators. She would like your comments on the current performance measurement system, and suggestions for improvement.

In addition to the common appendices (I to III), information provided in Appendix IV (Performance Management) is relevant for your analysis.

REQUIREMENTS FOR YOUR ROLE
(READ ONLY THE ONE SPECIFIED FOR YOUR PRE-SELECTED ROLE)

TAXATION REQUIREMENTS

You, CPA, are a member of the special investigation team currently working onsite at Elcar's facility. As part of its review, the team generally performs the same steps, but Denise has added some requests specific to Elcar's circumstances.

Platinum is a high-value, key component in Elcar's battery manufacturing. Therefore, Denise asks you to perform a variance analysis between budgeted and actual platinum costs and to report your findings.

Elcar committed to purchase a quantity of parts from K3Press Corporation (K3Press), which in hindsight is excessive. Denise asks you whether Elcar should be advised to cancel the contract. She asks for both quantitative and qualitative support.

Denise noted NHC's frustration with Elcar's reporting package. She asks you to review the key measures report that Elcar provides to NHC, recommend improvements, and make suggestions that would allow NHC to better monitor Elcar's financial results and would assist NHC in its decision to further fund Elcar.

Given Elcar's small accounting department, Denise is concerned with some financial reporting issues. Specifically, she would like you to assess the accounting for the foreign currency transactions, the revenue from car sales made under the new marketing program, the K3Press contract and the future dismantling of Elcar's battery construction facility.

Denise would like a calculation of the loss for tax purposes for the May 31, 2019, year end. She would also like to know the impact on the current and future tax returns of the financial reporting issues she has identified.

In addition, she is interested in the taxation of the Jitcoin, a cryptocurrency, particularly if the company starts selling cars for Jitcoin. Like other cryptocurrencies, Jitcoin is considered a commodity, not cash, for income tax purposes. You are asked only to assess the treatment of Jitcoin for tax purposes, not for financial reporting purposes. Denise is also interested in the taxation of the partnership unit investments.

Denise also asks you to advise Elcar and NHC on any ways to use Elcar's tax losses against the income of a related corporation, FilterH2O Corporation. Management expects about \$5 million more tax losses in Elcar prior to it becoming profitable and possibly sold.

Further, Elcar's HR director is considering alternatives for the CEO's compensation. Denise wants to understand the tax implications for Robin, and for Elcar, of the alternatives presented.

**REQUIREMENTS FOR YOUR ROLE
(READ ONLY THE ONE SPECIFIED FOR YOUR PRE-SELECTED ROLE)**

TAXATION REQUIREMENTS (continued)

Elcar is planning to send one of its scientists to a university in Grenada in order to conduct research. The HR director asks about the income tax implications of this temporary assignment for this person.

NHC has informed Elcar that, if NHC agrees to provide more funding, it may be advanced either through NHC or NHC Canada. It may come in the form of a loan or through the issuance of new common or preferred shares in Elcar. Denise would like a discussion of the tax implications of these forms of financing (and the income associated with them), now and in the future. She would also like suggestions for ways to transfer income to the U.S. if Elcar becomes profitable, in order to take advantage of the lower U.S. corporate tax rates.

Finally, Robin has presented two tax planning ideas that have been proposed by employees over the last few months. Denise would like you to evaluate these ideas to determine whether they are worth pursuing, and to discuss the risks associated with each if implemented.

In addition to the common appendices (I to III), information provided in Appendix IV (Taxation) is relevant for your analysis.

APPENDIX I – COMMON INFORMATION ABOUT ELCAR INC.

Elcar was incorporated on January 2, 2015, under the *Canada Business Corporations Act*. Elcar has a May 31 fiscal and taxation year end and reports under IFRS. Elcar's tax rate would be 28% if it had any taxes payable, but it has had none so far. Its incremental borrowing rate from the bank is 8%. Elcar's mission statement is:

“To develop, market and sell innovative electric vehicles using industry-leading battery technology.”

As many countries are forcing car manufacturers to reduce emissions, the electric car industry is growing, with several new entrants. Many of the large automakers have developed their own electric vehicles and offer special financing terms to their customers. Electric cars compete not only with fuel-powered vehicles but also with hybrid cars, which run on both electricity and gasoline. Hybrids are often marketed as having greater flexibility than electric models.

Electric cars are quiet, drive and accelerate well, and are simple to maintain and operate. However, electric vehicles are priced significantly higher than fuel-powered vehicles, mostly due to their large, heavy batteries, which can cost \$10,000 each and are the most expensive component of the car. While the batteries' storage capacity is improving, their range is typically between 150 and 600 kilometres. In addition, the top speeds of electric cars are generally lower than those of fuel-powered vehicles. The useful life of batteries can be as short as three years. Fully charging batteries can take up to six hours, and charging outlets are less common than gas stations.

Elcar decided to compete at a lower price point and not offer a luxury model. Elcar's management believes it has an efficient design, which uses pre-manufactured brakes, steering and electric motors. Elcar has one model, a two-seat car called the “Vassy.” The body design team has already created minor body variations for the next four model years, which will require minimal manufacturing changes. To keep production costs down, there is no customization available beyond the choice of colour.

Elcar sold its first Vassy in the middle of fiscal 2018 and had sold 164 cars by the fiscal year end. Sales have increased significantly in fiscal 2019. The typical Vassy buyer is a professional in their early 30s. The car is sporty in style but not in power or acceleration; its top speed is 110 kilometres per hour. The car's body design is patented and has won two design awards. The spring 2019 *Electrical Car Digest* magazine ranked the top 10 electric vehicles using 12 criteria, including style, charge time, speed, power, and range. The Vassy ranked sixth.

**APPENDIX I – COMMON (continued)
INFORMATION ABOUT ELCAR INC.**

Elcar’s head office and plant are rented for \$10,000 per month. The plant has the capacity to produce 3,000 cars per year with one daily eight-hour shift. Parts and components are stored at the plant. Typically, parts are ordered to arrive one month before manufacture and are paid on “net 20-day” terms. Each car has a unique Vehicle Identification Number (VIN).

Elcar’s processes use the latest technology. In addition to those in manufacturing, the company has 84 other employees—many of whom are scientists or technicians—whose average pay, including benefits, is \$76,000 per annum.

Elcar owns a battery construction facility. It is expending a lot of effort to develop a new battery design, the G1 battery, which contains platinum. The battery will cost about \$9,000 to produce. Platinum is a rare and precious metal whose price has fluctuated by 22% in the past year. Because it can be resold easily, it is susceptible to theft. Most batteries in the industry, including Elcar’s current battery, are made with lithium, which costs less per battery than platinum. The goal is to have a working prototype of the G1 battery for road testing by the end of November 2019. The team is also working on the next version, the G2 battery. A comparison of the batteries is as follows:

Battery Model	Range (km)	Charge Time (hours)
Current	175	4.0
G1	350	2.0
G2	600	1.5

If development is successful, the new models could have other applications outside of cars. Once technical feasibility is confirmed, the team will investigate obtaining its first patent and start capitalizing development costs going forward.

Elcar sells its cars through a collaboration with 48 car dealers that also sell traditional, non-electric cars. The Vassy is currently not available for sale via the internet but the sales team plans to launch online sales in late fiscal 2020. The sales team is also exploring sales to Europe but currently only sells within Canada and the U.S. Elcar currently does not offer financing for its car sales. Elcar does not store any inventory regionally and all cars sold are shipped directly from its plant.

**APPENDIX II – COMMON
EXCERPTS FROM ELCAR DRAFT FINANCIAL STATEMENTS**

Elcar Inc.
Statement of Financial Position
As at May 31

	2019	2018
	Draft	Audited
Assets		
Cash and cash equivalents	\$ 4,021,169	\$ 1,546,888
Trade receivables	98,752	76,415
Inventory and work in progress	3,416,985	2,665,248
Prepaid expenses	202,452	147,528
	<u>7,739,358</u>	<u>4,436,079</u>
Property, plant and equipment, net	1,076,044	1,007,772
Investments	40,000	0
	<u>\$ 8,855,402</u>	<u>\$ 5,443,851</u>
Liabilities		
Trade payables and other liabilities	\$ 616,458	\$ 398,694
Deposits	276,455	304,255
Due to parent company	19,422	16,422
	<u>912,335</u>	<u>719,371</u>
Shareholder's equity		
Common shares	15,284,736	9,357,372
Deficit	(7,341,669)	(4,632,892)
	<u>7,943,067</u>	<u>4,724,480</u>
	<u>\$ 8,855,402</u>	<u>\$ 5,443,851</u>

APPENDIX II – COMMON (continued)
EXCERPTS FROM ELCAR DRAFT FINANCIAL STATEMENTS

Elcar Inc.
Income Statement
For the year ended May 31

	2019	2018
	Draft	Audited
Revenues	\$ 30,698,472	\$ 6,065,868
Cost of sales	18,541,877	3,657,718
	<u>12,156,595</u>	<u>2,408,150</u>
General and administrative	3,145,875	1,715,168
Marketing and sales	3,740,151	546,120
Product development	7,814,521	2,148,452
Depreciation	164,825	159,444
	<u>14,865,372</u>	<u>4,569,184</u>
Net loss	<u>\$ (2,708,777)</u>	<u>\$ (2,161,034)</u>

**APPENDIX III – COMMON
OTHER INFORMATION****Platinum inventory**

In January 2019, management and the research and development (R&D) department determined that they would like to complete the first phase of G1 battery testing by May 31, 2019. To do so, they planned to build 300 prototypes of the G1 battery, which would require 38,100 grams of platinum using the standard of 127 grams per battery. Using the standard price of \$31.05 per gram, management budgeted \$1,183,005. At that time, Elcar had no platinum inventory on hand.

As of May 31, 2019, the R&D department had built 270 battery prototypes, and had 2,000 grams of platinum in inventory. The amount was determined by an inventory count, which was performed by only one person. This was the first count performed on platinum since March.

Jeremy Scalia, from the R&D department, explained that the platinum is stored in a secure area of the facility but no one in the department has official responsibility for the safekeeping and counting of the platinum. Scientists from the R&D department have 24-hour access. The records indicate that there were three separate purchases of platinum between January and May 2019, as follows:

	Quantity (grams)	Price (per gram)	Total Cost
March 1	9,425	\$ 32.00	\$ 301,600
April 1	20,000	\$ 33.50	\$ 670,000
May 1	8,675	\$ 35.50	\$ 307,963
Total	38,100		\$ 1,279,563

In building the prototypes, the researchers said they must sometimes dispose of batteries that do not meet the company's quality standards. No records are kept of these disposed batteries.

APPENDIX III – COMMON (continued)
OTHER INFORMATION

K3Press contract

In November 2018, Elcar signed a contract to buy a total of 9,000 reduction gears, a large and heavy car component, over the next three years from K3Press, at what was then a favourable price of \$185 per unit. The reduction gears are delivered on an as-needed basis. When the contract was signed, Elcar forecasted it would need over 3,000 reduction gears per year. Actual needs have lagged, with 1,100 having been delivered to date and 2,000 required for the 2020 fiscal year, after which time the reduction gears will probably no longer be needed. Elcar is considering cancelling the contract. Due to K3Press production plans, the cost of cancelling increases with time. Currently, the contract can be cancelled at a cost of \$215,000. This increases to \$245,000 on May 31, 2020, and to \$275,000 on May 31, 2021, regardless of the volume delivered. K3Press is a well-regarded supplier in the industry and Elcar may need to do business with it again in the future.

The market price of reduction gears has dropped to \$160 per unit. If Elcar resells the excess units, it will incur a 0.5% commission and \$5,000 in advertising costs.

Key measures report

The most recent report sent to NHC by Elcar is as follows.

Elcar Inc.		
Key Measures Report for the Month of April 2019		
Sent June 11, 2019		
	April 2019	March 2019
Number of vehicles ordered	79	77
Number of staff, excluding manufacturing staff	84	83
Grams of platinum purchased	20,000	9,425
Cash balance	\$4,077,442	\$3,709,641
Current ratio	8.02	7.94
Trade payable balance	\$526,415	\$505,789

Shelagh wants to be able to determine whether Elcar's financial performance is improving. To help with future funding decisions, she is always interested in knowing its current and future cash usage. Shelagh also attempts to collect additional information, informally, on her calls with Robin, especially related to sales. Also, if she thinks of it, she asks about the development of the G1 battery.

APPENDIX III – COMMON (continued)
OTHER INFORMATION

Foreign currency transactions

Elcar's functional currency for accounting purposes is the Canadian dollar (CAD). On April 19, 2019, Elcar implemented a new accounts payable module in its integrated accounting system. A consultant helped configure the programs for the general ledger coding, internal control and foreign currency conversion. All invoices dated after April 19 were processed in the new module rather than in the old one. While the system has worked well overall, some glitches have had to be resolved since implementation.

The listing of the May 31, 2019, U.S. dollar (USD) trade payables, excluding the NHC intercompany account, is as follows.

Invoice Date (YYYY-MM-DD)	Vendor	USD Amount	Recorded CAD Amount	Rate
2019-04-10	Electo Dool Inc.	\$ 49,504.00	\$ 67,325.44	1.36
2019-04-11	Mary & Walter	\$ 26,965.00	\$ 36,672.40	1.36
2019-04-14	Leitch Limited	\$ 70,130.22	\$ 95,377.10	1.36
2019-04-18	Old State Hoses Corp.	\$ 20,000.00	\$ 27,200.00	1.36
2019-04-20	Alabamah Specialty	\$ 20,000.00	\$ 25,800.00	1.29
2019-04-30	Leitch Limited	\$ 43,640.68	\$ 56,296.48	1.29
2019-05-01	193032 Canada Inc.	\$ 43,804.80	\$ 56,508.19	1.29
2019-05-02	Sorspumps Ltée.	\$ 72,100.00	\$ 93,009.00	1.29
2019-05-06	Old State Hoses Corp.	\$ 12,700.00	\$ 16,383.00	1.29
2019-05-14	Advantage Selling	\$ 24,705.88	\$ 31,870.59	1.29
			<u>\$ 506,442.20</u>	

The exchange rate at April 30, 2019, was \$1 USD = \$1.29 CAD, and at May 31, 2019, was \$1 USD = \$1.36 CAD. When the invoices are posted to accounts payable, the budgeted exchange rate for the month is used to record the related expense or asset.

At the beginning of the fiscal year, Elcar created an intercompany general ledger account for occasional transactions with NHC that are USD denominated. The intercompany transactions are accounted for at the budgeted exchange rate for the month, and subsequently the account balance is never adjusted, because the account balance eliminates on consolidation. The budgeted rate was \$1 USD = \$1.32 CAD for April and May 2019.

APPENDIX III – COMMON (continued)
OTHER INFORMATION

New marketing program

During the 2019 fiscal year, Elcar's marketing department started a new marketing program. When customers buy their vehicle at the current price, Elcar will upgrade their battery to the next generation, free of charge, once it is available. The full amount of the vehicle sales made under this program has been recorded as revenue.

Battery construction facility

In January 2019, new environmental legislation was passed that requires companies with battery construction facilities to properly decommission those facilities at the end of their useful lives in order to remediate any environmental damage caused as a result of the building construction. Elcar has obtained a quote from a third party, who is willing to dismantle the battery construction facility and contents and clean up the site for \$185,400 in today's dollars. The current and forecasted rate of inflation is 2%. The estimated remaining useful life of the facility is 15 years. As at May 31, 2019, no amount has been recognized related to decommissioning the facility.

**ASSURANCE ROLE
ADDITIONAL INFORMATION**

APPENDIX IV ASSURANCE – ADDITIONAL INFORMATION

Artwork

In March 2019, Elcar purchased a piece of artwork at an art auction for \$200,000. The piece was created by Innes Blanche, whose work is displayed at the Museum of Modern Art in New York City. Robin is convinced this is an exceptional investment, since the artist's work has increased significantly in value (more than 40%) over the past year and art experts expect this to continue. In order to protect the artwork, it is kept in a temperature-controlled storeroom in the plant. Because Innes' artwork is in such high demand, Robin believes Elcar can sell the asset quickly; the artwork has therefore been recorded as a cash equivalent at cost on the statement of financial position.

Updated cash flow forecast

In May 2019, management developed an updated cash flow forecast that indicates Elcar will have \$10 million in cash in 12 months' time and that sales will be at 150 units per month by the end of the first quarter of fiscal year 2020.

Additional assumptions used in developing this forecast are as follows:

- The inflation rate is 2%.
- The exchange rate is \$1 USD = \$1.35 CAD.
- The price of platinum is \$33.00 per gram.
- Labour costs will remain consistent, given that expected manufacturing efficiencies will offset the cost of the additional volume being manufactured.
- The G1 battery will achieve technical feasibility and be fully functional by November 2019.
- Elcar will have no capital expenditures in the next 12 months.
- Elcar's existing line of credit, which ends in February 2020, will be renewed.

APPENDIX IV (continued)
ASSURANCE – ADDITIONAL INFORMATION

Provincial government grant

In April 2019, Elcar received a grant from its provincial government for “Training of Staff Related to the Safe Disposal of Certain Wastes.” It is the first recipient under this new program. After the first year, a CPA must sign off on an audit report confirming Elcar’s compliance with the agreement.

The conditions of the grant are as follows:

1. The funds are to be deposited in a separate bank account or accounted for in a separate general ledger account in the books of the recipient.
2. No monies are to be spent for items related to this grant prior to actual receipt of the funds.
3. Until the funds are fully expended, the recipient is to maintain a minimum cash balance of \$300,000.
4. The recipient must spend at least 15% of the funds during the company’s fiscal year ended May 31, 2019.
5. The recipient is not to apply for any other funding from the provincial government before the earlier of: a) six months after the grant date; or b) full expenditure of the funds.
6. The recipient must comply at all times with applicable provincial labour laws.

Website

The following “environmentally responsible actions” appear on Elcar’s website:

1. Elcar is moving towards a paperless environment, with employees printing an average of less than five sheets of paper daily.
2. Elcar has an environmental impact committee, providing effective monitoring of corporate decisions for environmental responsibility.
3. Elcar is reducing waste and has hauled 10% less waste from the plant under its waste disposal contracts than in the prior fiscal year.
4. Elcar is focused on employee safety and no employees have filed Worker’s Compensation claims for environmental-related injuries during the past fiscal year.
5. Elcar’s plant property is not contaminated, as defined by the Provincial Contaminated Sites Act.
6. Elcar will reduce electricity usage per square foot by 20% by the year 2021 by implementing various measures.

Payroll

Elcar uses an independent organization to carry out its payroll. Shelagh says she has some concerns over the validity of hours worked, because she has learned that a friend of the payroll processing clerk was paid for two months last year but was not actually an employee. The payroll clerk has since been terminated.

**FINANCE ROLE
ADDITIONAL INFORMATION**

APPENDIX IV
FINANCE – ADDITIONAL INFORMATION

The following forecast (excluding investments) has been prepared by Elcar and submitted to NHC as part of its funding request.

Forecast – year ending May 31	2020	2021	2022	2023
Units sold				
Current model	1,200			
G1 model		1,600	2,400	
G2 model				2,900
Revenues				
Current model	\$ 45,600,000	\$ 0	\$ 0	\$ 0
G1 model	0	68,800,000	103,200,000	0
G2 model	0	0	0	133,400,000
	45,600,000	68,800,000	103,200,000	133,400,000
Cost of sales				
Current model	32,004,312	0	0	0
G1 model	0	45,072,416	67,608,624	0
G2 model	0	0	0	87,493,754
	32,004,312	45,072,416	67,608,624	87,493,754
Gross profit	13,595,688	23,727,584	35,591,376	45,906,246
<i>Gross profit margin</i>	<i>29.8%</i>	<i>34.5%</i>	<i>34.5%</i>	<i>34.4%</i>
Other expenses				
Selling (Note 1)	880,119	1,239,491	1,859,237	2,406,078
Shipping (Note 2)	2,774,400	3,699,200	5,548,800	6,704,800
Battery development costs	4,161,000	4,161,000	4,161,000	4,161,000
Payroll (non-manufacturing)	6,748,800	8,098,560	9,718,272	11,661,926
Marketing and sales	1,431,375	3,864,713	4,830,891	8,212,515
General and administrative	2,184,000	2,839,200	3,690,960	4,798,248
Amortization	194,500	194,500	194,500	194,500
	18,374,194	24,096,664	30,003,660	38,139,067
Income (loss) before taxes	(4,778,506)	(369,080)	5,587,716	7,767,179
Income tax expense	0	0	0	232,620
Income (loss) after taxes	\$ (4,778,506)	\$ (369,080)	\$ 5,587,716	\$ 7,534,559

Notes:

1. Selling – Half of sales through dealers
2. Shipping – Average cost to date

APPENDIX IV (continued)
FINANCE – ADDITIONAL INFORMATION

Other information

Tax losses

Non-capital tax losses such as Elcar's have a fair market value of about five cents on the dollar. The following extract is from Schedule 4 of Elcar's T2 for the year ending May 31, 2019.

<u>Year of Origin</u>	
2015-05-31	\$ 467,852
2016-05-31	\$ 824,131
2017-05-31	\$ 1,274,542
2018-05-31	\$ 2,101,222
	<u>\$ 4,667,747</u>

Working capital

Cost of sales is assumed to be paid in the year the costs are incurred. Going forward, management plans to maintain an inventory level (including finished goods, parts and work in progress) of 10% of the following year's forecasted cost of sales. Other balances within working capital are considered suitable for Elcar's existing and forecast operations.

Industry growth

Given the pace of change in the industry and growth in the number of competitors, average growth beyond 2023 is expected to be 2%.

APPENDIX IV (continued)
FINANCE – ADDITIONAL INFORMATION

Extracts from provincial grant offer

(DRAFT FOR DISCUSSION)

The Minister is pleased to offer a provincial grant to Elcar Inc. (the Company) of \$1,000,000 to fund Eligible Costs to develop “advanced battery technology” as defined in this agreement, under the following terms:

- Fifty percent (50%) of the grant is non-repayable if the Company complies with all conditions of the agreement (see below).
- Fifty percent (50%) of the grant is repayable in one payment four years after the grant date, and commences bearing interest one year after the grant date.
- The annual interest rate is calculated at the provincial government’s average borrowing rate plus 3%, and is paid on an annual basis, beginning two years after the grant date.

The grant is subject to the following conditions:

1. A majority of the outstanding voting shares cannot be sold, in a single or a series of transactions, during the period of the grant, to a foreign company, without prior approval of the Minister.
2. The grant may be revoked if the Company at any time violates Section 42 or 43 of the *Public and Corporate Assistance Act*.
3. Eligible Costs must be incurred inside a circle with a radius drawn 58 km from the Company’s plant.
4. Only salaries of employees with a home address inside the above designated circle are considered Eligible Costs.
5. A Canadian CPA must issue an annual audit report on Eligible Costs, with a materiality of \$1,000. The cost of the report must be borne by the Company.
6. Should the Company fail to repay the repayable portion of the grant when due, the Minister reserves the right to seize the assets of the Company or take an equity position in the Company, equal to the unpaid amount.
7. Instead of repayment, the Minister may, at his/her discretion, claim a 10% ownership interest in the Company’s common shares, obtained through the issuance of new shares.

APPENDIX IV (continued)
FINANCE – ADDITIONAL INFORMATION

Battery testing device purchase

The production manager wants to purchase a new battery testing device. It is new in the market and is not fully proven, but has a good warranty and is expected to last 10 years. It is manufactured in the U.S. but can be purchased from a nearby distributor. The cost is U.S. \$350,000 plus CAD \$5,600 freight-in and a CAD \$12,500 technical set-up and training charge.

The new machine would eliminate a stressful and time-consuming manual process. Currently, each test requires an employee to spend 2.1 hours on assembly and 0.4 hours on inspection, as well as approximately \$75 worth of chemicals, the price of which fluctuates significantly. The employee rate, with benefits, is \$32.04 per hour. Approximately 1,200 tests occur each year.

The new machine also eliminates some environmentally negative emissions released by the chemicals. Laws concerning these emissions are expected to be enacted within three years.

To maintain the warranty, the manufacturer requires a mandatory annual service contract of CAD \$5,000 with an approved service contractor. Preliminary estimates of additional electricity costs are \$200 per month.

NHC requires all capital investment by Elcar to be evaluated against its desired return on investment of 25%.

Platinum

Elcar has been approached by a company operating a very small platinum mine in South Africa, who heard Elcar plans to increase its platinum purchases. The company is willing to sell the mine to Elcar but has not yet disclosed its asking price.

Platinum futures and platinum options are readily available in the commodity markets.

APPENDIX IV (continued)
FINANCE – ADDITIONAL INFORMATION

Elcar property, plant and equipment

As a result of discussions about possible asset-based financing by a third party—which did not occur—all of Elcar’s property, plant and equipment was appraised, as follows.

Elcar Inc.
Replacement Cost at April 2, 2019

Office computers and equipment	\$ 37,000
Manufacturing equipment	260,000
R&D equipment	280,000
Battery construction facility	440,000
	<hr/>
	<u>\$ 1,017,000</u>

On average, Elcar’s equipment purchases are \$8,000 per month.

Investments

Elcar owns 10% of Barkser Limited Partnership (Barkser), for which it paid \$40,000. Barkser is developing short-term storage of wind energy for use on non-windy days. The capital raised by Barkser was spent on R&D and there are no intercompany transactions with Elcar. A week ago, Barkser announced that it had significantly progressed on its R&D. As a result, Elcar received an unsolicited offer of \$280,000 for its 10% stake in Barkser, but turned it down.

**PERFORMANCE MANAGEMENT ROLE
ADDITIONAL INFORMATION**

APPENDIX IV
PERFORMANCE MANAGEMENT – ADDITIONAL INFORMATION

**Elcar's Proposal presented to NHC for initial funding
(2016)**

The request is for \$8 million for the fiscal 2017 to 2019 period.

With the support of NHC's investment, we expect to start selling our own electric family sedan by the end of September 2017. Sales are forecast to be 1,678 units in the first two years and 5,000 in the next two years. At a sales price of \$36,400 and a cost to produce of 65%, we expect to earn a 35% gross profit on each vehicle, as presented in our forecast.

We have hired a team of young designers with the aim of winning an industry design award for the aesthetics of the vehicle. Staff numbers will increase slightly during fiscal 2018 and 2019, reaching 64 people, outside of manufacturing, and will remain constant for the following two years.

The car will be sold via the internet and an independent dealer network that will reach at least 100 metropolitan areas by the end of fiscal 2019. European sales are expected to be 20% of total sales.

The development of the battery technology will advance quickly with targeted product development. It should produce a range of 200 kilometres before the end of fiscal 2020, and the hours to charge per kilometer-of-range ratio will be less than 0.002. Our technology will be covered by four patents by the end of fiscal 2019, and we will apply immediately for a patent on our new battery acid.

So we can vacate our rented facility, we expect to purchase a manufacturing plant of about 30,000 square feet within six months, for \$2.4 to \$2.6 million.

To expand the business more rapidly, we plan to partner with a major industry player for our sales, manufacturing or battery development.

Extracts from the four-year forecast provided are as follows:

	Note	2017	2018	2019	2020	Totals
Units sold		278	1,400	2,000	3,000	6,678
Revenues	1	\$10,119,200	\$50,960,000	\$74,800,000	\$112,200,000	\$248,079,200
Income (loss) after taxes		(\$4,921,672)	\$760,527	\$3,966,558	\$8,274,589	\$8,080,002

Note 1: Unit price for 2017 and 2018 is estimated to be \$36,400 and to increase to \$37,400 for 2019 and 2020.

APPENDIX IV (continued)
PERFORMANCE MANAGEMENT – ADDITIONAL INFORMATION

Elcar – 2019 cash flow forecast

The following is Elcar's cash flow projection for the next six months of 2019.

	Note	June	July	August	Sept.	Oct.	Nov.
Opening cash		\$4,021,000	\$3,636,000	\$3,719,000	\$3,802,000	\$3,885,000	\$3,968,000
Cash sales	1	3,640,000	4,368,000	4,368,000	4,368,000	4,368,000	4,368,000
Direct materials	2	1,750,000	1,750,000	1,750,000	1,750,000	1,750,000	1,750,000
Direct labour	3	141,200	169,440	169,440	169,440	169,440	169,440
Variable overhead	4	458,800	460,560	460,560	460,560	460,560	460,560
Admin. salaries	5	475,000	525,000	525,000	525,000	525,000	525,000
Leases	6	250,000	360,000	360,000	360,000	360,000	360,000
R&D	7	700,000	770,000	770,000	770,000	770,000	770,000
Utilities	8	250,000	250,000	250,000	250,000	250,000	250,000
		4,025,000	4,285,000	4,285,000	4,285,000	4,285,000	4,285,000
Operating cash flow		(385,000)	83,000	83,000	83,000	83,000	83,000
Closing cash		\$3,636,000	\$3,719,000	\$3,802,000	\$3,885,000	\$3,968,000	\$4,051,000

Notes:

1. Based on forecasted selling price of \$36,400.
2. Based on the monthly average of direct materials purchased.
3. Based on the assumption that the cost varies with the number of employees who are paid hourly, as well as on the assumption of an annual cost of living increase of 5% commencing on November 1, 2019.
4. Variable overhead costs are based on May 31, 2018, fiscal year actuals.
5. Based on salaries for non-manufacturing staff.
6. Increase due to equipment rented for R&D work to complete testing of the G1 and G2 batteries.
7. R&D has requested additional expenditures to complete testing of the G1 and G2 batteries.
8. 90% of the utilities cost is to power the manufacturing equipment.

APPENDIX IV (continued)
PERFORMANCE MANAGEMENT – ADDITIONAL INFORMATION

Budget

During Shelagh's illness, no one from NHC contacted Robin. Shelagh commented, "When I returned, I was surprised to learn that the 2019 budget, which was originally approved by me, was changed by Robin without approval, that Elcar had obtained a line of credit when we could have borrowed at a lower rate and advanced it to Elcar, and that Robin did not obtain our approval for the December 2018 executive bonuses."

Paying employees by piecework

The majority of assembly line workers in the auto industry in Canada are unionized, demand high wages and strike from time to time. To date, Elcar's workers have not unionized. The VP, Manufacturing, Bill Smith, has come up with a plan to pay the car assembly workers via piecework (per car). Early discussions with the workers indicate that they are quite interested. The standard labour cost per vehicle and battery is currently \$1,412, but employees' productivity varies. It takes from 27 to 32 hours to build the car and an estimated 14 to 18 hours to build the battery. The manufacturing employees' hourly rate is \$32.04, including benefits and other payroll costs. In addition to the motivation it will naturally provide, it is likely that the workers will be more autonomous, eliminating the need for the two shift supervisors. The supervisors are currently paid a salary of \$80,000 each. However, quality and safety may become greater concerns. Bill wonders if there will be complications setting the piecework rate. The preliminary rate being considered is \$1,600 per car.

APPENDIX IV (continued)
PERFORMANCE MANAGEMENT – ADDITIONAL INFORMATION

Electric bicycle proposal

An Elcar employee, Fritz Smid, is proposing developing and selling an electric bicycle.

Fritz admits that the electric bicycle market is crowded but is growing rapidly. He obtained a letter of intent from a friend in Taiwan who is a bicycle distributor, for an order of 300 electric bicycles.

The letter of intent states that the order will be placed if an electric bicycle prototype can be produced that:

- can be charged using Taiwan's electrical system
- has a range of 80 kilometres at a continuous speed of 15 km per hour
- weighs less than 26 kg, including the battery
- has a battery that can be charged in less than two hours
- has an asking price of no more than \$1,140

Fritz has built four prototypes that work well, at a total cost of \$50,600. He has two options for the frame. One is for the supplier to manufacture an externally designed, heavy-duty bike frame that would cost \$464. The second option is for the supplier to manufacture a frame that would be internally designed by Elcar, and would cost an estimated \$390. The battery would cost \$195 and the motor and other components would total \$87. If annual orders exceed 3,000 units, volume discounts would result in cost reductions. Assembly labour is estimated at \$49 for the externally-designed frame and \$44 for the internally-designed frame.

There would be annual operating fixed costs, including the full payroll cost of \$97,525 for Fritz, \$84,250 for a marketing manager and \$39,422 for a clerk to do sales and administration. Fritz estimates an annual advertising and internet budget of \$75,000, equipment rental of \$15,210 and rent of \$14,000 for the additional manufacturing space in the existing plant. The cost accountant said an allocation of \$29,400 of factory overhead would be charged to the bicycle business.

APPENDIX IV (continued)
PERFORMANCE MANAGEMENT – ADDITIONAL INFORMATION

Performance indicators

Elcar's workforce is divided into four groups, with their primary responsibilities as follows:

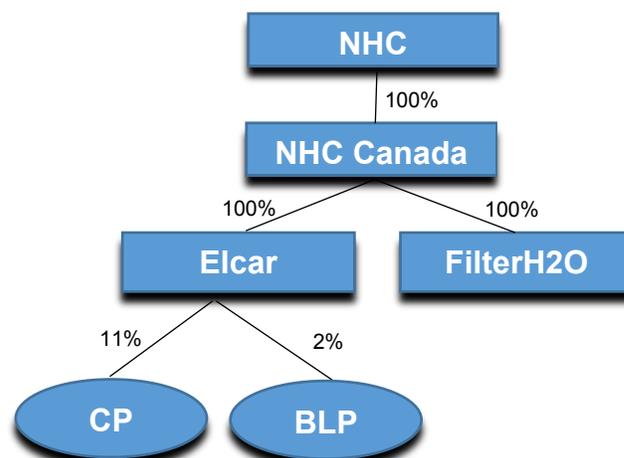
- R&D: Ongoing development of new products and innovation
- Manufacturing: Production of products and maintenance of building and equipment
- Design: Design of a desirable car
- Sales: Marketing the cars via the dealer network and online sales

Currently, Elcar uses 360-degree feedback as the performance measurement system for all employees' annual performance reviews. This technique involves an evaluation being performed by the person's superiors, the person's peers and by the people reporting to the person being evaluated. Each employee asks six other employees or managers to complete their survey. The survey contains two areas for comments: one for employee strengths and one for employee weaknesses. The employee's performance is measured solely on the average score obtained from the "1 to 10" ratings provided. Many employees have said the feedback is vague, confusing and almost entirely negative. Others have said the feedback is more about their popularity than about how well they do their job.

**TAXATION ROLE
ADDITIONAL INFORMATION**

APPENDIX IV TAXATION – ADDITIONAL INFORMATION

Corporate structure



Martin Blanc and NHC are resident in the United States for tax purposes. NHC Canada is resident in Canada for tax purposes and is profitable. Most Canadian oversight staff, including the Canadian members of the investigation team, are employed by NHC Canada.

In addition to Elcar, NHC has another Canadian subsidiary. FilterH2O Corporation is a profitable company that sells water treatment systems. Its taxable income last year was \$1,323,893, and it has a May 31 fiscal year end. It is expected to earn similar income in future years.

Partnership investments

During the fiscal year, Elcar acquired units in two unrelated partnerships described below, which are correctly recorded for financial accounting purposes at fair value through profit and loss. As the fair value of the units has not changed, Elcar has correctly not recorded any accounting entry for gains or losses.

On June 1, 2018, Elcar purchased units representing an 11% interest in a general partnership called Cara Partnership (CP), for \$10,000. CP has a December 31 fiscal year end, and for its year ended December 31, 2018, Elcar's share of CP's net income for tax purposes was \$25,000.

On January 16, 2019, Elcar purchased units representing a 2% interest in a limited partnership called Barkser LP (BLP), for \$30,000. BLP previously had no income for tax purposes but Elcar's share of the business losses for BLP's fiscal year end of May 31, 2019, was \$59,425.

APPENDIX IV (continued)
TAXATION – ADDITIONAL INFORMATION

Corporate income tax return

The following extract is from Schedule 4 of Elcar's T2 for the year ending May 31, 2018.

Schedule 4

Part 6 – Analysis of balance of losses by year of origin

Year of origin	Non-capital losses
2015-05-31	\$ 467,852
2016-05-31	\$ 824,131
2017-05-31	\$ 1,274,542
2018-05-31	\$ 2,101,222
	\$ 4,667,747

CEO compensation

Under a new policy at Elcar, Robin can take \$100,000 in remuneration above his base salary for 2019, in the following forms:

- a cash bonus
- an \$8,333 per month car allowance
- the use of a \$38,000 Vassy
- an RRSP contribution
- a payment directed to his spouse

As they are not mutually exclusive, Robin can take the \$100,000 using any combination of the options.

Scientist (Amber Lantic)

Amber is single with no dependents, has a rented apartment and drives a Vassy that she personally purchased. She is a Canadian citizen and owns a piece of land in Canada on which she hopes to build a home for herself one day. Other than her RRSP and bank accounts, she has no assets. Amber plans to leave Canada in late 2019 and live in Grenada for a few years. Grenada has lower personal income tax rates than Canada. Amber will not be covered by the province's health plan while away. If it means saving on her income taxes, she is willing to rearrange some of her affairs. Amber will remain employed by Elcar during this temporary assignment.

APPENDIX IV (continued)
TAXATION – ADDITIONAL INFORMATION

Jitcoin

Because Robin is convinced that cryptocurrency will continue to appreciate and become a more common medium of exchange, Elcar purchased one Jitcoin for \$152,808, and recorded it under cash in the draft May 31, 2019, financial statements. At May 31, 2019, one Jitcoin's quoted market price was \$174,708, and there has been no accounting for this change.

Other information

Elcar is working on patenting its first invention, called "A Method to Arcate Platinum." Elcar spent \$21,000 on the patent legal fees in the 2019 fiscal year and Sam is wondering how these will be treated for tax purposes.

Elcar made an \$8,000 donation to Manchester Hospital, which is a charity in the United Kingdom, in memory of Robin's mother. Sam hopes it is acceptable as a deduction from Elcar's income.

Recognizing that she is very critical to the company, Elcar has purchased key person life insurance costing \$12,543 per year on the life of the company's chief technology officer.

Capital cost allowance for the May 31, 2019 taxation year is estimated to be \$157,000.

APPENDIX IV (continued)
TAXATION – ADDITIONAL INFORMATION

Tax planning ideas

The following tax planning ideas have been suggested to Robin in recent months.

CCPC status

In order to be eligible for lower tax rates and many other tax advantages, Sam's friend suggested turning the company into a Canadian-controlled private corporation (CCPC). He says that, if NHC Canada sold all of its common shares of Elcar to a CCPC or a Canadian resident individual on the day before year end, Elcar would qualify as a CCPC for that taxation year. In order not to lose control of Elcar, NHC Canada would have a written agreement providing the right to repurchase the shares the day after year end, which would be exercised. There would also be an agreement that no changes would be made to the company during the two days it is not owned by NHC Canada. He said this model can be repeated at each successive year end, to perpetually qualify as a CCPC.

SR&ED

The head of quality control (QC) at Elcar read a bit about scientific research and experimental development (SR&ED) tax credits and has come up with an idea that allows the salaries and costs of the QC department at Elcar to be claimed as SR&ED expenditures.

The department is responsible for the following:

- examining vehicle components to ensure they meet specifications before manufacturing
- verifying the quality of third-party testing on battery prototypes
- assisting with experiments on batteries' output and amperage
- ensuring the quality of vehicles manufactured prior to shipment to customers

The head of QC says that, if the department is renamed "R&D Quality Control" and maintains full documentation of all activities, and if staff wear white lab coats for the benefit of any Canada Revenue Agency technical or financial auditors that might show up, all the costs should be claimable as SR&ED expenditures, and should result in a large amount of refundable tax credits for Elcar.

**DAY 2 – MARKING GUIDE – COMMON
ELCAR INC. (ELCAR)**

In all roles, the candidate is expected to perform a variance analysis of Elcar's platinum costs, advise as to whether Elcar should cancel its contract with K3Press, and recommend improvements to Elcar's reporting package. In addition, the candidate is expected to address the accounting issues identified by Denise and recommend any required adjustments.

Assessment Opportunity # 1 (Common)

The candidate analyzes the quantity and price variances for the platinum costs.

The candidate demonstrates BREADTH OR DEPTH in Management Accounting.

As it is a high-value, key component in Elcar's battery construction, Denise asked for a variance analysis between budgeted and actual platinum costs.

Since the R&D department did not build the expected 300 prototype G1 batteries, we first need to determine the flexible budget variance.

Actual costs: 36,100 grams (A) × \$33.58 (B) = \$1,212,238

A = actual quantity: 38,100 grams (bought) - 2,000 grams (inventory) = 36,100 grams

B = average price per gram: \$1,279,563 / 38,100 grams = \$33.58

Budgeted costs for 270 batteries: 34,290 grams (C) × \$31.05 (D) = \$1,064,705

C = standard quantity: 270 batteries × 127 grams per battery = 34,290 grams

D = standard price per gram: \$1,183,005 / 38,100 grams = \$31.05 (given)

Flexible budget variance = \$147,533 U (\$1,212,238 - \$1,064,705)

This variance can be explained by the price variance and by the quantity/efficiency variance.

Price variance = actual quantity × (actual price - standard price)

= 36,100 grams × (\$33.58 - \$31.05) = \$91,333 U

Efficiency variance = standard price × (actual quantity - standard quantity)

= \$31.05 × (36,100 grams - 34,290 grams) = \$56,200 U

Check: flexible budget variance = price variance + efficiency variance

\$147,533 = \$91,333 + \$56,200

Therefore, the variance is mostly attributable to the price difference of the platinum as compared to the standard price. Given the price fluctuations of this commodity, Elcar should budget for a much higher standard cost for future purchases.

The efficiency variance should also be investigated. The platinum inventory is susceptible to theft and there are some control issues, so some, or all, of the unfavourable efficiency variance could be related to theft. Alternatively, there may be significant wastage; if this is the case, a system to track the waste should be implemented, to better understand and manage the variances.

For Assessment Opportunity #1 (Management Accounting), the candidate must be ranked in one of the following five categories:

Not addressed – The candidate does not address this assessment opportunity.

Nominal competence – The candidate does not attain the standard of reaching competence.

Reaching competence – The candidate attempts to calculate and explain the variance.

Competent – The candidate calculates and explains some elements of the variance (price or efficiency).

Competent with distinction – The candidate calculates and clearly explains the elements of the variance (price and efficiency).

Assessment Opportunity #2 (Common)

The candidate discusses whether the K3Press contract should be cancelled.

The candidate demonstrates BREADTH OR DEPTH in Management Accounting.

The decision of whether to cancel the K3Press contract is a function of weighing the losses from buying and reselling of the excess inventory, against cancelling the order for cash, in conjunction with the following qualitative factors.

Qualitative Analysis

Reasons in favour of cancelling:

- Because the market price has dropped, Elcar can likely buy the components at a lower price if Elcar later finds it needs the reduction gears.
- As the gears are large and heavy, the reduction in carrying costs could outweigh the benefit of retaining the parts for resale.
- It would save the effort and time of personnel ordering, receiving, selling and shipping the surplus components.
- The cancellation cost is fixed and known whereas there is risk associated with reselling; the resale price may change and transaction costs could be higher than estimated.
- The cancellation cost increases on May 31, 2020, and on May 31, 2021, so cancellation in the immediate term will be less costly than if Elcar waits to cancel in the future.

Reasons in favour of not cancelling:

- K3Press is a well-regarded supplier in the industry and, after such a major cancellation, might be less inclined to deal with Elcar in the future. It may be more beneficial for Elcar to remain in the contract in order to preserve its customer-supplier relationship.
- In selling the gears to third parties, Elcar would now be competing with K3Press, which could damage the relationship.

Quantitative AnalysisCost to cancel

Cost of purchasing required units (2,000 units × \$160/unit)	\$ 320,000
Cost of cancelling	215,000
Total cost	<u>535,000</u>

Cost to continue

Cost of purchasing required + excess units [(9,000 - 1,100 units) × \$185]	1,461,500
Sale of excess units:	
Proceeds from sale [(9,000 - 1,100 - 2,000 units) × \$160]	944,000
Commission (@ 0.5%)	(4,720)
Advertising	(5,000)
	<u>(934,280)</u>
	<u>527,220</u>
Difference	<u>\$ 7,780</u>

Recommendation

The quantitative difference between the two options is quite minimal. A significant factor in the decision is whether you believe the price of the reduction gears will increase or decrease in the future. If you believe the price will increase, resale of the surplus components could be delayed until the price is higher, in which case Elcar might make a profit. We also recommend that you try to renegotiate the current contract terms. If that is not possible, the significant qualitative factors, such as the unknown additional costs of storing and processing the excess units for resale, provide stronger arguments for cancelling. A change in circumstances, such as a different market price or a change in the need for reduction gears, could impact your decision.

For Assessment Opportunity #2 (Management Accounting), the candidate must be ranked in one of the following five categories:

Not addressed – The candidate does not address this assessment opportunity.

Nominal competence – The candidate does not attain the standard of reaching competence.

Reaching competence – The candidate attempts to analyze the option to cancel the contract.

Competent – The candidate provides a reasonable analysis of the option to cancel the contract from both a quantitative and qualitative perspective.

Competent with distinction – The candidate provides an in-depth analysis of the option to cancel the contract from both a quantitative and qualitative perspective.

Assessment Opportunity #3 (Common)

The candidate discusses how to improve the monthly reporting from Elcar to NHC.

The candidate demonstrates BREADTH OR DEPTH in Management Accounting.

In addition to financial performance and current and future cash usage, Shelagh wants to know more about:

1. the sale of Vassys – additional information could include how rapidly sales are improving and how many are built.
2. the development of the G1 battery – additional information could include whether its progress is cost-effective and on schedule (later, this will become reporting on the G2 battery).

Shelagh currently attempts to gather this information informally on the calls with Robin. We have been told that, as Robin would rather spend money on product development than on overhead, Elcar's accounting department is small. Sam prepares the monthly report and may not have much time to prepare it, and might not have been given much direction on what to include in the report. The information being collected, and the related reporting, should be formalized.

Since cash usage and inflow are so critical, any reporting should, where possible, include the impact on cash. To allow Elcar and NHC to better assess Elcar's financial performance, I suggest including the following items in standard reporting.

Sales:

- Vehicle sales in units, and average sales price per vehicle, to determine whether Elcar's strategy of selling a lower-price model at higher volume is being met.

- Orders by geography, to indicate where there is market penetration, at least between Canadian and U.S. orders breakdown, but perhaps also between provinces, and states or regions.
- Short-, medium- and long-term sales forecasts, as sales are critical; actuals to forecast should be reported.
- Units in inventory at the month end, to measure the investment of cash in inventory (unsold cars).
- Current orders of Vassys that have not yet been delivered, to measure sales prospects and the success of the business, in addition to shipped sales for the month.
- Sales made under the new incentive program, to measure the magnitude of the future obligation to replace batteries.

Battery development:

- The latest estimate on time required to achieve production-ready G1 batteries, perhaps with the estimated cash investment required.
- Any issues or delays encountered that will require further cash investment.
- Once there are working prototypes, the latest vehicle range, charge and speed statistics.

Cash:

- How the cash has been, or will be, spent, in the short-, medium- and long-term. Particularly in terms of monitoring the need for further advances, this is critical for NHC. In addition to the cash balance that is currently being provided, we recommend that the latest estimate of cash spent for the month, quarter, year and two years be included, and perhaps days to zero cash.

Employees:

- The current reporting of employee headcount is not overly useful. Elcar should also provide the following details:
 - Headcount opening, additions and departures, by reason, and closing amount
 - Gross payroll, so NHC can monitor this critical cost

Additional Recommendations

Rather than just file them, NHC should be performing a detailed review of the financial statements. However, additional reports from Elcar on the following could also be used to monitor its financial position:

- Actuals to budget and to forecast
- Year-to-year variance analysis on expenditures, i.e., explanations for all significant differences (significant to be defined)

Timing

The month-end report should be required to be submitted soon after month end; 41 days (the April report was sent on June 11) is not timely enough to be useful. Consideration could be given to weekly reporting, particularly for cash flow, as that would provide more timely information. To provide real-time reporting to NHC, perhaps at least part of the report could be automated.

For Assessment Opportunity #3 (Management Accounting), the candidate must be ranked in one of the following five categories:

Not addressed – The candidate does not address this assessment opportunity.

Nominal competence – The candidate does not attain the standard of reaching competence.

Reaching competence – The candidate attempts to discuss improvements to the monthly reporting by Elcar to NHC.

Competent – The candidate provides reasonable suggestions for improving Elcar's monthly reporting to NHC, taking into account NHC's needs.

Competent with distinction – The candidate provides detailed suggestions for improving Elcar's monthly reporting to NHC, taking into account NHC's needs.

Assessment Opportunity #4 (Common)

The candidate discusses the appropriate accounting treatment for Elcar's foreign currency transactions.

The candidate demonstrates BREADTH OR DEPTH in Core Financial Reporting.

There may be a malfunction in the newly implemented module, which is causing an error in the financial statements. Also, *IAS 21 The effects of changes in foreign exchange rates*, has been applied incorrectly with respect to the exchange rate at which the transactions are recorded, and to the intercompany balance.

U.S. Dollar Accounts Payable

There appear to be foreign currency accounting problems resulting from the new accounts payable module. We know that a change to the accounting system was made on April 19 and that any invoices dated after April 19 were processed under the new module. In the May 31, 2019, U.S. trade payables list, the invoices processed under the new module are recorded at the *April 30, 2019*, CAD-USD exchange rate of \$1.29 rather than at the May 31, 2019, month-end exchange rate of \$1.36. Further, it appears that the invoices processed under the old module have been correctly revalued.

There is an error in the balance sheet accounts payable and an understatement of foreign exchange loss, as follows:

Invoice Date	Vendor	USD Amount	Recorded CAD Amount	Exchange Rate	Corrected CAD Amount	Difference
4/20/2019	Alabama Specialty	\$ 20,000.00	\$ 25,800.00	1.36	\$ 27,200.00	\$ 1,400.00
4/30/2019	Leitch Limited	\$ 43,640.68	\$ 56,296.48	1.36	\$ 59,351.32	\$ 3,054.84
5/1/2019	193032 Canada Inc.	\$ 43,804.80	\$ 56,508.19	1.36	\$ 59,574.53	\$ 3,066.34
5/2/2019	Sorspumps Inc.	\$ 72,100.00	\$ 93,009.00	1.36	\$ 98,056.00	\$ 5,047.00
5/6/2019	Old State Hoses Corp	\$ 12,700.00	\$ 16,383.00	1.36	\$ 17,272.00	\$ 889.00
5/14/2019	Advantage Selling	\$ 24,705.88	\$ 31,870.59	1.36	\$ 33,600.00	\$ 1,729.41
	Total		\$279,867.26			\$15,186.59

There may be a problem in the system that caused the error. The program logic should be examined to see what rate is being used and how the rate is being applied.

Alternatively, this could be a human error, due to a lack of understanding of the system or how to account for foreign currency; when setting the rate for May in the new system, a person might have inadvertently entered April's rate.

USD A/P IFRS Reporting Requirements

Per IAS 21, paragraph 23, *“At the end of each reporting period: (a) foreign currency monetary items shall be translated using the closing rate.”* Translating the accounts payable balance at the end of the reporting period, using the May 31, 2019, closing rate, is therefore correct.

There may be another issue, however. It appears that the original postings of the invoices were recorded at the budgeted exchange rate for the month rather than at the “transaction/spot” rate in effect on the transaction date. This is an error, as IAS 21, paragraph 21, requires that *“A foreign currency transaction shall be recorded, on initial recognition in the functional currency, by applying to ... the spot exchange rate between the functional currency and the foreign currency at the date of the transaction,”* or at least an approximation thereof, per paragraph 22. While it is possible that the budgeted rate “approximates” the closing rate, it is unlikely. Therefore, the expenses and assets are likely recorded at the wrong rate. Again, the program logic should be verified. Based on the current information, the amount cannot be quantified but would likely be material and pervasive, given that several expense and asset accounts would be affected.

NHC Intercompany Balance

Similar to the accounts payable closing balance, the NHC intercompany account balance needs to be revalued at the closing CAD-USD exchange rate at each reporting date for Elcar's financial statements. Also, it must be verified that the budgeted rate approximates the spot rate; otherwise, the expenses and assets are recorded at the wrong rate.

When considering Elcar's financial statements, the fact that the account gets eliminated in the NHC parent company consolidation process is irrelevant. The gain or loss related to this error cannot be quantified without further information; all intercompany transactions would have to be obtained to determine the impact of this error.

For Assessment Opportunity #4 (Financial Reporting), the candidate must be ranked in one of the following five categories:

Not addressed – The candidate does not address this assessment opportunity.

Nominal competence – The candidate does not attain the standard of reaching competence.

Reaching competence – The candidate attempts a reasonable discussion of Elcar's foreign currency transactions.

Competent – The candidate provides a reasonable discussion of Elcar's foreign currency transactions.

Competent with distinction – The candidate provides an in-depth discussion of Elcar's foreign currency transactions.

Assessment Opportunity #5 (Common)

The candidate discusses the appropriate revenue recognition related to the new marketing program.

The candidate demonstrates BREADTH OR DEPTH in Core Financial Reporting.

To increase sales, the marketing department has started a new sales incentive program that will allow customers to buy their vehicle for the current list price but upgrade their battery to the next generation free of charge if and when the G1 or G2 battery is available from Elcar. However, lab testing just began and the road testing is planned to begin in November 2019. There are no guarantees that the new battery design will work, especially since technical feasibility has not yet been confirmed. Denise is wondering whether the revenue recognized for the car sales under this new program is appropriate.

To assess this, we turn to the five-step process under *IFRS 15 Revenue from contracts with customers*:

1. Identify the contract(s) with a customer, per paragraph 9:
 - (a) *the parties to the contract have approved the contract (in writing, orally or in accordance with other customary business practices) and are committed to perform their respective obligations;*
 - (b) *the entity can identify each party's rights regarding the goods or services to be transferred;*

- (c) *the entity can identify the payment terms for the goods or services to be transferred;*
- (d) *the contract has commercial substance (ie the risk, timing or amount of the entity's future cash flows is expected to change as a result of the contract); and*
- (e) *it is probable that the entity will collect the consideration to which it will be entitled in exchange for the goods or services that will be transferred to the customer. In evaluating whether collectability of an amount of consideration is probable, an entity shall consider only the customer's ability and intention to pay that amount of consideration when it is due. The amount of consideration to which the entity will be entitled may be less than the price stated in the contract if the consideration is variable because the entity may offer the customer a price concession (see paragraph 52).*

Since there was a sale of a car, it is assumed that a contract exists between the two parties, one in which both parties have approved the contract, and the customer's rights (and Elcar's obligation) to the newer version of the battery, as well as the payment terms, are clear. The vehicle sale contract has commercial substance as Elcar's cash flow will change when providing the newer-generation battery, which will cost Elcar money to manufacture. It is collectible because it is paid upfront.

2. Identify the separate performance obligations in the contract, per paragraph 22:

At contract inception, an entity shall assess the goods or services promised in a contract with a customer and shall identify as a performance obligation each promise to transfer to the customer either:

- (a) *a good or service (or a bundle of goods or services) that is distinct; or*
- (b) *a series of distinct goods or services that are substantially the same and that have the same pattern of transfer to the customer (see paragraph 23).*

There seem to be two performance obligations, one for the delivery of the original vehicle and battery, and another for the delivery of the newer-generation battery. However, this second obligation is conditional; it is uncertain. There is also the question of whether the obligations are separate. Per IFRS 15, paragraph 27:

A good or service that is promised to a customer is distinct if both of the following criteria are met:

- (a) *the customer can benefit from the good or service either on its own or together with other resources that are readily available to the customer (ie the good or service is capable of being distinct); and*
- (b) *the entity's promise to transfer the good or service to the customer is separately identifiable from other promises in the contract (ie the promise to transfer the good or service is distinct within the context of the contract).*

The obligations would likely be considered distinct, as the customer could benefit from the battery on its own, the battery could have other applications outside of cars, or the customer could resell the battery to another vehicle owner, and Elcar's promise to transfer the battery is separately identifiable from the promise of the car sale.

Paragraphs B39 and B40 provide additional guidance on customer options to acquire additional goods:

Customer options to acquire additional goods or services for free or at a discount come in many forms, including sales incentives, customer award credits (or points), contract renewal options or other discounts on future goods or services.

If, in a contract, an entity grants a customer the option to acquire additional goods or services, that option gives rise to a performance obligation in the contract only if the option provides a material right to the customer that it would not receive without entering into that contract (for example, a discount that is incremental to the range of discounts typically given for those goods or services to that class of customer in that geographical area or market). If the option provides a material right to the customer, the customer in effect pays the entity in advance for future goods or services and the entity recognises revenue when those future goods or services are transferred or when the option expires.

In this case, the customer has been given a material right to an upgraded battery (worth at least \$9,000, the cost of production) that they would not have received without the purchase of the car. Therefore, it should be considered a separate performance obligation.

3. Determine when the performance obligations have been satisfied under paragraph 31:

An entity shall recognise revenue when (or as) the entity satisfies a performance obligation by transferring a promised good or service (ie an asset) to a customer. An asset is transferred when (or as) the customer obtains control of that asset.

In this case, the performance obligation of the vehicle and the upgraded battery are satisfied when each of these items are delivered to the customer, since the customer obtains control of the asset at that point.

4. Determine the transaction price under paragraph 47:

An entity shall consider the terms of the contract and its customary business practices to determine the transaction price. The transaction price is the amount of consideration to which an entity expects to be entitled in exchange for transferring promised goods or services to a customer, excluding amounts collected on behalf of third parties (for example, some sales taxes). The consideration promised in a contract with a customer may include fixed amounts, variable amounts, or both.

This is the sale price of the vehicle, which is fixed and determinable and measurable when the contract is entered into.

5. Allocate the transaction price to the separate performance obligations under paragraph 73:

The objective when allocating the transaction price is for an entity to allocate the transaction price to each performance obligation (or distinct good or service) in an amount that depicts the amount of consideration to which the entity expects to be entitled in exchange for transferring the promised goods or services to the customer.

As there is no stand-alone selling price for the newer-generation battery, which is still not fully tested to date, this is difficult to apply. Paragraph B42 provides additional guidance:

Paragraph 74 requires an entity to allocate the transaction price to performance obligations on a relative stand-alone selling price basis. If the stand-alone selling price for a customer's option to acquire additional goods or services is not directly observable, an entity shall estimate it. That estimate shall reflect the discount that the customer would obtain when exercising the option, adjusted for both of the following:

- (a) any discount that the customer could receive without exercising the option; and*
- (b) the likelihood that the option will be exercised.*

Therefore, the stand-alone selling price of the battery should be estimated. Given that the battery has not yet achieved technical feasibility, there is uncertainty as to whether customers will be able to exercise the option to upgrade the battery. Without further information, and given Elcar's resources that are being devoted to the project, we will assume successful development of the battery. However, if the likelihood of development completion can be estimated, this should be factored into the estimated selling price.

As there is no market for the battery yet, the stand-alone selling price could be estimated, perhaps by using a cost-plus margin formula, or by determining the market price of batteries with similar ranges and charging times. The selling price of the vehicle then needs to be allocated between the vehicle itself and the upgraded battery performance obligation.

Elcar is currently recording the full amount of sales as revenue. A portion of this revenue will have to be reversed, reducing net income. More information, such as the number of cars sold under this program, the stand-alone value of the upgraded battery and the likelihood of battery development success, is needed in order to quantify the adjustment.

For Assessment Opportunity #5 (Financial Reporting), the candidate must be ranked in one of the following five categories:

Not addressed – The candidate does not address this assessment opportunity.

Nominal competence – The candidate does not attain the standard of reaching competence.

Reaching competence – The candidate attempts to discuss the revenue recognition related to the new marketing program.

Competent – The candidate provides a reasonable discussion of the revenue recognition related to the new marketing program.

Competent with distinction – The candidate provides an in-depth discussion of the revenue recognition related to the new marketing program.

Assessment Opportunity #6 (Common)

The candidate discusses the appropriate accounting treatment for the K3Press contract and the future dismantling of Elcar's battery construction facility.

The candidate demonstrates BREADTH OR DEPTH in Core Financial Reporting.

Denise asked for advice on how to account for the K3Press contract and the future dismantling of the battery construction facility.

K3Press Contract

Per IAS 37 Provisions, contingent liabilities and contingent assets:

66 If an entity has a contract that is onerous, the present obligation under the contract shall be recognised and measured as a provision.

68 This Standard defines an onerous contract as a contract in which the unavoidable costs of meeting the obligations under the contract exceed the economic benefits expected to be received under it. The unavoidable costs under a contract reflect the least net cost of exiting from the contract, which is the lower of the cost of fulfilling it and any compensation or penalties arising from failure to fulfil it.

The K3Press contract appears to meet the definition of an onerous contract. Whether Elcar chooses to cancel the contract, thereby incurring penalties, or continue with the contract, thereby purchasing units that cannot be used and will be sold at a loss, Elcar will be incurring a loss associated with the contract. The standard requires that an onerous contract be measured at the lower of the cost of fulfilling it and any penalties arising from failure to fulfil it. As \$215,000 is the cost to cancel, while purchasing the remaining units of the contract would cost \$157,220 [(5,900 units × (\$185 - \$160)) + \$4,720 commission + \$5,000 advertising], \$157,220 should be recorded as a liability and an expense for this amount.

Battery Construction Facility

Initial measurement

IAS 37, paragraph 14, states that a provision should be recognized when:

- (a) *an entity has a present obligation (legal or constructive) as a result of a past event;*
- (b) *it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation; and*
- (c) *a reliable estimate can be made of the amount of the obligation.*

New legislation requires that the battery construction facility be properly dismantled to remediate any environmental damage caused from its construction; therefore, Elcar has a present obligation as a result of a past event. It is probable that an outflow of resources will be required to settle the obligation and that the amount of the obligation can be estimated, given that Elcar has obtained a third-party quote for the cost of remediation.

IAS 37 mandates that the provision for a liability should be the best estimate of the expenditure required to settle the obligation as of the balance sheet date. In this case, that would be \$185,400 in today's dollars, or \$249,524 in future dollars, inflated at 2% for 15 years.

IAS 37, paragraph 45, states that, "*the amount of a provision shall be the present value of the expenditures expected to be required to settle the obligation.*" This means a discount rate must be selected. IAS 37, paragraph 47, further states that, "*The discount rate (or rates) shall be a pre-tax rate (or rates) that reflect(s) current market assessments of the time value of money and the risks specific to the liability. The discount rate(s) shall not reflect risks for which future cash flow estimates have been adjusted.*"

The company's incremental borrowing rate from the bank is currently 8%. As risks specific to the liability are not known and as it is a fairly risky liability, 8% plus a 3% risk premium will be estimated. Using this rate, the discounted amount is \$52,152, which should be recorded as a liability. If possible, we should determine if there are liabilities with similar risks and obtain the discount rate reflective of this risk, to use in the calculation of the discounted value.

Asset recognition of a decommissioning liability

IAS 16 *Property, plant and equipment*, paragraph 16, states that:

The cost of an item of property, plant and equipment comprises:

- (a) its purchase price, including import duties and non-refundable purchase taxes, after deducting trade discounts and rebates.*
- (b) any costs directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management.*
- (c) the initial estimate of the costs of dismantling and removing the item and restoring the site on which it is located, the obligation for which an entity incurs either when the item is acquired or as a consequence of having used the item during a particular period for purposes other than to produce inventories during that period.*

In this case, the battery construction facility now has a cost of dismantling (new this year), and therefore an amount of \$52,152 would be added to the carrying value of the asset.

Amortization/accretion

Elcar will need to recognize an increase in the decommissioning liability as an accretion expense for the change in the carrying value of the liability each year; this would be 11% of the remaining decommissioning liability, or \$5,736 in the first year.

In addition, there would be amortization of the asset amount of the decommissioning liability, over the estimated useful life of the building of 15 years. Therefore, there would be additional amortization of \$3,477 per year.

Future changes

IAS 37, paragraph 36, states that, *“the amount recognised as a provision shall be the best estimate of the expenditure required to settle the present obligation at the end of the reporting period.”*

Therefore, the best estimate would require reconsideration in each reporting period if, for example, the industry now charges significantly more to decommission battery construction facilities. *IFRIC 1 Changes in existing decommissioning, restoration and similar liabilities* provides guidance on accounting for long-lived assets when changes in existing decommissioning, restoration, and similar liabilities occur.

For Assessment Opportunity #6 (Financial Reporting), the candidate must be ranked in one of the following five categories:

Not addressed – The candidate does not address this assessment opportunity.

Nominal competence – The candidate does not attain the standard of reaching competence.

Reaching competence – The candidate attempts to discuss the accounting for the K3Press contract and the battery construction facility.

Competent – The candidate provides a reasonable discussion of the accounting for the K3Press contract and the battery construction facility.

Competent with distinction – The candidate provides an in-depth discussion of the accounting for the K3Press contract and the battery construction facility.

**DAY 2 – MARKING GUIDE – ASSURANCE ROLE
ELCAR INC. (ELCAR)**

In the Assurance role, the candidate is expected to address the accounting treatment for the artwork investment. They are also expected to provide an audit planning memo and provide audit procedures for areas with errors or control deficiencies. They are further expected to provide audit procedures for the cash flow forecast provided by Elcar’s management, as well as for the conditions related to the provincial grant. In addition, the candidate should discuss the control deficiencies found in the platinum-related activities, as well as in other areas of Elcar. Finally, the candidate should discuss whether the environmentally responsible action statements can be verified by an independent party, including how it could be verified or what challenges the statement may pose in terms of independent verification.

See Common Marking Guide for the Common Assessment Opportunities #1 to #6.

Assessment Opportunity #7

The candidate discusses the appropriate accounting treatment for the artwork investment.

The candidate demonstrates DEPTH in the Assurance role (competence in Financial Reporting).

Denise has asked for a review of the accounting for the artwork, which is currently recorded as a cash equivalent in the draft balance sheet. As there are no IFRS sections that deal specifically with artwork investments, we will use financial statement concepts and explore existing standards where similar principles apply, to assess how it could be accounted for.

Is the artwork an asset?

The artwork meets the definition of an asset. IFRS – *Conceptual Framework for Financial Reporting*, paragraph 4.4(a), states that, “An asset is a resource controlled by the entity as a result of past events and from which future economic benefits are expected to flow to the entity.”

As a result of a past event (the purchase), Elcar controls the artwork and, since it can be sold at any time, there will be future economic benefits. The question then becomes what type of asset the artwork represents.

Is it a cash equivalent?

IAS 7 – *Statement of Cash Flows*, paragraph 7, states that:

Cash equivalents are held for the purpose of meeting short-term cash commitments rather than for investment or other purposes. For an investment to qualify as a cash equivalent it must be readily convertible to a known amount of cash and be subject to an insignificant risk of changes in value. Therefore, an investment normally qualifies as a cash equivalent only when it has a short maturity of, say, three months or less from the date of acquisition. Equity investments are excluded from cash equivalents unless they are, in substance, cash equivalents, for example in the case of preferred shares acquired within a short period of their maturity and with a specified redemption date.

Although Robin believes that the artwork can be sold quickly, it does not meet the definition of cash equivalents under IFRS, as Elcar is not holding the investment in order to meet short-term cash commitments. As it has increased in value more than 40% in the past year and is expected to continue to appreciate according to art experts, it does not appear to be subject to an insignificant risk of changes in value. Therefore, it should not be classified as a cash equivalent.

Is the artwork inventory?

Per IAS 2 – *Inventories*, paragraph 6:

Inventories are assets:

- (a) held for sale in the ordinary course of business;*
- (b) in the process of production for such sale; or*
- (c) in the form of materials or supplies to be consumed in the production process or in the rendering of services.*

As Elcar's ordinary business is selling cars, the artwork is not held for sale in the ordinary course of business. The artwork is not in the process of production for ordinary business sales, and it is not consumed in the production process or rendering of services. Therefore, it is not inventory.

Is the artwork property, plant and equipment?

Per IAS 16 – *Property, Plant and Equipment*, paragraph 6:

Property, plant and equipment are tangible items that:

- (a) are held for use in the production or supply of goods or services, for rental to others, or for administrative purposes; and*
- (b) are expected to be used during more than one period.*

Although the artwork is a tangible item, it is not held for the production or supply of goods or services, nor is it rented to others. As the artwork is not being displayed at the office, but rather stored in a temperature-controlled room in Elcar's plant, it is also not being used for administrative purposes. It appears that the primary reason for the purchase was for investment purposes. Therefore, it is not property, plant and equipment.

Is the artwork a financial asset?

Per IAS 32 – *Financial Instruments: Presentation*, paragraph 11:

A financial asset is any asset that is:

- (a) cash;*
- (b) an equity instrument of another entity;*
- (c) a contractual right:*
 - (i) to receive cash or another financial asset from another entity; or*
 - (ii) to exchange financial assets or financial liabilities with another entity under conditions that are potentially favourable to the entity; or*
- (d) a contract that will or may be settled in the entity's own equity instruments and is:*
 - (i) a non-derivative for which the entity is or may be obliged to receive a variable number of the entity's own equity instruments; or*
 - (ii) a derivative that will or may be settled other than by the exchange of a fixed amount of cash or another financial asset for a fixed number of the entity's own equity instruments. For this purpose the entity's own equity instruments do not include puttable financial instruments classified as equity instruments in accordance with paragraphs 16A and 16B, instruments that impose on the entity an obligation to deliver to another party a pro rata share of the net assets of the entity only on liquidation and are classified as equity instruments in accordance with paragraphs 16C and 16D, or instruments that are contracts for the future receipt or delivery of the entity's own equity instruments.*

As it is not cash, an equity instrument, a contractual right, nor a contract that will be settled in equity instruments, the artwork does not meet the definition of a financial asset. Therefore, although many investments are financial assets, the artwork does not seem to fall into this category.

Is the artwork an investment property?

Per IAS 40 – *Investment Property*, paragraph 5:

Investment property is property (land or a building — or part of a building — or both) held (by the owner or by the lessee under a finance lease) to earn rentals or for capital appreciation or both, rather than for:

- (a) use in the production or supply of goods or services or for administrative purposes; or*
- (b) sale in the ordinary course of business.*

Although the artwork was purchased by Elcar for capital appreciation, it is not property, as it is not land or a building. Therefore, it does not meet the definition of an investment property.

What should the accounting policy be?

Since there does not appear to be any specific IFRS that addresses high-value artwork held for investment purposes, IAS 8 – *Accounting Policies, Changes in Accounting Estimates and Errors*, states:

10 In the absence of an IFRS that specifically applies to a transaction, other event or condition, management shall use its judgement in developing and applying an accounting policy that results in information that is:

- (a) relevant to the economic decision-making needs of users; and*
- (b) reliable, in that the financial statements:*
 - (i) represent faithfully the financial position, financial performance and cash flows of the entity;*
 - (ii) reflect the economic substance of transactions, other events and conditions, and not merely the legal form;*
 - (iii) are neutral, i.e., free from bias;*
 - (iv) are prudent; and*
 - (v) are complete in all material respects.*

11 In making the judgement described in paragraph 10, management shall refer to, and consider the applicability of, the following sources in descending order:

- (a) the requirements in IFRSs dealing with similar and related issues; and*
- (b) the definitions, recognition criteria and measurement concepts for assets, liabilities, income and expenses in the Framework.*

12 In making the judgement described in paragraph 10, management may also consider the most recent pronouncements of other standard-setting bodies that use a similar conceptual framework to develop accounting standards, other accounting literature and accepted industry practices, to the extent that these do not conflict with the sources in paragraph 11.

As the artwork was acquired for investment purposes, the investment property description seems to be the most analogous to the artwork, given that the company's intent (holding assets for capital appreciation) and the assets involved (they typically have long/indefinite useful lives, their fair values tend to increase over time and they are held mainly as wealth storage) are similar. Accounting for artwork as investment property reflects most accurately the economic substance of the artwork transaction and provides the most relevant information to users of the financial statements.

IAS 40 states that:

20 An owned investment property shall be measured initially at its cost. Transaction costs shall be included in the initial measurement.

30 With the exception noted in paragraph 32A, an entity shall choose as its accounting policy either the fair value model in paragraphs 33–55 or the cost model in paragraph 56 and shall apply that policy to all of its investment property.

35 A gain or loss arising from a change in the fair value of investment property shall be recognised in profit or loss for the period in which it arises.

Therefore, the artwork should be recorded initially at cost. Elcar has the option to record the artwork at fair value at each subsequent reporting period, or to apply the cost model. The fair value option better reflects the continually increasing value of the artwork. In addition, by using an appraiser, the fair value of the artwork should be reliably attainable. We recommend that Elcar apply the fair value model. Each year, the gain or loss arising from a change in the artwork's fair value will be recognized in profit or loss.

For Assessment Opportunity #7 (Assurance), the candidate must be ranked in one of the following five categories:

Not addressed – The candidate does not address this assessment opportunity.

Nominal competence – The candidate does not attain the standard of reaching competence.

Reaching competence – The candidate attempts to discuss the accounting treatment options for the artwork.

Competent – The candidate provides a reasonable discussion of accounting treatment options for the artwork.

Competent with distinction – The candidate provides an in-depth discussion of the accounting treatment options for the artwork.

Assessment Opportunity #8

The candidate drafts the audit planning memo.

The candidate demonstrates DEPTH in the Assurance role.

Denise asked for an audit planning memo.

CAS 315 – *Identifying and Assessing the Risks of Material Misstatement through Understanding the Entity and Its Environment*, paragraph 25, states:

The auditor shall identify and assess the risks of material misstatement at:

(a) the financial statement level; and (Ref: Para. A122-A125)

(b) the assertion level for classes of transactions, account balances, and disclosures, (Ref: Para. A126-A131)

to provide a basis for designing and performing further audit procedures.

CAS 300 – *Planning an Audit of Financial Statements*, paragraph 9, states:

The auditor shall develop an audit plan that shall include a description of:

(a) The nature, timing and extent of planned risk assessment procedures, as determined under CAS 315.

(b) The nature, timing and extent of planned further audit procedures at the assertion level, as determined under CAS 330.

(c) Other planned audit procedures that are required to be carried out so that the engagement complies with CASs. (Ref: Para. A12-A14)

Finally, CAS 320 – *Materiality in Planning and Performing an Audit*, paragraphs 10 and 11, states:

When establishing the overall audit strategy, the auditor shall determine materiality for the financial statements as a whole. If, in the specific circumstances of the entity, there is one or more particular classes of transactions, account balances or disclosures for which misstatements of lesser amounts than materiality for the financial statements as a whole could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements, the auditor shall also determine the materiality level or levels to be applied to those particular classes of transactions, account balances or disclosures. (Ref: Para. A3-A12)

The auditor shall determine performance materiality for purposes of assessing the risks of material misstatement and determining the nature, timing and extent of further audit procedures. (Ref: Para. A13)

The audit plan would therefore include an assessment of the risks of material misstatement at the financial statement level, as well as a discussion of materiality and the planned approach for further audit procedures.

Risk of Material Misstatement at the Financial Statement Level

The following factors increase the risk of material misstatement at the financial statement level:

- Elcar has an incentive to make financial performance look better due to the following:
 - As they have only experienced one full year of sales, Elcar appears to be a development-stage entity. This increases risk as Elcar’s management may be motivated to manipulate the financial statements in order to show better results.
 - With a highly involved parent company that may provide additional funding if Elcar continues to underperform, Elcar’s management may be motivated to show an improved financial position and operating results.
 - Elcar is experiencing losses, which may indicate going concern issues. To disguise the possible going concern issue, management may be motivated to present financial results more positively than they should.
- Although further investigation is required, the current control environment appears to have some weaknesses:
 - The controls for safeguarding platinum, the company’s most valuable asset, appear weak.
 - As the payroll processing clerk’s friend was apparently paid for two months without working, the payroll controls appear weak.
 - The small accounting department makes segregation of duties more difficult and increases control risk.
 - With cursory reviews of financial reports and informal phone calls, parent company oversight is weak, which may allow Elcar management to override controls.

While additional time is needed to understand the design and implementation of other internal controls, the above findings suggest additional control risk, which increases the risk that errors will go undetected.

- Sam does not have a professional accounting designation. Based on the exchange rates used to translate accounts payable, he does not seem to understand foreign currency accounting. Nor does he recognize that elimination of intercompany accounts on consolidation is not relevant to the accounting for Elcar’s financial statements. Shelagh, who performs oversight, also may not have the relevant financial expertise given she has a master’s degree in biology. This situation increases the risk of Elcar’s financial statements containing errors.
- Shelagh, who plays a key role in the company, including oversight, was absent for two months. This increases the risk that errors in the financial statements have gone undetected and controls normally performed by Shelagh were not followed, increasing the chance of errors.
- Errors have already been found in several areas, such as the new battery replacement program, the new legislation related to decommissioning the battery construction facility, and the new accounts payable module. The presence of existing errors increases the risk that there may be other errors that we are not aware of, increasing risk.
- There has been implementation of a new accounts payable module in the integrated accounting system. This means that existing data from the old system had to be moved the new system, and it creates new processes and new controls that may not be familiar to employees, increasing the risk of error.

The following factors decrease the risk of material misstatement at the financial statement level:

- The external audits performed on Elcar since being acquired by NHC should decrease the risk that there are errors in the financial statements, particularly in the opening balances.
- With only one product for sale, the routine transactions are relatively simple and thus are less susceptible to errors.

Given the significant number of factors that increase the risk of material misstatement at the financial statement level, the overall financial statement risk is considered to be high.

Planning Materiality

We must assess the sensitivity of financial statement users, namely the parent company and the bank, to misstatements in the financial statements. The parent company, NHC, would be most interested in net income of the company, which will provide an indication of whether the target return on investment will be met and whether additional investment in the company is worthwhile.

The chartered bank that extended Elcar a line of credit this year will also be interested in the financial statements of this new client, especially given that the line of credit is up for renewal in February 2020. Again, the bank will be interested in net income (or EBITDA), which will provide an indication of the ability to repay, with secondary interest in the value of any collateral that might have been used to secure the line of credit.

As Elcar has losses for the year, net income is not an appropriate basis for materiality. Revenue is typically a good proxy to determine the profitability of a company. It is therefore suggested that revenues be used. Once the adjustment to revenue is quantified for the revenue recognition of car sales under the new marketing program, materiality should also be adjusted.

Per CAS 320.A8:

Determining a percentage to be applied to a chosen benchmark involves the exercise of professional judgment... For example, the auditor may consider five percent of profit before tax from continuing operations to be appropriate for a profit-oriented entity in a manufacturing industry, while the auditor may consider one percent of total revenue or total expenses to be appropriate for a not-for-profit entity. Higher or lower percentages, however, may be deemed appropriate in the circumstances.

Therefore, 1% would be the typical percentage used with revenue as a benchmark. However, given that NHC has sent an investigation team to assess Elcar, the parent company would likely be quite concerned about misstatements, so a lower percentage is warranted. At 0.5% of revenues, materiality would be calculated as follows:

Revenues	\$ 30,698,472
	<u>0.5%</u>
	\$ <u>153,492</u>

We will use \$153,000 as our planning materiality.

Performance Materiality

The typical range for performance materiality is 50% to 90% of planning materiality. Given the complexity of the recent transactions, the errors found, and that, based on our risk assessment, the likelihood of further financial statement misstatements is high, we set performance materiality at 60% of materiality (the lower end of the range), which is \$91,800.

Audit Approach

We should take a substantive approach to the audit. Due to the small size of the business, the lack of financial reporting expertise in the accounting department and the apparent lack of controls and segregation of duties in these areas, substantive testing will be the most effective approach to take for inventory, foreign exchange, payroll, revenue recognition and general financial reporting. In addition, there are likely no controls over the significant, new and unusual transactions in the year, such as the requirement to dismantle the battery construction facility and the potential cancellation of the K3Press contract. Due to the high risk and lack of controls associated with a going concern assessment, the going concern assessment should also be audited substantively.

For Assessment Opportunity #8 (Assurance), the candidate must be ranked in one of the following five categories:

Not addressed – The candidate does not address this assessment opportunity.

Nominal competence – The candidate does not attain the standard of reaching competence.

Reaching competence – The candidate attempts to discuss the audit plan.

Competent – The candidate provides a reasonable discussion of the audit plan.

Competent with distinction – The candidate provides an in-depth discussion of the audit plan.

Assessment Opportunity #9

The candidate discusses audit procedures for areas with errors or control deficiencies.

The candidate demonstrates DEPTH in the Assurance role.

Denise has asked us to document the procedures that we recommend be undertaken on the areas where errors or control deficiencies have been found.

Foreign Exchange Transactions

With a senior financial executive who does not seem to completely understand foreign exchange accounting, the foreign exchange errors identified may be symptomatic of larger foreign exchange accounting problems. We need to pay particular attention to valuation of foreign currency denominated monetary items on the balance sheet, and any foreign exchange transactions that have been processed since implementation of the new accounts payable module. We should perform the following procedures:

- Obtain documentation related to the module implementation in order to understand the implementation process. Select a sample of accounts payable transactions before the implementation and trace them to the new system to ensure that they are the same and that the implementation captured all relevant data from the old module.
- Review a reputable source (e.g., Oanda) for the year-end foreign exchange rate and ensure that the correct rate was applied to all balance sheet monetary items, especially for invoices dated after April 19, 2019.
- Discuss with the people involved in foreign exchange transactions, and review the programming of the system, to determine whether the cause of the exchange rate errors (i.e., wrong exchange rate used for transactions and inconsistent application of year-end exchange rate) is due to a system error or to a lack of knowledge by the people involved, and ensure that the errors have been corrected.
- Obtain the adjusting journal entry correcting the system error, review the supporting calculations for the journal entry and agree the rates used to supporting documentation, such as the Oanda website.
- Confirm the “due to parent company” account with NHC (the amount on the balance sheet likely represents USD transactions). Ensure that it is translated at the year-end exchange rate in Elcar’s financial statements.
- Elcar also sells cars in the U.S.; it is not clear if sales prices are in Canadian dollars or U.S. dollars. Determine whether sales and receivables also need to be translated to Canadian dollars at relevant exchange rates.

New Marketing Program

There is significant risk that the new marketing program, where customers will get the next-generation battery free of charge, has not been accounted for appropriately. We should perform the following procedures:

- Review the sales documents related to the promise of providing a battery upgrade and for any additional terms we might not have considered in making our revenue recognition assessment.
- Discuss with management, and corroborate their responses with the research and development (R&D) team, as to whether the G1 battery is likely to be fully developed and ready for market soon, and as to the progress made on the G2 battery. This will involve an examination of R&D progress reports and test reports.
- Perform research to see if the market has batteries similar to G1 or G2, to determine the related market price, and to determine the stand-alone selling price of the battery.
- Obtain recent sales documents for sales not under this program, to determine the stand-alone selling price of the car.
- Obtain listing of cars sold under the new marketing program. Select a sample of sales documents and trace them to the listing to ensure that the listing is complete.
- Recalculate the amount to be deferred using the listing of cars sold under the new program and the stand-alone selling price and ensure that the amount calculated has been deferred to account for the battery performance obligation in the future.

Excess Purchase Commitment

We are aware of the K3Press excess purchase commitment and the potential for paying a cancellation penalty, resulting in an onerous contract liability. We should perform the following procedures:

- Review the terms of the K3Press contract to ensure that we understand the cancellation terms and the purchase price and amounts that have been committed to.
- Verify the amount that the reduction gears can be sold for in the market by performing online research to determine the selling price for similar items.
- Review projections for the reduction gears needed in fiscal 2020 by reviewing any available sales forecasts or committed purchases, to ensure that the projected assumptions are reasonable (this number is relevant in determining the excess commitment or for determining the number needed from a new contract if the current contract is cancelled).

Battery Construction Facility

There is a risk that this new decommissioning liability has not been accounted for properly or that the estimates used are not appropriate. We should perform the following procedures:

- Review the current regulations, either on a government website or other third-party source, to ensure that there is an obligation for Elcar to dispose of the battery construction facility in a specific manner.
- Obtain management's calculation of the liability and vouch the significant assumptions to supporting documentation, such as the third-party quote for the current disposal cost, a government website for the inflation rate, and the loan agreement for any liabilities that have similar risk profiles to the decommissioning liability recorded to establish the discount rate.
- Discuss with management the estimated useful life of the battery construction facility and evaluate any supporting documentation.

Artwork

As the artwork has been recorded as a cash equivalent, management has accounted for it incorrectly. We should perform the following procedures:

- Review the documentation related to the original purchase of the artwork to verify the purchase price.
- Ensure the existence of the artwork by visiting the temperature-controlled storeroom and viewing the artwork. Look for any evidence of damage or other indication that the artwork may be impaired.
- If Elcar decides to record the artwork at fair value after initial recognition, research the market for support of the quoted market price at year end (e.g., what additional artwork by the particular artist has sold for). Consider having an appraiser determine the value of the artwork.

Platinum Inventory

There is a significant quantity variance for platinum inventory between budgeted and actual costs and it is unknown whether it is due to recording errors, battery development inefficiencies or theft, given that controls surrounding the platinum inventory appear to be weak. We should perform the following procedures:

- As only one person performed the count, the controls surrounding the count were weak. To ensure existence and completeness, we should perform a count of the platinum inventory immediately, and perform rollback procedures (vouch amounts purchased subsequent to year end to invoices, and amounts used in production to number of batteries built since year end) and agree the rollback amount to the general ledger balance at year end. Given that there are control weaknesses in the platinum count process and tracking, the rollback procedures may be difficult to apply. We may have to rely on additional evidence such as the count sheets at the year-end date to support the rollback amounts. We may need to ask some of Elcar's

scientists, those with expertise in metals and components and who are objective (i.e., not involved in managing inventory), to assist with the count verification.

- Verify the cost of platinum purchases by reviewing supplier invoices and ensure that proper costs were used to value inventory at year end (depending on the company's policy for inventory costing, such as average cost or FIFO).
- Assess whether the net realizable value of platinum exceeds the cost by researching the year-end market value of platinum, to determine whether any write-down is required.

Payroll

Payroll is Elcar's largest cost and, according to Shelagh, the payroll clerk's friend was paid while not being an employee. This raises concerns regarding hours not being properly processed, and fictitious hours or employees. In addition, Elcar received a grant for staff training. It would be important to ensure that these payroll costs are real. We should perform the following procedures:

- Determine whether adequate controls over payroll inputs sent to the service provider, and outputs received from the service provider, exist at Elcar. Given the issues already identified related to the payroll processing clerk, adequate controls may not exist.
- Select a sample of payments to employees and vouch the amounts back to timesheets or other evidence of hours worked.
- To test for fictitious employees, select a sample from the payroll records and inspect government-issued identification in the HR files and find evidence that they do work for the company.
- To assess the reasonableness of the payroll amount for the last portion of 2018 and the first portion of 2019 that fall into fiscal year 2019, review the T4 summary from calendar year 2018, pro-rate it for the months that fall into fiscal year 2019, and compare it to the payroll expense recorded.

For Assessment Opportunity #9 (Assurance) the candidate must be ranked in one of the following five categories:

Not addressed – The candidate does not address this assessment opportunity.

Nominal competence – The candidate does not attain the standard of reaching competence.

Reaching competence – The candidate discusses some procedures for the areas where errors or control deficiencies have been found.

Competent – The candidate discusses several procedures for the areas where errors or control deficiencies have been found.

Competent with distinction – The candidate discusses many procedures for the areas where errors or control deficiencies have been found.

Assessment Opportunity #10

The candidate discusses the audit procedures required for the updated cash flow forecast.

The candidate demonstrates DEPTH in the Assurance role.

An updated cash flow forecast shows Elcar will have \$10 million in cash in the next 12 months, which appears to support the going concern assumption. However, the assumptions provided in the forecast need to be tested:

- Inflation and USD-CAD exchange rate – agree to available forecasts of the inflation and exchange rates, such as policy rate announcements from the Bank of Canada for inflation, or forecasts available from major banks for the exchange rate.
- Platinum price – review industry forecast information on platinum and compare it to the prices used in the forecast to determine whether they are reasonable. Consider looking at platinum futures to determine whether the forecast prices used are reasonable. Also, determine whether Elcar may have any purchase contracts already in place for the upcoming year that may confirm the future purchase price.
- Labour costs – discuss with manufacturing staff to corroborate that manufacturing efficiencies are anticipated. Review any management meeting minutes, or union agreement (if one exists) to determine whether there are any planned salary increases or other items that will affect labour costs. Compare any expected increases to the anticipated efficiencies to see whether they are likely to offset each other.
- G1 battery feasibility – review any progress reports from the R&D team to determine whether the G1 battery research is on schedule and whether the November 2019 timeline is likely to be met. If there are reported delays, discuss with the R&D team the plans to address the delays and assess whether they are reasonable.
- No capital expenditures in the next 12 months – review Elcar’s strategic plan and significant contracts to ensure that this assumption is valid.
- Existing line of credit will be renewed in February 2020 – Elcar should meet with the bank to determine the likelihood of this renewal occurring. We should then request that the bank confirm its plan to renew the line of credit. The bank may be reluctant to confirm this; however, since Elcar has not drawn on its line of credit at year end, the bank may not see much risk in confirming this.
- Sales – as the amount is significantly higher than expected (Elcar has averaged 68 per month and 812 for the year in 2019), discuss with management their rationale for the forecast. Management should be asked to provide support, such as market research studies, for the forecast, including the breakdown between sales before, and under, their new incentive program. In addition, management should be asked whether there will be sufficient production resources and inventory to support the anticipated sales, and whether such volume is dependent on the successful launch of the G1 and G2 batteries. We should evaluate the reasonableness of increased sales and production.

For Assessment Opportunity #10 (Assurance), the candidate must be ranked in one of the following five categories:

Not addressed – The candidate does not address this assessment opportunity.

Nominal competence – The candidate does not attain the standard of reaching competence.

Reaching competence – The candidate discusses some of the audit procedures required for the updated cash flow forecast.

Competent – The candidate discusses several of the audit procedures required for the updated cash flow forecast.

Competent with distinction – The candidate discusses many of the audit procedures required for the updated cash flow forecast.

Assessment Opportunity #11

The candidate discusses the procedures to be performed for an audit engagement to report on compliance with an agreement.

The candidate demonstrates DEPTH in the Assurance role.

In order to provide an audit report on compliance with the provincial government agreement related to the training grant, the external auditor should first read the grant agreement to see if there is a description of the types of expenditures that qualify, such as instructor time, travel, accommodation, meal and room rental. The auditor then needs to obtain a listing of the expenses that have been incurred related to the grant, and verify that the expenses are appropriate and valid by selecting a sample and vouching the amount, nature of the expense, and date of the expense to supporting documentation, such as invoices, payroll documents, etc.

In addition, the following audit procedures should be performed for each criterion specified:

1. The funds are to be deposited in a separate bank account or accounted for in a separate general ledger account in the books of the recipient:

- Examine the bank statement for the bank account in which the grant funds were deposited and determine if the bank account was used solely for that purpose (i.e., the only transactions in the account relate to grant funds receipt and training expenditures).
- If the funds were deposited in a general bank account, examine the general ledger to determine if a separate account was set up for recording grant funds and related training expenditures. Review the activity within that account to ensure that it only contains activities related to the grant.

- Trace a sample of deposits to the deposit slips and a sample of disbursements to supporting invoices and ensure that they only relate to employee training, as specified by the provincial program.
- 2. No monies are to be spent for items related to this grant prior to actual receipt of the funds:**
- Review the funding agreement and/or deposit slip to determine when the first funding amount was received. Ensure that there were no prior expenses from either the separate bank account or the separate general ledger account by reviewing bank statements or a listing of general ledger activity prior to that date. Also, from the expense listing for the grant, select a sample and vouch the expenses to the related invoice or other supporting documentation for the date, to ensure that there are no items dated before the receipt of funds.
 - If there is a separate bank account, ensure that there was no transfer of cash from another bank account, or journal entries transferring funds into a separate general ledger account, if maintained, prior to receipt of the funds, as this may indicate the transfer into the bank/general ledger account of training expenditures related to safe disposal of waste.
- 3. Until the funds are fully expended, the recipient is to maintain a minimum cash balance of \$300,000:**
- The external auditor will need to clarify whether the “minimum cash balance” refers to the bank balance or to an accounting cash balance. And, given that cash balances fluctuate with every transaction, whether the balance to be considered is at every second of the time period, or at the close of the day. Once this is defined, the auditor can examine the company’s bank statement (if bank balance is to be used) or cash subledger (if accounting balance is to be used) from the date of the grant until full expenditure of the funds (or today’s date if not yet fully expended), to ensure that there is at least \$300,000 based on the expected parameters.
- 4. The recipient must spend at least 15% of the funds during the company’s fiscal year ended May 31, 2019:**
- Ensure the listing of expenditures totals at least 15% of the amount of the grant funds.
 - If Elcar has not spent 15% of the funds, it will be motivated to include other expenditures in this listing to ensure that it does not violate this condition. The auditor should perform additional procedures in ensuring that the expenditures are the type expected under the terms of the grant. For example, if there are expenditures related to internal training, the auditor could examine communications sent to staff regarding the courses for the topics to be covered.

5. The recipient is not to apply for any other funding from the provincial government before the earlier of: a) six months after the grant date; or b) full expenditure of the funds:

- Ask management whether they applied for any other funding from the provincial government. If they did, determine whether it was prior to the earlier of six months after the grant date or full spending of the funds. If available, obtain a listing of grant applications to corroborate management's claims.
- Obtain a written confirmation from the provincial government that Elcar did not apply for any other funding during the period in question (i.e., before full expenditure of the funds, or if full expenditure has not yet occurred, from the grant date until today). If confirmation cannot be obtained, select a sample of large deposits from the bank statement during the period and vouch back to supporting documentation to ensure that the deposit is not a result of other provincial government funding.

6. The recipient must comply at all times with applicable provincial labour laws:

- Review provincial labour laws to determine which ones Elcar should comply with.
- Confirm with Elcar's external lawyers or internal legal counsel department as to whether there are known labour law violations. Review the general ledger account related to legal or miscellaneous expenses for any expenses that may be related to labour law violations. As labour laws are not typically an external auditor's area of expertise, they may need to consult with external experts while performing these procedures.

As discussed above, the definition of "minimum cash balance" is unclear. If the auditor is unable to obtain clarification from the provincial government, they can consider putting a footnote, such as, "We have used accounting cash balance at the end of every day as our interpretation of 'cash balance,'" in the practitioner's report on compliance.

For Assessment Opportunity #11 (Assurance), the candidate must be ranked in one of the following five categories:

Not addressed – The candidate does not address this assessment opportunity.

Nominal competence – The candidate does not attain the standard of reaching competence.

Reaching competence – The candidate discusses some of the procedures required for an audit engagement to report on compliance with an agreement.

Competent – The candidate discusses several of the procedures required for an audit engagement to report on compliance with an agreement.

Competent with distinction – The candidate discusses many of the procedures required for an audit engagement to report on compliance with an agreement.

Assessment Opportunity #12

The candidate discusses internal control deficiencies related to the platinum inventory and Elcar's activities.

The candidate demonstrates DEPTH in the Assurance role.

An assessment of the internal control deficiencies is a standard part of the team's work, and Denise asked you to review the control deficiencies related to the platinum inventory, as well as those identified from a review of Elcar's activities. The following weaknesses were noted.

Weakness	Impact	Recommendation
Only one person counted the platinum inventory on May 31.	The person who counts the platinum could be in a position to steal platinum or make errors in the count, resulting in theft or inaccurate financial reporting.	To reduce the risk of theft and verify accuracy of the count, at least two individuals should count platinum.
Platinum is only counted every three months, or only at year end.	Discrepancies may be missed, or not caught until much later, increasing the ability for people to steal without getting caught. In addition, not having regular inventory counts means there is no deterrent for theft. Unexpected shortfalls in platinum inventory could also impact timely production of the G1 batteries.	Platinum should be counted at least monthly, and perhaps weekly.
No one is responsible for overseeing platinum counting and safekeeping.	The risk of platinum losses due to theft or error (due to lack of tracking) is increased when no one is accountable for the inventory, as there would be no tracking and there are no repercussions for anyone when there is loss/theft, which may increase Elcar's cost of production.	An inventory manager should be made responsible for oversight of the platinum, which may include scheduling platinum counts, creating/enforcing policies to ensure safekeeping, and ensuring that adequate records are kept for any activity in the inventory stock.
While the platinum is located in a secure area of the facility, scientists from the R&D department have 24-hour access.	As the scientists can enter the area after hours and take platinum without any tracking or accountability, there is the potential for loss of platinum via theft, which will lead to financial losses.	Employees with access to platinum should be security-checked and bonded. The platinum storage area should be manned at all times and all employees leaving the area should be required to reveal the platinum taken and document this on a sign-out sheet.

Weakness	Impact	Recommendation
		Sign-out sheets should be reviewed by management to identify unusual withdrawals in relation to each person's job responsibilities and level of production of G1 batteries. As platinum can be easily hidden from sight, employees who work with platinum should be scanned by a metal detector before leaving work each day. Since Elcar only operates one 8-hour shift per day, the platinum storage area should be locked with extra security outside normal working hours, to prevent those with 24-hour access from entering when no one else is around.
There is no tracking of disposal of the batteries that do not meet quality control standards.	Failure to control and track disposals of sub-standard batteries does not hold employees accountable for their work and may prevent identification of production problems. It also allows employees to potentially recover the used platinum and sell it personally. There is also the risk that uncontrolled sub-standard battery disposal may expose the company to penalties or fines for violating environmental regulations.	A system should be established to track sub-standard batteries. Information that should be captured includes: <ul style="list-style-type: none"> • reasons for the failure to meet quality standards • the name of the person responsible for producing the sub-standard battery • information on the disposal, including sign-off by someone responsible for ensuring that its disposal is in compliance with environmental regulations.
There appear to be poor controls over payroll as well as fictitious employees and/or hours, as a friend of the payroll processing clerk, while not actually an employee, was apparently paid for two months.	There could be fraudulent payroll expenses, resulting in additional cost to Elcar.	Two individuals (likely one from HR and one from Finance) should approve additions to the authorized employee payroll file and ensure that the payroll amounts are correct. Appropriate timesheets should be filled out and approved before approval is given for payroll payment release. Someone independent of the payroll processing clerk should check that terminated employees are removed from the authorized employee payroll

Weakness	Impact	Recommendation
		file. The reports from each payroll run should be reviewed by someone in the finance department.
Parent company oversight is poor. There appears to be no formal oversight or approval of Elcar's policies by NHC. The Board only contains one person, who is Robin.	Elcar management could override controls and implement policies that are not in the best interest of the parent company, or make decisions that are not in the best interest of Elcar (e.g., artwork was purchased as an investment despite the poor performance to date of core operations).	Parent company oversight should be improved. For example, any significant policies adopted by Elcar, and significant purchases, should first be approved by NHC. The Board should contain someone other than Robin (e.g., representatives from NHC) so that there is better oversight on significant strategic decisions.

For Assessment Opportunity #12 (Assurance), the candidate must be ranked in one of the following five categories:

Not addressed – The candidate does not address this assessment opportunity.

Nominal competence – The candidate does not attain the standard of reaching competence.

Reaching competence – The candidate discusses some of the internal control deficiencies.

Competent – The candidate discusses several of the internal control deficiencies.

Competent with distinction – The candidate discusses most of the internal control deficiencies.

Assessment Opportunity #13

The candidate discusses whether each environmentally responsible actions' statement can be verified by an independent party, including how it could be verified or what challenges the statement may pose.

The candidate demonstrates DEPTH in the Assurance role.

Elcar's management wants to be able to state on its website that its "environmentally responsible actions" have been verified by an independent party. Denise would like to understand whether each statement can be independently verified, including an explanation of how it could be verified or what challenges the statement may pose in terms of independent verification. The following is an analysis of each statement:

- **Elcar is moving towards a paperless environment, with employees printing an average of less than five sheets of paper daily.** – Although it would be a bit difficult, this policy could be verified. No independent party could realistically monitor employees' printing throughout an entire year. Instead, it could determine whether Elcar's IT system tracks the annual number of pages printed and could examine the programming logic to ensure that it is correctly capturing the data. Alternatively, the independent party could obtain the opening and closing balances of paper inventory from a count, or from the perpetual inventory system if paper is tracked there, determine the amount of paper purchased by examining supplier invoices for quantities, and perform a calculation on the amount of paper used throughout the year. It may be difficult to obtain opening and closing balances of paper inventory; if this is not possible, the amount purchased for the year would be a good proxy for usage, assuming there is not a significant difference in the amount of paper kept on hand between the beginning and the end of the year. The independent party could then determine average number of employees of the company (defined as opening plus closing number / 2) for the same period from the payroll master file, and calculate the usage per employee.
- **Elcar has an environmental impact committee, providing effective monitoring of corporate decisions for environmental responsibility.** – The existence of an environmental impact committee would be easy to verify. To ensure that the environmental impact committee exists, the independent party could examine the committee's meeting minutes. However, proving that they have been providing effective monitoring would be more difficult. It is unknown what would constitute effective monitoring. The independent party could get some evidence of effectiveness by reviewing meeting minutes to determine whether they are meeting regularly and to review their topics of discussion. If the minutes reflect that corporate decisions were reviewed for environmental responsibility, and perhaps that the committee made recommendations to management for things to consider or implement to ensure that environmental impact is appropriately addressed, that would show effective monitoring. They could not guarantee that every corporate decision was reviewed, however, because a "decision" is hard to define, and there would be a completeness issue that would be difficult to address.
- **Elcar is reducing waste and has hauled 10% less waste from the plant under its waste disposal contracts than in the prior fiscal year.** – This item would be easy to verify if the waste disposal company keeps records of the waste hauled and if there is a small volume of disposal contracts. A definition of waste volume would also be needed, but could be assumed (e.g., kilograms, tonnes, truck loads or cubic metres). In addition, it could verify the completeness of disposal contracts by reviewing the general ledger for waste disposal expenses and ensuring that all service providers used have been included in the calculation.

- **Elcar is focused on employee safety and no employees have filed Worker's Compensation claims for environmental-related injuries during the past fiscal year.** – This would be verifiable at least in part if a complete list of Worker's Compensation claims could be obtained for the fiscal year. The independent party could also obtain confirmation directly from the Worker's Compensation Board as to whether any claims have been filed for Elcar, and if so, the nature of the claims. However, a definition of environmental-related injuries would be needed. It would likely not include cuts or falls, but probably would include ingestion of harmful chemicals, burns and explosions.
- **Elcar's plant property is not contaminated, as defined by the Provincial Contaminated Sites Act.** – The independent party would need to read the Provincial Contaminated Sites Act and determine the definition of a contaminated site. They would then have to assess whether Elcar's plant met that definition; making that determination might require the involvement of an environmental engineer. If the provincial government conducts inspections to ensure compliance with the act, the independent party may be able to read reports from those inspections and/or confirm directly with the government whether Elcar was declared a contaminated site.
- **Elcar will reduce electricity usage per square foot by 20% by the year 2021 by implementing various measures.** – As it is a future goal, this would be difficult to verify. The independent party would need to ask what electricity reduction measures management plans to implement, because without specific action plans, Elcar is unlikely to meet the target reduction. Assuming action plans exist, the independent party would then need to assess the progress towards this goal. They could obtain a listing of electricity expenses for the prior and current year from the general ledger. To ensure completeness of the listing, the independent party could select a sample of electricity invoices to ensure that they appear on the listing. Then, the invoices related to the expenses on the listing could be reviewed to determine the amount of electricity used, as this information would appear on the invoice. The square footage of each building would also need to be obtained, perhaps via blueprints of the buildings or the lease agreements. A calculation could be performed to see if the electricity usage per square foot is decreasing from the prior year. However, they would still need to extrapolate from that as to whether the goal of 20% reduction will be met by 2021. If the current rate of reduction is inadequate, management may need to come up with additional electricity reduction measures. In addition, the independent party could review management meeting and board minutes to determine whether this goal is being discussed, whether results are being monitored and whether additional actions are planned in order to achieve this goal.

For Assessment Opportunity #13 (Assurance), the candidate must be ranked in one of the following five categories:

Not addressed – The candidate does not address this assessment opportunity.

Nominal competence – The candidate does not attain the standard of reaching competence.

Reaching competence – The candidate discusses whether some of the statements can be independently verified (either how they could be verified or what challenges the statement may pose).

Competent – The candidate discusses whether several of the statements can be independently verified (either how they could be verified or what challenges the statement may pose).

Competent with distinction – The candidate discusses whether most of the statements can be independently verified (either how they could be verified or what challenges the statement may pose), recognizing that some statements can be verified while others will pose challenges.

**DAY 2 – MARKING GUIDE – FINANCE ROLE
ELCAR INC. (ELCAR)**

In the Finance role, the candidate is expected to analyze and comment on the assumptions used in Elcar's latest forecast and calculate its cash position at the end of each fiscal year. The candidate is also expected to identify and discuss alternative financing options, and opportunities to reduce operating costs if NHC decides not to fund Elcar. The candidate is further expected to value Elcar using the discounted-cash-flow method, calculate the percentage of Elcar that will need to be sold to cover its financing requirements and comment on this financing strategy as it relates to NHC. To support the discounted-cash-flow valuation, the candidate is expected to calculate the value of Elcar using an asset-based valuation methodology. Next, the candidate is expected to help NHC assess a government funding offer received by Elcar and provide a recommendation as to whether Elcar should accept this offer. The candidate is also asked to provide a capital budgeting analysis of the possible purchase of a battery-testing device. Lastly, the candidate is expected to review possible platinum price hedging strategies, including futures, options, or acquiring a mine.

See Common Marking Guide for the Common Assessment Opportunities #1 to #6.

Assessment Opportunity #7

The candidate analyzes and comments on the assumptions used in the latest forecast and calculates Elcar's cash position at the end of each year up to fiscal 2023.

The candidate demonstrates DEPTH in the Finance role.

We have been asked to analyze the assumptions used in the latest forecast and calculate Elcar's cash position at the end of each year up to 2023.

We have some comments and concerns about Elcar's latest four-year forecast. In general, the forecast assumptions need to be more clearly supported.

- The most uncertain amount is predicted sales, which need to be supported with the key assumptions and analysis (e.g., breakdown of sales by geographic region).
- The high level of forecasted growth (29% in 2023) is inconsistent with the long-term growth rate of 2% and we question whether the growth in the forecast is reasonable.
- The forecast assumes 50% of sales are through dealers. Because 100% of Elcar's sales are made through dealers and the website is not expected to launch until late fiscal 2020, this does not appear to be a reasonable assumption.
- The gross profit decreases from a current 40% to 30% in 2020 with no clear indication of the cause of this decline.
- When G1 batteries become available, gross profit margin increases from 30% to 35%. This should be supported by key factors that impact gross profit margin, which could include the superior battery performance of the G1s.

- The projected sales volume is an increase of 2.9 times between 2020 and 2023, compared to a projected 2.2 times increase in general and administrative costs. As sales volumes increase, we would typically expect to see more efficiency in the general and administrative costs (due to fixed costs), and would expect a smaller increase in general and administrative costs. However, we do not know if 2.2 times is the appropriate assumption to make, as we do not know the proportion of fixed vs. variable costs that make up general and administrative costs.
- Given the shift to the G2 battery model over the four-year period, it is unlikely that the car costs can be predicted accurately over this period.
- As the design of the Vassy is complete, we would expect the design department to be shut or reduced, yet it is unclear whether this has been done.
- We question whether there is sufficient patent spending to protect the G1 and G2 battery designs.
- Battery development costs are stable across all years and yet the battery design work changes each year.
- We would expect battery development costs to be decreasing, especially in 2023, when the G2 battery will be complete.
- We wonder whether the annual capital spending plan is sufficient to allow for the increase in production.
- We are not clear at what price platinum has been budgeted. As discussed later, a 20% price increase for platinum would result in over \$5 million in additional costs. Given the 22% price fluctuation during the past year, the company is greatly exposed to risk of platinum price increases.
- While less important, as a non-cash item, the constant amortization amount seems incorrect.
- The costs to upgrade existing customers, and new customers who purchase a car under the new marketing program, to the next-generation battery have not been included in the forecasts and could be substantial.
- Given Elcar's history of losses and the forecast 2020 losses, there is the potential that Elcar will no longer be a going concern if it is unable to obtain additional funding.

We have used the forecasts to produce estimated cash flows. Our assumptions are as follows:

- As it is a non-cash item, amortization must be added back.
- Expenses will be paid for in the period in which they are incurred.
- Cost of sales is assumed to be paid for in the year in which it is incurred. Management maintains an inventory level, including finished goods, parts and work in progress, of 10% of the following year's cost of sales, which is paid for in the prior year.

	Elcar Inc. (excludes Barkser LP) Forecast – years ending May 31			
	2020	2021	2022	2023
Income after taxes	(4,778,506)	(369,080)	5,587,716	7,534,559
Add: amortization	194,500	194,500	194,500	194,500
Capital (\$8,000 × 12 months)	(96,000)	(96,000)	(96,000)	(96,000)
Inventory build (Note 1)	(1,090,257)	(2,253,621)	(1,988,513)	(174,988)
Estimated cash flow	(5,770,263)	(2,524,201)	3,697,703	7,458,071
Opening cash	4,021,169	(1,749,094)	(4,273,295)	(575,592)
Closing cash	(1,749,094)	(4,273,295)	(575,592)	6,882,479

Note 1:

Year 2020: $[- \$45,072,416 \text{ (2021 cost of sales)} \times 10\%] + \$3,416,985 \text{ (2019 inventory balance)} = -\$1,090,257$

Year 2021: $[\$67,608,624 \text{ (2022 cost of sales)} - \$45,072,416 \text{ (2021 cost of sales)}] \times 10\% = -\$2,253,621$

Year 2022: $[\$87,493,754 \text{ (2023 cost of sales)} - \$67,608,624 \text{ (2022 cost of sales)}] \times 10\% = -\$1,988,513$

Year 2023: As forecasts are not provided for 2024, we have assumed that cost of sales will increase by inflation in 2024, resulting in a working capital adjustment of $-\$87,493,754 \times 2\% \times 10\% = -\$174,988$

Assuming no outside financing, the above calculations indicate that the current cash balance will be depleted before the end of 2020, and that a cash infusion of approximately \$4.3 million is needed.

For Assessment Opportunity #7 (Finance), the candidate must be ranked in one of the following five categories:

Not addressed – The candidate does not address this assessment opportunity.

Nominal competence – The candidate does not attain the standard of reaching competence.

Reaching competence – The candidate attempts a cash flow forecast for Elcar but the calculation contains errors or omissions, and identifies some of the assumptions used or performs a reasonable cash flow forecast.

Competent – The candidate performs a reasonable cash flow forecast for Elcar and comments on the assumptions used.

Competent with distinction – The candidate performs a reasonable cash flow forecast for Elcar, comments on the assumptions used and determines the amount of financing needed.

Assessment Opportunity #8

The candidate discusses Elcar's options if funding is not provided by NHC.

The candidate demonstrates DEPTH in the Finance role.

In order to deal with this cash shortage, Elcar can explore the following options.

Operating Costs

Elcar may be able to reduce operating costs. Areas of major spending include:

- Vehicle construction
- Vehicle promotion and selling
- Battery development
- Manufacturing costs
- General and administrative overhead

As the first two items generate positive cash flows, even if sales are less than forecast, it is not advisable to reduce these costs.

If battery development is to be eliminated completely, the company could presumably survive in the short term. Based on the Electrical Car Digest ranking, however, the lack of a better battery would make Elcar an average, small electric-car manufacturer. As there continue to be more entrants to this highly-competitive industry, it makes sense to improve the product.

If the battery-development costs are removed completely, the company will end development of the G1 battery. This means the company will keep selling the current vehicle, and with sales assumed to be flat, no “inventory build” cash is needed, further reducing cash outflows. However, this option goes against Elcar’s mission and will likely have a negative impact on Elcar’s ability to keep pace with the industry in the longer term. Another option could be to cut battery development costs in half. The speed of progress will presumably decrease by about fifty percent, but this should be confirmed with the scientists.

There may be opportunities to generate savings by streamlining the manufacturing process. Given Elcar’s forecast, which expects significant growth in vehicle sales, we would need to ensure that we retain the ability to scale up our manufacturing process in order to meet future sales.

Opportunities could exist to trim general and administrative costs, resulting in leaner operations. We would need to ensure, however, that the general and administrative support is sufficient to support Elcar’s projected growth.

Other Potential Sources of Income or Savings

The cash position would improve if the provincial government grant can be obtained.

If the company greatly exceeds sales forecasts, these funds could support battery development, perhaps even at an increased pace.

A sale of the investment in Barkser, for which Elcar received an unsolicited offer a week ago, would generate \$280,000. As the Barkser investment does not appear to be a strategic fit, selling this investment is unlikely to impact Elcar’s long-term operations.

Elcar could enter into a sale-leaseback transaction for its equipment. Although it would have a negative impact on future cash flows, this strategy could generate \$1 million in cash.

Unless any of the following options can be realized, we recommend that Elcar sell its investment in Barkser and investigate cost reductions by streamlining its manufacturing process and reducing general and administrative costs. If insufficient cash is generated, Elcar could investigate a sale-leaseback transaction and the impact of cutting battery development costs in half. If battery development costs are reduced, research and development (R&D) progress needs to be closely monitored to ensure that Elcar’s long-term success is not jeopardized.

Other Options

If NHC chooses not to fund Elcar’s operations, the company can pursue other options:

- Find a partner for battery development. It may be necessary to offer the partner a royalty or the ability to use the battery for their own projects.

- Seek other debt financing. Although securable assets are limited, with about \$1 million in property, plant and equipment, there is a substantial amount of inventory. The specialized nature of this inventory, being primarily platinum in various forms, may concern potential lenders.
- Seek other government financing. Being on the brink of a greatly improved electric battery may generate more government funding for jobs, and there may be funding for the environmentally-friendly aspect of electric vehicles.
- Sell the company wholly or partially to management. As the asset valuation suggests that the company is worth more than \$8 million (see below), it is likely that management would require some sort of earnout or deferred financing from NHC. Other financing options, mentioned above, may also be required if this option is selected.
- Seek other private equity financing, which could include debt or equity financing from other private equity companies. A second investor could have different goals than NHC, which could result in disagreements regarding Elcar's strategy.

(Candidates may be able to think of other options.)

For Assessment Opportunity #8 (Finance), the candidate must be ranked in one of the following five categories:

Not addressed – The candidate does not address this assessment opportunity.

Nominal competence – The candidate does not attain the standard of reaching competence.

Reaching competence – The candidate attempts to determine some ways to improve Elcar's operating cash flows or suggests some relevant alternative financing solutions.

Competent – The candidate determines some relevant ways to improve Elcar's operating cash flows and suggests some relevant alternative financing solutions.

Competent with distinction – The candidate determines several relevant ways to improve Elcar's operating cash flows and suggests several relevant alternative financing solutions.

Assessment Opportunity #9

The candidate discusses how much of the business would have to be sold to an equity investor to get the necessary funding, and comments on this financing strategy.

The candidate demonstrates DEPTH in the Finance role.

The necessary amount of funds would appear to be the largest shortfall in the cash flows calculated earlier, that of \$4.3 million.

The going concern value of the company is the present value of the cash flows, using a 25% discount rate based on NHC's desired rate of return, plus redundant assets. As it is not part of the core business, Elcar's investment in Barkser must be considered a redundant asset. As it represents an arm's length offer and is the most recent and reliable indicator of value, the unsolicited offer is taken to represent its fair value.

Purpose: discounted-cash-flow valuation of company

Year	1	2	3	4	Terminal (Note 1)
Cash flow from above	(5,770,263)	(2,524,201)	3,697,703	7,458,071	5,456,892
Terminal multiple (Note 2)					4.35 ×
Terminal value					23,725,618
PV factor	0.800	0.640	0.512	0.410	0.410
PV of cash flows	(4,616,210)	(1,615,489)	1,893,224	3,057,809	9,727,503
Total cash flows					8,446,837
Redundant assets – Barkser LP					<u>280,000</u>
Value of Elcar					<u>8,726,837</u>

Note 1: Terminal year cash flow is calculated as follows:

Terminal year pre-tax income (assuming inflationary growth of 2%):

$$\$7,534,559 \times (1 + 2\%) = \$7,685,250$$

Terminal year after-tax income:

$$\$7,685,250 \times (1 - 28\%) = \$5,533,380$$

Free cash flows:

$$\$5,533,380 + \$194,500 \text{ (amortization)} - \$96,000 \text{ (capital)} - \$174,988 \text{ (inventory)} = \$5,456,892$$

Note 2: Terminal multiple is based on a 25% discount rate and a terminal growth rate of 2%.

Conclusion

Elcar needs approximately \$4.3 million (\$4,273,295) to continue. The value of the company is \$8.7 million. To raise \$4.3 million, NHC must sell 32.9% [$\$4,273,295 / (\$8,726,837 + \$4,273,295)$] of the company.

Qualitative Considerations

- By giving up 32.9% of Elcar, NHC would be losing ownership of the business, which may be undesirable. This would likely result in the formation of a Board of Directors composed of more representatives from the new investor(s).
- Due to the company's current high-risk profile, only venture capitalists or private equity investors would likely be interested, which limits the number of potential investors.
- Given the provincial funding offer, the provincial government might be interested but their interests may conflict with those of NHC.
- Successful development of advanced battery technology could increase vehicle sales but could also generate millions of dollars in other markets, such as golf carts, cell phones and flashlights, or be sold or licensed to competitors. By giving up a share in Elcar, NHC could potentially be giving up some of its returns.
- This is a high-risk, nascent business. Sales forecasts have not been met and future forecasts may also be suspect. Reducing its equity interest could reduce NHC's risk.

(Candidates could make other assumptions, such as that forecasting beyond four years is speculative, so no subsequent years should be included.)

For Assessment Opportunity #9 (Finance), the candidate must be ranked in one of the following five categories:

Not addressed – The candidate does not address this assessment opportunity.

Nominal competence – The candidate does not attain the standard of reaching competence.

Reaching competence – The candidate attempts a calculation of Elcar's value using the discounted-cash-flow method.

Competent – The candidate performs a reasonable calculation of Elcar's value using the discounted-cash-flow method. The candidate accurately calculates the portion of the company that would have to be sold or performs a reasonable qualitative analysis of this financing strategy.

Competent with distinction – The candidate performs a reasonable calculation of Elcar's value using the discounted-cash-flow method. The candidate accurately calculates the portion of the company that would have to be sold and performs a reasonable qualitative analysis of this financing strategy.

Assessment Opportunity #10

The candidate prepares an asset-based valuation of the company.

The candidate demonstrates DEPTH in the Finance role.

Using the adjusted-book-value approach, we have performed the preliminary valuation of Elcar. As liquidation does not appear to be NHC's intention, we do not feel the liquidation approach should be used.

In addition to other information disclosed below, we have used the unaudited financials dated May 31, 2019, as a starting point.

We have made adjustments to the net book value of the company to reflect assets and liabilities at their estimated fair values.

The book values of accounts receivable, inventory and work in progress are assumed to equal their fair values. The book values of accounts payable, deposits, and due to parent company account are also assumed to equal their fair values.

The value for the redundant asset, the investment in Barkser, is based on the recent unsolicited offer.

For physical assets, we should use "replacement cost," being the amount required to obtain comparable used assets plus installation costs. Our best estimate for this is the replacement cost appraisal.

While improving battery technology could be considered an asset, we cannot estimate its worth, and it is assumed to have a nil value.

It is difficult to determine if there is any goodwill in the business. The business has never been profitable but has designed and sold quite a few electric cars. For purposes of this valuation, we assumed no goodwill.

The company has tax losses from the prior year's Schedule 4 of the T2 tax return, plus the 2019 loss to May 31. Their value is not recorded in the books. Based upon industry knowledge, we have added 5% of the losses as their realizable value.

Conclusion

The estimated value of the business, based on the adjusted-book-value method, is approximately \$8.5 million.

Net book value per 2019 draft f/s	\$ 7,943,067		
Net book value of property, plant and equipment	(1,076,044)		
Appraised value of property, plant and equipment	1,017,000		
Value of Barkser in excess of book	240,000		
Value of tax losses (5%)	368,826	Schedule 4 losses	\$ 4,667,747
		2019 losses	<u>2,708,777</u>
Adjusted book valuation	<u>\$ 8,492,849</u>		<u>\$ 7,376,524</u>

While we have assumed a nil value for the in-process R&D on battery technology, this item could become very valuable, a circumstance that would greatly impact this valuation.

The implied value of Elcar using the adjusted-book-value approach is lower than the value of Elcar calculated using the discounted-cash-flow method, which could be related to the battery technology or goodwill.

For Assessment Opportunity #10 (Finance), the candidate must be ranked in one of the following five categories:

Not addressed – The candidate does not address this assessment opportunity.

Nominal competence – The candidate does not attain the standard of reaching competence.

Reaching competence – The candidate attempts an asset-based valuation of Elcar.

Competent – The candidate performs a reasonable asset-based valuation of Elcar, containing some adjustments from the book values, or an adequate description and explanation of the assumptions made.

Competent with distinction – The candidate performs a reasonable asset-based valuation of Elcar from the book values and an adequate description and explanation of the assumptions made, and comments on the two valuations.

Assessment Opportunity #11

The candidate discusses the provincial government funding offer.

The candidate demonstrates DEPTH in the Finance role.

We have examined the extracts from the new provincial government funding offer.

Advantages

- Unless the equity clause is triggered, there is less need for parent company financing and no dilution of NHC's investment.
- The financing does not require Elcar to provide any security to support the financing.
- It funds battery development costs, which are key to the company's success.
- Repayment would be avoided if the government accepts common company shares.
- If certain conditions are met, Elcar only needs to repay 50% of the funds.

Disadvantages

- The government's ability to exercise veto power over the sale of the company during the period of the grant may restrict NHC's ability to sell the investment.
- As the interest rate will fluctuate with the government's future borrowing rate, NHC bears the interest rate risk.
- If sales don't perform well and the parent company doesn't provide funding, Elcar will have trouble repaying the grant.
- If the equity clause is triggered, Elcar and the provincial government may disagree on the common share value. If so, the government should be required to pay for an independent valuation.
- The audit clause could be problematic. It is not clear what report the government requires, and the stipulated materiality of less than 0.001% of the government contribution (\$1,000 / \$1 million = 0.001%) will increase the report cost and is much lower than that used for Elcar's audited financial statements. The auditor should determine the appropriate materiality level.
- As not all costs have a precise geographic location, the definition of "eligible costs" could be problematic. For example, a battery testing device manufactured in the U.S. but purchased from a distributor within the designated geographic circle may or may not be considered an eligible cost. An employee could move outside the eligible circle partway through the program or not live at the address on file with the company. It is also unclear whether employee benefits are to be treated as an eligible cost.
- As we don't know what Sections 42 and 43 of the Public and Corporate Assistance Act stipulate, the company needs to get legal advice on whether it can comply with this legislation.
- Because of political issues, having a government shareholder may restrict NHC's operations and not allow for a maximized return on investment from Elcar.

- By accepting 10% ownership for non-repayment of \$500,000, the government has valued the company at \$5 million ($\$500,000 / 0.1 = \5 million); this is significantly less than our calculated market value.

Arguments against the Change in Control Clause

Since this company is already foreign-owned, we question why the government should have a veto right on the sale of majority of shares to a foreign company. This clause would make more sense if the company was Canadian-owned. As it doesn't violate the agreement, a sale of assets would be possible but would violate the spirit of the agreement. The company should negotiate a buyout clause, perhaps in exchange for repaying the grant.

Recommendation

A number of clarifications and negotiations are required in order to make this offer acceptable. Based on our calculated market valuation, the government offer grossly undervalues the company. If adequate changes are made, the company should consider accepting the grant. However, if the parent company provides sufficient funding, the grant is likely not worth entertaining.

For Assessment Opportunity #11 (Finance), the candidate must be ranked in one of the following five categories:

Not addressed – The candidate does not address this assessment opportunity.

Nominal competence – The candidate does not attain the standard of reaching competence.

Reaching competence – The candidate attempts a discussion of the government funding offer.

Competent – The candidate performs a reasonable discussion of the government funding offer and provides a recommendation.

Competent with distinction – The candidate analyzes the government funding offer in depth and provides a recommendation.

Assessment Opportunity #12

The candidate analyzes the possible purchase of a battery-testing device.

The candidate demonstrates DEPTH in the Finance role.

As requested, we have analyzed the capital budgeting decision associated with the new battery-testing device.

Advantages

- Money is saved with each use (1,200 times a year).
- Employee time and stress is reduced.
- The elimination of chemicals reduces environmental damage.
- It will prevent an expected future legal environmental problem.
- The risk of price fluctuation for the chemicals is eliminated.
- The device has a good warranty.

Disadvantages

- This is a newer device and has no proven track record.
- If NHC doesn't advance more cash, the company may not be able to afford it.
- If the battery-making venture is shelved, the device is not needed.
- The ten-year lifespan is questionable.
- Maintenance costs might be higher than expected.
- Electricity costs might be higher than expected.

Quantitative Analysis

We have performed the following net present value analysis, which discounts the expected future savings at NHC's desired 25% rate of return. We then calculated the tax shield, being the tax savings from the asset capital cost, including freight-in but excluding the setup cost. Based on the company's four-year financial forecast, we have discounted the tax shield for an estimated two-year delay until the company starts paying taxes.

Capital cost		\$350,000	USD
CAD	\$	476,000.00	1.36
Freight-in		5,600.00	
Setup and training		12,500.00	
	\$	<u>494,100.00</u>	

Savings, less operating costs

Chemicals	\$	75.00	
Inspection – labour		12.82	0.4 × 32.04
Assembly – labour		67.28	2.1 × 32.04
	\$	<u>155.10</u>	

Annual volume 1,200

Savings	\$	186,120.00	\$155.10 × 1,200
Service contract annual		(5,000.00)	
Electricity		(2,400.00)	
Pre-tax savings	\$	<u>178,720.00</u>	
After-tax savings	\$	<u>128,678.40</u>	

NPV calculation

Capital cost		\$(494,100.00)	
Tax shield		\$42,192.44	Discounted 2 years out
PV of savings		\$459,446.65	3.57 Present value factor 25% 10-year useful life

Net present value \$ 7,539.09

Payback period 3.84 years

Capital cost		
(\$476,000+\$5,600)		\$481,600.00
Tax rate		28%
CCA rate		20%
Discount rate		25%

Tax shield \$ 65,925.69

Conclusion

The net present value is a savings of \$7,539. Even with the high 25% discount rate, the undiscounted payback period is only 3.84 years. If sales increase to 4,000 units per year, the savings would be greater than forecast. The qualitative advantages, particularly the environmental ones, suggest that we proceed.

As it will be purchased from a local distributor, the company should determine whether the provincial grant could fund some or all of this purchase.

For Assessment Opportunity #12 (Finance), the candidate must be ranked in one of the following five categories:

Not addressed – The candidate does not address this assessment opportunity.

Nominal competence – The candidate does not attain the standard of reaching competence.

Reaching competence – The candidate attempts a reasonable capital budgeting analysis (net present value, payback period) of the battery-testing device acquisition.

Competent – The candidate performs a reasonable calculation of the net present value of the battery-testing device acquisition and provides some qualitative factors relevant to the decision.

Competent with distinction – The candidate performs a thorough calculation of the net present value of the battery-testing device acquisition and provides several qualitative factors relevant to the decision.

Assessment Opportunity #13

The candidate discusses the possible platinum price hedging strategies.

The candidate demonstrates DEPTH in the Finance role.

We have been asked to review possible platinum price hedging strategies, including futures, options and mining.

Based on the four-year forecast and on the current market price, there is a need for \$27 million worth of platinum from 2020 to 2023. While it is unclear what price has been forecast, a 20% increase in the price of platinum would result in over \$5 million in additional costs. The company is greatly exposed to the risk of platinum price increases.

	Forecast Platinum Purchases				(127 grams per battery)	per gram
	2020	2021	2022	2023	Total	\$ 31.05
Grams	0	203,200	304,800	368,300	876,300	
\$	0	\$6,309,360	\$9,464,040	\$11,435,715	\$27,209,115	

A few options for hedging the price of platinum have been identified.

1. Platinum futures, which fix the price for a given volume at no cost, could be used to hedge the risk of future fluctuating platinum prices. The futures will not actually be settled in tangible goods but the company will make a gain or loss versus the market price on settlement. If a future goes “out of the money,” there may be margin calls.
2. The company could use platinum options to hedge the risk of buying platinum in the market in future years. The company can use options to select a maximum platinum price, a worst-case scenario. If the platinum market price is less than the strike price, the company would buy cheaply on the market. The price to pay for this security is the option price. The options will not actually be settled in tangible goods but the company will make a gain or loss versus the market price on settlement. Options may not be available for purchases four or more years in the future.
3. The company could accept the offer to buy the South African platinum mine in order to source its platinum directly. A list of qualitative considerations follows.

Advantages

- If the mine does well, the company could make extra money.
- Market price increases of platinum could offset the company's higher cost of platinum purchases at the current market spot price.

Disadvantages

- If the mine does poorly, the company could lose money.
- Although we lack the information needed to perform a quantitative analysis, buying a mine is a major step, and would likely require substantial financing.
- The company would have to deal with possible environmental issues with the mine.
- This option is outside the vision/mission statement of the business.
- The mine is far away geographically.
- Elcar has no experience in overseeing a mining operation.

Another option that Elcar could possibly use to hedge the price of platinum is to stockpile enough platinum at the current price to last for several years. While this strategy locks in the price, there would be carrying costs and the risk of theft. The risk of price fluctuations still exists, should any oversupply need to be resold.

Recommendation

The company should not purchase a platinum mine as a hedging strategy. While the purchase should be explored as a vertical integration strategy, more information is needed. The company should use platinum futures to hedge the purchase price of platinum for as long as platinum will be needed, and thus avoid the out-of-pocket cost of options.

For Assessment Opportunity #13 (Finance), the candidate must be ranked in one of the following five categories:

Not addressed – The candidate does not address this assessment opportunity.

Nominal competence – The candidate does not attain the standard of reaching competence.

Reaching competence – The candidate attempts an analysis of the potential platinum price hedging strategies.

Competent – The candidate performs a reasonable analysis of the potential platinum price hedging strategies.

Competent with distinction – The candidate analyzes the potential platinum price hedging strategies in depth.

**DAY 2 – MARKING GUIDE – PERFORMANCE MANAGEMENT ROLE
ELCAR INC. (ELCAR)**

In the Performance Management role, CPA is a member of the special investigation team currently working onsite at Elcar’s facility. The candidate is asked to review the proposal Elcar provided to NHC to support the 2017 cash injection, and to comment on Elcar’s actual performance relative to that initial proposal. In order to further assess the current situation, candidates are asked to discuss the risks that Elcar is facing and suggest how to mitigate them.

Candidates are also asked to review the forecast and make any changes believed to be necessary. If, while reviewing the forecast, candidates notice any areas where Elcar could reduce costs, they are asked to note them.

Sam told Denise they are investigating paying the vehicle and battery assembly employees strictly by piece work. Candidates are asked to analyze this form of compensation and provide a recommendation. In addition, candidates are asked for a quantitative and qualitative analysis of the electric bicycle proposal, and for a recommendation on whether to pursue the venture.

Candidates are also asked to recommend changes that would improve the governance and oversight of Elcar by NHC. This includes possible changes to the Board of Directors, structure or policies and processes.

Finally, Denise believes that Elcar’s performance could be improved if each department had better performance indicators. She asks for comments on the current performance measurement system and suggestions for improvement.

See Common Marking Guide for the Common Assessment Opportunities #1 to #6.

Assessment Opportunity #7

The candidate discusses the request for NHC’s 2017 investment and compares Elcar’s actual performance to its initial proposal.

The candidate demonstrates DEPTH in the Performance Management role.

We have looked at Elcar’s original request for NHC’s 2017 investment and have compared the proposed actions to actual events.

We have divided the outcomes into those that have exceeded the initial proposal, those achieved, and those not achieved—and where management may have been deliberately misleading. Rather than act solely on our report, NHC should have discussions with Elcar’s management.

Objectives Exceeded

- Elcar won two design awards for the vehicle, more than the one promised.
- Elcar has sold the vehicle for more than the \$36,400 forecast price; the average sales price has been \$37,806.
- The higher selling price has generated a gross profit of 39.6% in 2019 to date, which exceeds the targeted gross profit of 35%.

Objectives Achieved

- The company has started selling vehicles, albeit later than the anticipated date of September 2017; the first sale was in mid-fiscal 2018, so was likely in November 2017.
- Development of a battery with greater range and charge-speed capabilities is approaching expectations with development of the G1 and G2 batteries (ratio of 0.008 and 0.00375 respectively). As this is a May 2020 target, there are still 11 months in which to meet this objective.

Objectives not Achieved

- Cumulative sales of 1,678 vehicles were forecast by the end of May 2019, but sales of 164 in fiscal 2018 and about 900 in fiscal 2019 result in a cumulative shortfall of 36.6%.
- Elcar planned to have at least four patents; only one is nearing application status. This suggests that further investigation into the R&D work being done at Elcar is required.
- Elcar planned to sell the Vassy via the internet; this has not yet been done.
- The planned number of dealers was 100; Elcar currently has 48, which will have a significant negative impact on sales. Further investigation is needed to determine why the network is so much smaller than planned.
- Elcar's planned headcount was 64, excluding manufacturing. As of March 2019, the non-manufacturing headcount is 84, which contributes to the year's net loss.
- The company built a sports model rather than the planned family sedan, which is a significant change in direction and may have contributed to the smaller dealer network and fewer sales.
- There is no partnership with a successful industry player, which is another factor contributing to the sluggish sales growth.
- The company planned to buy a manufacturing facility and has not; it has rented since the beginning of the forecast period.
- The company was forecast to generate 20% of total sales in Europe; Elcar has yet to sell in Europe.

Significant Differences

Elcar initially forecast a modest after-tax income of \$760,527 by the end of fiscal 2019. Instead, Elcar is projected to have a loss, which is even greater than the 2019 draft financial statement indicates, considering the accounting changes suggested.

We believe the main reasons for the company not achieving its objectives are because:

- Sales have been well below expectations, which are likely a result of the smaller than expected dealer network and the lack of sales in Europe.
- Battery development has not proceeded as rapidly as planned.
- Targets set may not have been achievable.
- NHC appears not to hold the company accountable for the targets set.

For Assessment Opportunity #7 (Performance Management), the candidate must be ranked in one of the following five categories:

Not addressed – The candidate does not address this assessment opportunity.

Nominal competence – The candidate does not attain the standard of reaching competence.

Reaching competence – The candidate attempts to discuss Elcar's performance compared to its forecast.

Competent – The candidate discusses Elcar's performance compared to its forecast.

Competent with distinction – The candidate discusses Elcar's performance compared to its forecast and attempts to explain the possible reasons for the shortfalls.

Assessment Opportunity #8

The candidate analyzes the risks facing Elcar and suggests ways to mitigate them.

The candidate demonstrates DEPTH in the Performance Management role.

We have been asked to review Elcar's risks and suggest ways to mitigate them.

The key uncertainty facing Elcar is the volume of cars sold. The following four risks constitute the main underlying factors behind this uncertainty:

1. Assuming the new sales incentive program is implemented and the G1 and G2 battery development is not achieved, customers given the upgrade promise will be unhappy and sales will be hurt. This could be mitigated by disciplined, focused R&D efforts toward achieving the targets, and possibly by increasing R&D resources, to ensure that the G1 and G2 batteries are successfully developed.
2. Customers may dislike that their only option is colour. This could be mitigated by offering low-cost customization or encouraging after-market, independent options, such as sun roofs. As the main reason for not offering options was to keep production costs down, Elcar could investigate the addition of low-cost features.

3. The number of charging outlets is lower than the number of gas stations. A lack of charging outlets will restrict travel. This could be mitigated by increasing the battery range and petitioning the industry to expand the charging network.
4. There is the risk that a competitor will steal the innovations for improving the battery before it is patented, and that the company will lack the funds needed to legally contest the theft. This could be mitigated by earlier patenting, reviewing employee confidentiality agreements and implementing better computer and plant security.

Also, a strategic concern is financing, since Elcar is not yet profitable. If Elcar cannot rely on stable funding, it is very difficult to plan and operate the business and hire and retain people. To mitigate this risk, NHC should decide upon funding soon, and obtain sufficient funds to support operations for several years. This risk can be further mitigated if alternative funding sources, such as government and other investors, are found.

Vehicle manufacturing cost increases could erode margins and profits, making the company unsuccessful. This could be mitigated by good cost control and purchasing practices.

As the majority of workers in the automotive industry are unionized, unionization of Elcar's assembly workers is a possibility. This may increase labour costs, thereby decreasing margins and reducing profits. The risk of unionization at Elcar could be mitigated by keeping employees happy with good pay and work conditions, and with creative compensation options such as piece work.

Due to its high value, there is the risk that employees will steal platinum, which would result in significant financial losses. This could be mitigated by increased security over platinum in the plant, improved processes to account for all platinum and regular inventory checks.

As it is a critical component of the batteries, any increases in the price of platinum would increase the cost of sales and decrease margins, and therefore profits. This could be mitigated by hedging this risk with the use of options or futures on the price of platinum, or stockpiling platinum when the price is low.

There is a risk of more stringent environmental laws for platinum chemical-battery disposal, which would increase costs and possibly make the batteries uneconomical, and would significantly damage the business. This could be mitigated by working with, and lobbying, the regulators, to ensure that the laws are reasonable.

A large portion of vehicles sold to retail customers are financed by the manufacturer. Elcar is at a competitive disadvantage by not offering financing. While offering financing would require additional capital and personnel, there may be other options, such as an alliance with a financial institution or assistance from dealers in the network. Because the vehicle is relatively unproven and the after-market is uncertain, some financial institutions may be concerned about the collateral value. Also, buyers of two-seat sportscars are generally younger, and usually represent a higher credit risk to lenders.

Management appears to lack the expertise needed to grow Elcar to a mass-production car company. Robin, the CEO, has underspent on overhead, gone externally for a line of credit and has provided insufficient reporting to NHC. The senior financial executive has made numerous financial accounting errors. This risk could be mitigated by hiring that expertise as the company grows. Currently, however, the most critical success factor is ensuring that the battery technology is significantly improved.

The company's current method of using dealers who also sell traditional cars, and for whom the Vassy is a sideline, has obvious drawbacks. The dealers do not have a vested interest in marketing the Vassy, which is likely more expensive than similar, gas-powered cars. This could be mitigated by creating a small and dedicated dealer network, at least in the larger markets.

The company's current distribution method also has drawbacks, as all vehicles must be shipped from the factory and there is no local or regional inventory. This could be mitigated if vehicles were sent to warehouses in various Canadian regions, thereby cutting costs.

For Assessment Opportunity #8 (Performance Management), the candidate must be ranked in one of the following five categories:

Not addressed – The candidate does not address this assessment opportunity.

Nominal competence – The candidate does not attain the standard of reaching competence.

Reaching competence – The candidate attempts to discuss risks and provide mitigation solutions.

Competent – The candidate discusses risks and provides mitigation solutions.

Competent with distinction – The candidate discusses internal and external risks and provides mitigation solutions.

Assessment Opportunity #9

The candidate analyzes the company's current six-month cash flow projections and recommends ways Elcar could reduce costs.

The candidate demonstrates DEPTH in the Performance Management role.

There are several significant errors in the cash flow projection. Attached is a revised cash flow and explanations for the revisions.

	Note	June	July	August	Sept	Oct	Nov
Opening cash		\$ 4,021,000	\$ 3,776,000	\$ 3,542,000	\$ 3,308,000	\$ 3,074,000	\$ 2,840,000
Cash sales	1	3,780,000	4,536,000	4,536,000	4,536,000	4,536,000	4,536,000
Units sold		100	120	120	120	120	120
Direct materials	2	1,750,000	2,100,000	2,100,000	2,100,000	2,100,000	2,100,000
Direct labour	3	141,200	169,440	169,440	169,440	169,440	177,912
Variable overhead	3	458,800	550,560	550,560	550,560	550,560	578,088
Admin. salaries	4	475,000	525,000	525,000	525,000	525,000	525,000
Leases	5	250,000	360,000	360,000	360,000	360,000	360,000
R&D	6	700,000	770,000	770,000	770,000	770,000	770,000
Utilities	7	250,000	295,000	295,000	295,000	295,000	295,000
		4,025,000	4,770,000	4,770,000	4,770,000	4,770,000	4,806,000
Operating cash flow		(245,000)	(234,000)	(234,000)	(234,000)	(234,000)	(270,000)
Ending cash		\$ 3,776,000	\$ 3,542,000	\$ 3,308,000	\$ 3,074,000	\$ 2,840,000	\$ 2,570,000

Notes:

1. We assumed the same number of units sold but increased the selling price to this year's actual average price of \$37,806 per unit (rounded to \$37,800) versus the forecast \$36,400, resulting in much higher cash sales.
2. Direct materials are a variable cost and should increase with increased sales. There is no information about the direct materials cost per unit but we assumed the cost per unit would remain unchanged. Therefore, since sales increased by 20%, we increased direct material costs by 20%.
3. Direct labour and variable overhead are also variable costs and should increase by 20% in July. The 5% increase in November was omitted in the original projection, and has been included here.
4. We assumed that administrative salaries were fixed and unchanged from June onwards.
5. We assumed that leases had fixed contracts in place, and therefore remain unchanged from June onwards.
6. We assumed that R&D is fixed and left it unchanged from June onwards. While it is important for Elcar to complete testing of the G1 and G2 batteries, it is worth investigating the 10% increase in expenses.
7. Utilities are predominantly linked to production and, with increased sales, utilities should increase as well. For simplicity, we assumed a 20% increase of the 90% related to powering the manufacturing equipment.

As there are only a couple of weeks left in the month, we also assumed that June was relatively accurate, and therefore made no changes to it.

Conclusion

With these revisions, Elcar is barely above the \$3 million cash balance target at the end of the months of June through to September, and the balance falls below that threshold at the end of October and November. Also, the revised projection shows the cash balance declining month after month. This should be a great concern to NHC.

A great deal of the increase in cash outflow is being directed to R&D and completion of the G1 and G2 batteries. However, it is worth investigating whether the additional \$180,000 per month (\$110,000 for leases + \$70,000 for R&D) is necessary. Over the five months from July to November, this amounts to an additional \$900,000.

There is no explanation for the increase in headcount for the administrative salaries. Elcar is already operating with a headcount above expectations, so this increase should be investigated further and justified by Elcar management. Since the consumer price index is closer to 2%, the 5% cost of living increase may be higher than necessary. If the increase has not already been agreed upon, Elcar should consider eliminating or reducing this increase.

The cost of the direct materials was assumed to be flat. However, as it is more likely that materials will cost more, based on inflation alone, it would be in Elcar's best interests to negotiate pricing with its suppliers.

Resolution of the issues identified with the platinum inventory and the K3Press contract will also contribute to decreasing costs and increasing cash flows.

For Assessment Opportunity #9, the candidate must be ranked in one of the following five categories:

Not addressed – The candidate does not address this assessment opportunity.

Nominal competence – The candidate does not attain the standard of reaching competence.

Reaching competence – The candidate attempts adjustments to the cash flow forecast.

Competent – The candidate adjusts the cash flow forecast and recognizes that Elcar will have difficulty meeting its cash balance target.

Competent with distinction – The candidate adjusts the cash flow forecast and suggests ways that Elcar can meet its cash balance target.

Assessment Opportunity #10

The candidate discusses a possible move to piece work for assembly of the vehicles and recommends whether to proceed.

The candidate demonstrates DEPTH in the Performance Management role.

Using the proposed piece work rate of \$1,600 per car, we have analyzed the possible move from hourly wages to piece work for the car and battery assembly employees.

Quantitative Analysis

Piece work compensation would eliminate the variability of direct labour costs for manufacturing each car.

Current assembly cost range	Hours		Hourly Rate	Cost to Build		
	Low	High		Low	High	Average
Vehicle	27	32	\$ 32.04	\$ 865.08	\$ 1,025.28	\$ 945.18
G1 battery	14	18	\$ 32.04	\$ 448.56	\$ 576.72	\$ 512.64
				\$ 1,313.64	\$ 1,602.00	\$ 1,457.82

Based on these results, the move to piece work compensation would increase variable labour costs by \$142.18 per car (\$1,600 - \$1,457.82). However, it would reduce annual fixed labour costs by \$160,000 (2 supervisors × \$80,000). In essence, it would equate to transforming fixed costs to variable costs. Therefore, the proposed change would be profitable if the number of cars sold is less than 1,125 per year (\$160,000/\$142.18), which is currently the case. However, the funding proposal presented in 2016 planned for annual production of more than 1,125 cars, so this option would become unprofitable in the future. Before proceeding with this option, further analysis on current costing should be completed. Elcar should determine the current average cost and time per unit, as opposed to simply providing a range, as the average may end up being at the low end or the high end of the range.

Advantages

- This fixes the price of assembly, which is better for product costing, business planning and maximizing profits.
- This pays employees based on results, not time, which is ideal for the employer.
- There will be little need to track employee hours.

- Employees will be motivated to be efficient by, for example, limiting their breaks in order to make more money.
- If employees are happier, and since early discussions with employees indicate that they are quite interested, this may reduce the risk of unionization. The more productive employees will likely prefer this type of payment.
- This will encourage employees to innovate and think of ways to work better, faster and smarter in order to increase their output.
- As hours will not be tracked, the amount of supervision required might be reduced.

Disadvantages

- Employees may rush their work in order to get paid more, which could reduce quality. This could increase warranty costs and be detrimental to the company's reputation over time. If sales were to drop because of this, the risk of overstocking would increase.
- This is more complex than paying an hourly wage, as Elcar will need to consider variables such as work-in-process units, defective units, and production slow downs caused by poor materials or broken equipment.
- Rates will have to be monitored continuously and possibly reduced if, for example, improved equipment reduces the hours needed to complete each unit.
- Employees will not be interested in doing any work that does not contribute to generating more units, such as clean up, setup or other assigned duties.
- If they rush to complete as many units as possible, employees may be more likely to be injured.
- If they are focused on completing as many units as possible or on matching the productivity of others, employees may be more stressed.
- Employees with lower productivity will be reluctant to adopt piece work compensation, which might generate conflict among employees. Reluctance to change might also be an issue.

Recommendations

While there are many advantages to piece work compensation, there are also quite a few complexities and possible pitfalls. Rather than fully implementing it, we recommend that Elcar first test the piece work system with a few employees. Further investigation into current costs, specifically the hours used per unit, is necessary in order to determine whether piece work compensation would produce a financial benefit.

Pay will have to be tied to quality in some way. Generally, work that is rushed results in lower quality and more defects. Quality targets, such as no more than 0.5% defects for full compensation, should be tied to output. Elcar might need to implement more quality checks in its process.

As Elcar is an innovative company, the product is likely to change regularly; each change will entail a delay in manufacturing while staff learn the new process or work with new materials and parts. Some allowance should be made for these constant changes. However, this is somewhat mitigated for the next four years, as the models have been set, with little change in manufacturing required.

For Assessment Opportunity #10 (Performance Management), the candidate must be ranked in one of the following five categories:

Not addressed – The candidate does not address this assessment opportunity.

Nominal competence – The candidate does not attain the standard of reaching competence.

Reaching competence – The candidate attempts to qualitatively and quantitatively analyze the piece work option and provide a recommendation.

Competent – The candidate qualitatively and quantitatively analyzes the piece work option and provides a supported, consistent recommendation.

Competent with distinction – The candidate qualitatively and quantitatively analyzes the piece work option, provides a supported, consistent recommendation and identifies other considerations or implementation steps.

Assessment Opportunity #11

The candidate analyzes the electric bicycle proposal and recommends whether to pursue it.

The candidate demonstrates DEPTH in the Performance Management role.

We have analyzed the electric bicycle proposal in order to determine whether it is worth pursuing.

Quantitative Analysis

As we have not been provided with sales forecasts, we have compiled a breakeven analysis to assess the venture.

Fixed costs

Product manager	\$	97,525
Marketing manager		84,250
Clerk		39,422
Annual advertising		75,000
Equipment rental		15,210
Manufacturing space		14,000
Fixed overhead		0
		<hr/>
	\$	325,407
		<hr/>

		Off-the-shelf	Internally-designed
Selling price	\$	1,140	\$ 1,140

Variable costs

Frame		464	390
Battery		195	195
Motor and other		87	87
Assembly labour		49	44
		<hr/>	<hr/>
		795	716
		<hr/>	<hr/>
Contribution margin	\$	345	\$ 424
		<hr/>	<hr/>
Annual breakeven units		943	767

The \$50,600 cost of developing the prototypes is a sunk cost and was ignored. The \$29,400 of common fixed costs allocated to this product is not relevant to this decision, since those costs will be incurred whether or not the project is undertaken.

Qualitative Analysis

Advantages

- The letter of intent is proof that there is a market for the electric bikes.
- The market is rapidly growing, implying exponential profit potential.
- With just \$354,807 in fixed costs, financial risk is relatively low.
- This aligns with the mission to sell innovative electric vehicles. Elcar's innovation could create a competitive advantage in a competitive market.
- This might force the company to scale the better battery technology to bicycle size, which could create a new product, with potentially other uses.
- This would build the Elcar brand, which will have synergies with the electric vehicle business.

Disadvantages

- The company does not have bicycle manufacturing or selling expertise, which could be a big drawback.
- The bike being developed is specifically for the Taiwan electrical system and would need to be modified in order to sell it in North America.
- This could be a distraction from the core business of selling vehicles.
- As there are many competitors worldwide in a crowded market, prices would need to be competitive.
- This will use production capacity and space; if Elcar's car production ramps up to meet sales goals, this could be problematic.
- This product has a different distribution network than the vehicles, so Elcar would not be able to take advantage of its current network.

Conclusion

Unless sales were well beyond the breakeven numbers, the total profitability of the bikes is relatively insubstantial and would not significantly contribute to Elcar's bottom line. However, since the investment is relatively low, it could be worthwhile for Elcar to move ahead with this opportunity.

The project aligns with the company mission and will provide a different revenue stream. The market is growing, so there may be potential for a much higher volume of sales.

However, entering a new market with a new product is a risky venture at this point in time. As Elcar is struggling to resolve issues with its main product line, it might be premature to undertake international expansion with a new product at this time.

Elcar should investigate a distribution network in a bigger market, such as North America, and determine the sales potential for the bikes.

If we obtain a sales forecast, the net present value of the project, using NHC's 25% rate of return, could be calculated.

For Assessment Opportunity #11 (Performance Management), the candidate must be ranked in one of the following five categories:

Not addressed – The candidate does not address this assessment opportunity.

Nominal competence – The candidate does not attain the standard of reaching competence.

Reaching competence – The candidate attempts to qualitatively and quantitatively analyze the electric bike proposal and provide a recommendation.

Competent – The candidate qualitatively and quantitatively analyzes the electric bike proposal and provides a supported, consistent recommendation.

Competent with distinction – The candidate qualitatively and quantitatively analyzes the electric bike proposal, provides a supported, consistent recommendation and identifies other considerations.

Assessment Opportunity #12

The candidate discusses parent company oversight of Elcar going forward.

The candidate demonstrates DEPTH in the Performance Management role.

It is evident that NHC must improve its oversight of Elcar. During the time Shelagh was off work, she was not replaced, resulting in two months with virtually no oversight.

Board Structure

Elcar's management team needs to be more accountable; NHC can create structure for this in various ways.

As Robin is the only board member, Elcar ostensibly does not have a Board of Directors. NHC should establish a board for Elcar, made up of several members with diverse expertise. These experienced board members would provide advice on opportunities such as the electric bike market and changing to piece work compensation. They would meet regularly and be responsible for the governance and oversight of Elcar.

The board could have useful subcommittees, such as compensation and environment, or could have members with technical expertise in these fields. At the very least, there needs to be more technical oversight of the company by a scientific or engineering professional; Shelagh has a biology degree whereas Elcar works in the fields of automobile and electrical engineering and chemistry (battery development). This expertise would help determine how well Elcar's R&D department is functioning. To reduce the number of financial reporting issues, there should also be stronger financial oversight, with at least one professional accountant.

If NHC does not want to establish a board, more than one person should provide the oversight, perhaps by creating a small committee that meets regularly, includes NHC representation and addresses issues, such as cash flow, in a timely fashion.

Policies and Processes

There should be policies for decisions where NHC's approval is needed; Elcar should not act on its own in every area.

NHC should be involved in setting CEO bonus targets, and the CEO should be limited in how much he can give in bonuses to his subordinates. Anything more than a pre-determined bonus pool should require parent company approval. The CEO should not be allowed to circumvent clear policies.

The operating line of credit obtained by Elcar was a surprise to NHC. Any substantial financial commitment should be approved by the parent. This would include significant purchase orders and block sales of vehicles.

Although NHC approved the annual budget, it did not approve the subsequent changes made. There should be provisions for quarterly budget updates, or revised forecasts, involving the parent.

Setting targets, such as for sales and development, may be the most critical aspect of monitoring and overseeing Elcar. These targets should be agreed upon, and reported on regularly, including reasons for why they have not been met.

It appears that the current headcount is higher than that planned in the 2016 funding request. The CEO should be required to obtain approval for hiring more people.

For Assessment Opportunity #12 (Performance Management), the candidate must be ranked in one of the following five categories:

Not addressed – The candidate does not address this assessment opportunity.

Nominal competence – The candidate does not attain the standard of reaching competence.

Reaching competence – The candidate attempts to discuss some board and policy improvements for Elcar.

Competent – The candidate discusses some board and policy improvements for Elcar.

Competent with distinction – The candidate discusses many board and policy improvements for Elcar.

Performance Management Assessment Opportunity #13

The candidate suggests ideas for performance measures and incentives.

The candidate demonstrates DEPTH in the Performance Management role.

Denise has asked for comments on the current 360-degree feedback performance management system, and suggestions for improvement.

Some benefits of the 360-degree feedback method are that it includes feedback from multiple sources, increases understanding of organizational development needs and teaches employees how to better work together. However, in order to be useful, the feedback must be based on specific, pre-determined and agreed-upon attributes of the manager's role, not simply on their perceived performance by their peers. Additionally, Elcar's staff have mentioned many of the downsides of the current use of the 360-degree feedback at Elcar.

The first issue is the survey itself. The questions are vague and do not encourage the rater to think about all aspects of the employee's performance. Structured questions are better at ensuring that all relevant aspects are addressed and that every area is commented upon. There should be questions about skills and competencies, and about quality of outputs. For example, questions should include whether the employee exhibits leadership qualities, is a team player or has problem-solving skills.

Clarification of the questions will also help determine who should complete the survey. If it is vague, the employee could give the survey to friends, who don't necessarily know how well the employee does their job. The survey should also provide direction on who to give it to, such as to at least one manager and one direct report.

Since the staff report to their superiors and are accountable to them, more weight should be allocated to the superiors' responses than to that of peers and subordinates. To allow staff time to adapt to changes to the survey, Elcar should consider implementing a timeline.

In addition, it is important to come up with specific performance measures that align with the company mission: "*To develop, market and sell innovative electric vehicles with industry-leading battery technology,*" and to employee roles and what they can control and influence. Having performance measures based solely on ratings by other employees is too subjective.

For example, the R&D team should be measured on the products they invent or improve. Significant milestones, and the successful deployment of the G1 and G2 batteries, could be measures for this group, which aligns with the goal of being innovative and having leading battery technology. The number of patents obtained could also be a valid performance measure for the R&D team.

The sales team should have targets for sales and number of dealers. The original goal of 100 locations should be a target. If it is determined that sales through dealers is a declining trend, targets for internet sales could replace the indicators linked with the number of dealers. The sales team should also have milestone targets for achieving the goal of selling in Europe.

As the design team has already won annual awards, that could be an ongoing target. Their designs also contribute to the objective of innovation.

The manufacturing group could have production and quality targets, both of which are vital for achieving sales targets and being an industry leader.

To give each team financial targets, Elcar could implement a balanced scorecard, which could align with NHC's targeted 25% rate of return. The non-financial targets could encourage continuous improvement in Elcar's processes, which, to remain competitive, are essential.

The 360-degree feedback method is effective but not in isolation. We recommend that Elcar keep the 360-degree feedback but improve the survey itself and train staff on how to provide effective feedback to their peers. This system should then be complimented with a performance measurement system that assesses individuals on measures they can control and that aligns with the company mission.

If a bonus plan linked to performance is established, the measures that employees can control and that would best motivate employees to perform their best should have the greatest weight, both from a short- and long-term perspective.

For Assessment Opportunity #13 (Performance Management), the candidate must be ranked in one of the following five categories:

Not addressed – The candidate does not address this assessment opportunity.

Nominal competence – The candidate does not attain the standard of reaching competence.

Reaching competence – The candidate critiques the current system or recommends department-specific performance measures.

Competent – The candidate critiques the current system and recommends department-specific performance measures.

Competent with distinction – The candidate thoroughly critiques the current system and recommends department-specific performance measures.

**DAY 2 – MARKING GUIDE – TAXATION ROLE
ELCAR INC. (ELCAR)**

In the Taxation role, the candidate is expected to prepare a calculation of the 2019 non-capital loss based on the revised financial statements and to discuss the additional tax issues presented to them. The candidate is also expected to discuss potential options for utilizing the losses incurred by Elcar in a sibling company, FilterH2O (FH). The candidate is further expected to discuss several proposed benefits that might be provided to Elcar's CEO. One of Elcar's staff may be assigned to conduct research in Grenada, and the candidate is expected to provide an analysis of her residency and recommend ways to help her ensure that she becomes non-resident. Next, the candidate is expected to help NHC, Elcar's parent company, decide how to best structure an inbound investment into Elcar – through shares or debt, and through a Canadian or non-resident company. Lastly, the candidate is expected to help the CEO assess whether to pursue some tax planning ideas proposed by some employees to help Elcar benefit from CCPC status and from SR&ED credits.

See Common Marking Guide for the Common Assessment Opportunities #1 to #6.

Assessment Opportunity #7

The candidate discusses corporate tax issues (related to new accounting and other business issues) and calculates the current-year non-capital loss.

The candidate demonstrates DEPTH in the Taxation role.

New Tax Issues

Since it relates to the purchase of items used in operations, the foreign exchange loss is on account of income. Therefore, the amount is fully deductible in the current year and no adjustment is required when reconciling net income for income tax purposes or taxable income.

Reserves are only deductible if specifically allowed by the *Income Tax Act*. The onerous contract liability (K3Press) and battery construction facility dismantling accounting accruals will both be added back to determine net income for tax purposes as the costs will only be deductible for tax purposes when incurred.

Rather than be deferred, as it is for accounting purposes, any deferred revenue for replacement batteries must be brought into income when the income is received. However, a 20(1)(m) reserve may be available for this income.

Since donations are only deductible when made to Canadian charities, the donation to the United Kingdom charity is not tax deductible. There are limited circumstances in which donations to international charities can be deducted and there is no evidence that this charity qualifies. Since there is no income, even if made to a Canadian charity, this donation would be restricted by the “75% of net income for income tax purposes” limitation.

As it is not a financing requirement and therefore not tax deductible, the company must add back the cost of the key person life insurance. Any eventual net proceeds will not be taxable.

Under para. 20(1)(cc) of the *Income Tax Act*, the costs of obtaining patents is fully deductible in the year incurred, so no adjustment is required.

Calculation of the Estimated Net Loss for Tax Purposes

Year-end accounting loss for the year ending May 31, 2019	\$ (2,708,777)
<i>Financial statement adjustments:</i>	
Foreign exchange loss	(15,187)
Onerous contract	(157,220)
Unwinding of the discount on decommissioning liability (accretion)	(5,736)
Additional amortization on decommissioning costs	(3,477)
<i>Add:</i>	
Amortization and depreciation	164,825
Additional amortization on decommissioning costs	3,477
Onerous contract	157,220
Unwinding of the discount on decommissioning liability (accretion)	5,736
Donation to UK charity	8,000
Cost of key person life insurance	12,543
Cara Partnership income for December 31, 2018 year end	25,000
Cara Partnership adjusted stub period accrual (ASPA)	10,342
<i>Deduct:</i>	
Capital cost allowance	(157,000)
Barkser LP loss up to at-risk amount	(30,000)
	<hr/>
Net loss for income tax purposes	<u><u>\$ (2,690,254)</u></u>

Since, as noted, the charitable donations are not allowed, there are no adjustments between net loss for income tax purposes and the current-year non-capital loss.

For Assessment Opportunity #7 (Taxation), the candidate must be ranked in one of the following five categories:

Not addressed – The candidate does not address this assessment opportunity.

Nominal competence – The candidate does not attain the standard of reaching competence.

Reaching competence – The candidate attempts to calculate taxable income or identifies some of the relevant adjustments.

Competent – The candidate calculates taxable income with some supported adjustments.

Competent with distinction – The candidate calculates taxable income with several supported adjustments.

Assessment Opportunity #8

The candidate discusses the Jitcoin and partnership unit investments.

The candidate demonstrates DEPTH in the Taxation role.

Taxation of Jitcoin

Sales of cars for Jitcoin

The company might start selling cars for Jitcoin. As Jitcoin is not considered cash for income tax purposes, such sales are considered a barter transaction. Canada Revenue Agency (CRA) describes the treatment of barter transactions in IT-490, Barter Transactions:

The cost of the ... property received ... is the same amount as the total value of the ... property ... given up, plus any cash given as part of the barter, and minus any cash received as part of the barter.

As the value of the property given up would be the normal sales price of the vehicle, Jitcoin is valued at that amount and the sale of cars would be treated as business income.

Treatment of Jitcoin assets

Since Jitcoin is to be considered a commodity and not cash, we need to decide whether Jitcoin is income or capital property for Elcar. If it is capital property, gains or losses realized when the Jitcoin is turned into cash will be capital gains or losses. If it is not capital, gains or losses will be income.

Elcar has no historic fact pattern from prior Jitcoin transactions, and its core business is not speculating in Jitcoin. As Jitcoin is peripheral to the business, we believe capital treatment would be appropriate.

Alternatively, if Elcar starts regularly accepting Jitcoin as car payments, it could be argued that any resultant gains or losses are on account of income, as these would be incidental to the business of selling cars. This is in contrast to the Jitcoin held to date.

Currently, there is an unrealized capital gain. Any difference between the accounting treatment and the tax treatment for Jitcoin will need to be reversed on the tax return. Unrealized gains or losses are not recognized for income tax purposes; if anything is recorded to accrue for unrealized gains or losses, there will be a T2 Schedule 1 adjustment to reverse these. Gains or losses will be brought into income when realized.

Cara Partnership (CP)

For partnerships in which they own greater than 10%, corporate partners with non-coterminous year ends must add a prorated portion of the partnership's income to the corporate income for the year, preventing the deferral of taxation.

This is achieved by calculating the corporation's "adjusted stub period accrual (ASPA)," being the income added by the corporate partner for the partnership's year end that terminated during the corporate partner's year end, and multiplying by the following fraction:

$$\frac{\text{Number of days that are in both the corporation's tax year and the fiscal period of the partnership that starts in the corporation's tax year and ends after the tax year (the stub period)}}{\text{Number of days in the fiscal period of the partnership that ends in the corporation's tax year}}$$

In Elcar's case, this is calculated as follows:

$$\begin{aligned} \text{Income at December 31, 2018} &\times \frac{\text{days from January 1, 2019 to May 31, 2019}}{\text{days in calendar 2018}} \\ &= \$25,000 \times \frac{151}{365} \end{aligned}$$

Therefore, an addition of \$10,342 is required in the May 31, 2019, year end.

A corporate partner may make a discretionary designation to reduce its ASPA to reflect the actual partnership income for the stub period, but we do not have sufficient information to do so in this instance.

In the next taxation year, Elcar will receive a deduction for the same amount as was included in this fiscal year, thus preventing double taxation of income.

Elcar's adjusted cost base (ACB) in CP is adjusted for the income attributed to it in the year; its new ACB will be \$35,000 (\$10,000 + \$25,000).

Barkser Limited Partnership (BLP)

Under the "at-risk amount" rules of the *Income Tax Act*, Elcar can only deduct the amount for which it was at risk for this investment, namely the \$30,000 originally invested, adjusted for the income allocated to it over time. Any additional losses will be allowed only when the at-risk amount increases.

Similar to the case for CP, Elcar's ACB in BLP is adjusted for the loss attributed to it in the year; its new ACB will be \$nil (\$30,000 - \$30,000).

For Assessment Opportunity #8 (Taxation), the candidate must be ranked in one of the following five categories:

Not addressed – The candidate does not address this assessment opportunity.

Nominal competence – The candidate does not attain the standard of reaching competence.

Reaching competence – The candidate attempts to discuss either the Jitcoin or the partnership units.

Competent – The candidate discusses either the Jitcoin or the partnership units.

Competent with distinction – The candidate discusses the Jitcoin and the partnership units.

Assessment Opportunity #9

The candidate discusses loss planning in the corporate group.

The candidate demonstrates DEPTH in the Taxation role.

Loss Utilization

The issue is whether Elcar's historic, current and future losses can be used by its profitable sibling company, FilterH2O (FH).

Since any transactions would be occurring within a related group, there is no risk of an acquisition of control, which would limit loss usage.

Amalgamation or wind-up

If the two companies were amalgamated into one corporation, Elcar's ongoing losses would offset FH's ongoing income. After the amalgamation, Elcar's prior year losses could be carried forward against FH's income. If FH's future taxable income is similar to last year's and FH has the same tax rate as Elcar, the tax savings would be approximately \$370,690 ($\$1,323,893 \times 28\%$) each year. This savings should exceed the legal costs of amalgamation. NHC Canada's ACB in the shares of the new amalgamated entity would be the sum of its ACB in the two predecessor corporations.

Amalgamation would result in a single corporation with one charter, which may make it more difficult to sell either business in the future. From a tax perspective, the rollover provisions of section 87 apply, so no tax liabilities are triggered and there are no deemed disposals. All tax balances continue, summed together. The predecessor corporations are deemed to have had a taxation year end immediately before the amalgamation. Based on timing, there are various potential tax implications of a short year end, such as reduced life on non-capital losses and pro-rated capital cost allowance (CCA).

Similar results could be achieved by rolling the shares of FH into Elcar (using section 85 to defer any taxes) or vice versa, and then winding up the subsidiary.

If amalgamation or wind-up is not desirable for business reasons, other options are available.

Charging management fees

There is some opportunity to pay management fees amongst related Canadian corporations in order to utilize losses. Losses could be shared by Elcar taking on certain central functions of FH, such as, for example, some of the investigations team who work for NHC Canada. Elcar could employ the team and FH could pay Elcar a management fee to cover the services provided, along with a reasonable markup.

Transfer profitable assets into loss corporations

Rather than amalgamate Elcar with FH, FH could transfer the assets of a division, or of its entire business, into Elcar. Using section 85 would defer any tax on the transfer. The future profits from those assets would then be earned by Elcar, and Elcar could use both its current and prior year losses to reduce or eliminate the taxable income.

Alternatively, FH could transfer some of its real estate (for example, if it owns its office building) to Elcar using section 85. Elcar could then charge fair value rent to FH, which would provide a deduction for FH and an income inclusion for Elcar.

Intercompany loan

If Elcar were able to obtain spare cash, it could loan money to FH for use in its operations. FH would pay Elcar a reasonable interest rate. The interest would be deductible to FH and taxable to Elcar, and Elcar could apply its losses against the income. Elcar could obtain spare cash by selling its Jitcoin or from further capital investments by NHC, to be discussed later.

Involvement of NHC Canada

It should be noted that several of these planning opportunities could also be done in ways that involve NHC Canada. While I do not have enough information to know NHC Canada's structure or tax attributes, consideration should be given to whether it can or should be involved in any such transactions. For example, both Elcar and FH could be wound up into, or amalgamated with, NHC Canada. NHC Canada would then operate both businesses as divisions. This would not only allow for Elcar's historic and future losses to be used against FH's future income but also for any losses incurred by NHC Canada, or by FH in future, to be applied against Elcar's future income.

For Assessment Opportunity #9 (Taxation), the candidate must be ranked in one of the following five categories:

Not addressed – The candidate does not address this assessment opportunity.

Nominal competence – The candidate does not attain the standard of reaching competence.

Reaching competence – The candidate identifies one planning opportunity for using the losses within the corporate group.

Competent – The candidate discusses one planning opportunity for using the losses within the corporate group.

Competent with distinction – The candidate discusses more than one planning opportunity for using the losses within the corporate group.

Assessment Opportunity #10

The candidate discusses the CEO compensation issues raised by Elcar.

The candidate demonstrates DEPTH in the Taxation role.

CEO Bonus

We have been informed that the CEO, Robin, can take \$100,000 in additional remuneration for fiscal 2019, in any of the following forms:

- a) A cash bonus
- b) An \$8,333 per month car allowance
- c) The use of a \$38,000 Vassy
- d) An RRSP contribution
- e) A payment directed to his spouse

Implications to Elcar

As employee compensation, options a, b, and d are regular business expenses and tax deductible to Elcar. There is some argument that the car allowance is not reasonable and would therefore be denied by section 67. However, Elcar could make the argument that the amount is intended as an employee benefit and that the amount of the benefit is a reasonable amount of compensation for its CEO.

As a CCA Class 10.1 asset, the car will be tax deductible over time as CCA, but only to a maximum of \$30,000. Class 10.1 provides for CCA deductions at 30% per annum on a declining-balance basis. The cost above \$30,000, on which CCA can never be claimed, is a wasted tax deduction.

Given the company's current margin, the cost of the Vassy may be under \$30,000 [$\$38,000 \times (1 - .40) = \$22,800$], and could be included in a Class 10 pool, which also provides for CCA at 30% per annum on a declining-balance basis.

Note: For electric cars purchased on or after March 19, 2019, the 2019 Federal Budget announced a new Class 54, which has a 100% CCA rate in the first year, with a limit of \$55,000 rather than \$30,000. Under these new rules, both the cost and fair value of the Vassy will be under the threshold, and therefore a full deduction will be available to Elcar in the year of acquisition.

If it is not considered a reasonable expense or not incurred for the purposes of earning income, the payment to the spouse would not be deductible to the company.

Implications to Robin

The cash bonus would be included as regular employment income and taxes would be withheld at source.

Since it is a flat amount and not based on actual kilometres driven for employment purposes, the car allowance is treated as cash compensation. However, if Robin drives for employment purposes, the company can sign Form T2200, indicating that he has received a taxable automobile benefit and that he was required to drive for employment purposes. This would allow Robin to deduct the actual driving costs incurred for employment purposes from his employment income.

The use of the vehicle will be a taxable benefit, which will be calculated based on a standby charge and operating expense benefit. These are calculated based on the cost of the car to Elcar, the number of kilometres driven for employment versus personal use and the period that the car was available to Robin. This would impact Robin's cash flow, as income taxes will be withheld on Robin's paycheque, even though no cash has been paid.

The RRSP contributions are both taxable to Robin and deductible by Robin, so it is neutral for tax purposes. No source deductions are required. It is critical, however, that Robin has the RRSP room available to make the contribution.

As it is considered an indirect payment to Robin under subsection 56(2), remuneration paid to the spouse is taxable to Robin. Robin's spouse did not perform the services and would only receive the benefit because Robin worked for Elcar. If Robin's spouse is a bona fide employee of the corporation carrying out bona fide work, that portion would be taxable to the spouse.

Recommendation

We recommend that the bonus be paid in the following order of priority:

1. RRSP contribution, since this will be deductible to Elcar and, effectively, not taxable to Robin. This should be paid up to his limit for the year
2. Car allowance, since this will be deductible to Elcar, and Robin will be able to claim deductions for the employment-use portion of the vehicle against the taxable allowance
3. Cash bonus

We do not recommend making payments to Robin's spouse as this would ultimately be taxable to Robin and would add needless complexity to the payroll process. In addition, if deemed an unreasonable wage, these payments may not be deductible to Elcar.

For Assessment Opportunity #10 (Taxation), the candidate must be ranked in one of the following five categories:

Not addressed – The candidate does not address this assessment opportunity.

Nominal competence – The candidate does not attain the standard of reaching competence.

Reaching competence – The candidate analyzes some of the proposed benefits.

Competent – The candidate analyzes some of the proposed benefits and provides a recommendation.

Competent with distinction – The candidate analyzes most of the proposed benefits and provides a recommendation.

Assessment Opportunity #11

The candidate discusses the employee residence issue.

The candidate demonstrates DEPTH in the Taxation role.

Income Tax Residence of Amber Lantic

As income tax rates are lower in Grenada, Amber should consider ways to qualify as a non-resident of Canada during her overseas transfer. If she were not taxable in Canada, she would only pay the lower personal income taxes in Grenada.

If she can ensure that she does not maintain residential ties with Canada, she may become a non-resident.

While guidance has been developed over time by the courts, the CRA summarizes residential ties in Income Tax Folio S5-F1-C1, Determining an Individual's Residence Status. In determining residence, we must consider significant residential ties and secondary residential ties.

Significant residential ties

Significant residential ties include a person's dwelling place, their spouse and their dependants.

Amber has no dwelling in Canada, other than the vacant land, on which she cannot live without first constructing a home. This provides some evidence of an intention to return but she clearly does not currently have a dwelling available to her in Canada. She does currently rent her home but presumably will terminate her lease when she moves to Grenada.

Amber has no spouse or dependants. While these last two ties do not help tie Amber to Grenada, they also do not tie her to Canada, which helps make her case that she will become non-resident.

Therefore, Amber has very little in the way of significant residential ties.

Secondary residential ties

Secondary residential ties include:

- personal property in Canada (such as furniture, clothing, automobiles and recreational vehicles) – Amber does have a Vassy, and it is not clear whether she will keep it in Canada, bring it with her or sell it.
- economic ties with Canada (such as employment with a Canadian employer and Canadian bank accounts) – Amber will continue to be employed by Elcar, and currently has a Canadian bank account and RRSP, so these may be considered secondary ties to Canada.
- hospitalization and medical insurance coverage from a province or territory of Canada – Amber will lose her provincial health plan coverage, so this is an argument that she will become non-resident.
- a driver's license from a province or territory of Canada – Amber will have this tie, as she intends to keep her Canadian driver's licence.
- a vehicle registered in a province or territory of Canada – again, Amber owns a Vassy. If she leaves it in Canada, it will likely need to remain registered in a Canadian province or territory, so this would be a secondary tie for Amber.
- a Canadian passport – Amber will retain her Canadian citizenship and there is no reason to believe she would give up her passport, so she likely retains this residential tie.

Intention

In addition to significant and secondary ties, the CRA will consider the taxpayer's intention to permanently sever residential ties. In Amber's case, she is planning an absence of a few years with no firm return date. However, she does intend for the absence to be for a few years only, which could be evidence that her absence is only temporary.

Conclusion and suggestions

In conclusion, given that she has no significant residential ties and only a few secondary residential ties, it is likely that Amber will be able to claim non-resident status when she moves.

To help Amber strengthen her claim to non-resident status, perhaps a foreign entity in the NHC group could employ her, funded by Elcar, or her employment could be transferred to another NHC subsidiary in Grenada.

In addition, she could improve her chance of qualifying by:

- Terminating her Canadian mailing address
- Visiting Canada for short periods of time only
- Terminating the lease on her rental home
- Terminating her cell phone service
- Selling her Vassy
- Reducing social ties
- Closing all but one of her Canadian bank accounts and keeping only her RRSP
- Establishing social ties in Grenada

Taking as many of the above steps as possible could help Amber defend a non-resident status. Without doing so, and given the temporary nature of her absence, it is possible she will remain a Canadian resident.

If Amber becomes a non-resident, as per section 128.1 of the *Income Tax Act*, she will be deemed to have disposed of all assets. Amber owns taxable Canadian property (the land), her RRSP, and bank accounts, all of which are exempt from the deemed disposition.

If she leaves before the end of the year, Amber will be considered a part-year resident for 2019 and will pay Canadian tax on her worldwide income only until her departure. The same treatment will happen in reverse in the year of her return. While she remains non-resident, she will only be subject to Canadian tax on Canadian-source income.

For Assessment Opportunity #11 (Taxation), the candidate must be ranked in one of the following five categories:

Not addressed – The candidate does not address this assessment opportunity.

Nominal competence – The candidate does not attain the standard of reaching competence.

Reaching competence – The candidate attempts to analyze Amber's residence status.

Competent – The candidate discusses Amber's residence status.

Competent with distinction – The candidate discusses Amber's residence status and suggests changes to help ensure that she is a non-resident.

Assessment Opportunity #12

The candidate discusses the tax implications of possible financing structures (of NHC funds).

The candidate demonstrates DEPTH in the Taxation role.

NHC is considering advancing money to Elcar to fund operations and R&D. The money could be advanced as:

- A non-interest-bearing loan
- An interest-bearing loan
- A purchase of common shares
- A purchase of preferred or special shares
- Some combination of the above

Broader Issues

NHC will have to consider the U.S. federal and state tax implications of these options, including the implications should the company fail. U.S. taxes are outside the scope of this memo.

In order to comply with the transfer pricing rules, transactions will need to occur at fair market value.

If Elcar is never successful, the biggest concern will be loss utilization. If the company is successful, it will either generate taxable income or be sold.

Whether successful or not, NHC will want to minimize the tax implications of a sale of the company.

Under para. 20(1)(e), costs incurred by Elcar with respect to refinancing debt or equity would be deductible on a straight-line basis over five years.

Non-interest-bearing Loan

A non-interest-bearing loan from NHC may create transfer pricing concerns from a U.S. perspective. Since no income is being generated from the cash advanced, the parent company is not getting any return.

Additionally, this approach does not provide a tax deduction in Canada against future profits.

If, instead, the loan was made by NHC Canada, no transfer pricing concerns would arise but there would still be no opportunity to move future income out of Elcar.

If Elcar's shares are sold, the cost basis to NHC Canada of its shares would be lower than if it invested with additional shares. If the buyer agrees, however, to pay back the loan, the return of capital to NHC or NHC Canada would be tax-free.

If Elcar loses money and cannot repay a loan to NHC, NHC could forgive the loan, perhaps with U.S. tax advantages; consultation with a U.S. advisor is recommended. If the debt is advanced by NHC Canada, NHC Canada would have a capital loss on the investment made.

Any debt forgiveness would first reduce Elcar's loss carryforward balances. Any remaining forgiven amount would then optionally be applied against undepreciated capital cost (UCC) and other tax pools, and any further amounts could become taxable to Elcar.

Interest-bearing Loan

An interest-bearing loan from NHC will likely be more acceptable to the U.S. tax authorities and, should the company be profitable, will result in useful tax deductions in Elcar. The rate of interest should not exceed market. Given the riskiness of this loan, however, a higher interest rate could be justified, based on Elcar's start-up status.

As non-arm's length interest, Part XIII withholding tax of 25% on interest payments would apply but be eliminated by the Canada-U.S. Tax Treaty. The interest will be deductible to Elcar.

There would be no withholding tax on a loan advanced by NHC Canada but the interest would still be deductible by Elcar and taxable to NHC Canada.

Consequences in the event of a sale of the business, or of Elcar's inability to repay the loan, are the same as in the "non-interest-bearing loan" scenario.

If this structure is used, consideration would have to be given to the thin capitalization rules, but a detailed analysis is beyond the scope of this report.

Shares

Since Elcar is a wholly-owned subsidiary of NHC Canada, the tax implications of an investment in common shares or in preferred shares by NHC Canada would be the same. In either instance, a valuation of the company would be required. In order to minimize the issuance costs, the preferred shares could be given a fixed value. We can also set fixed dividend rates in preferred shares but Elcar might then be unable to choose the timing of its dividend payments.

If NHC makes the investment directly, profits could be paid out through dividends, but these would not be tax-deductible to Elcar. Since NHC is a non-resident of Canada, Part XIII tax of 25% of the dividend paid would normally be applicable. Since NHC owns more than 10% of Elcar's shares, the Part XIII tax would be reduced by the Canada-U.S. Tax Treaty to 5%. Consultation with a U.S. advisor is recommended to determine if U.S. tax would also apply.

If NHC Canada made the investment, dividends would still not be deductible to Elcar but, as intercorporate dividends made within Canada, they would not be taxable to NHC Canada.

In both cases, tax-free returns to the investor could be made through a partial share redemption, which would reduce the paid-up capital of the shares. Existing paid-up capital is likely somewhere near the \$15 million shown as share capital on the balance sheet.

If the company is sold, there would be a higher cost basis for the shares sold, which would reduce the taxes incurred by NHC or NHC Canada. If NHC were making the investment, further analysis should be performed, and a U.S. tax advisor consulted, to confirm which country would tax this transaction.

As there are advantages to both, and flexibility would be useful, we recommend a split between an interest-bearing loan and preferred shares.

Other Options for Transferring Income to the U.S.

U.S. corporate tax rates are expected to be lower than Canadian rates. After Elcar becomes profitable, there are several options for transferring corporate income to the U.S. parent company.

Elcar could sell the intellectual property related to the advanced battery technology to NHC, with an agreement to have the exclusive right to use the technology for the next twenty years. Elcar would pay a higher, but reasonable, royalty per vehicle to NHC. NHC will pay less tax on this income stream and Elcar would receive the benefit of a deduction, thus reducing its taxable income.

Canadian tax laws require that both the sale of the intellectual property and the amount of the royalty are transacted at an arm's length price. A tax price adjustment clause should be put in place to ensure that there is no double taxation between the entities in the case of a reassessment by CRA.

There is also the potential for Part XIII tax on the royalty to NHC which, based on the Canada-U.S. Tax Treaty, will be limited to 10%.

Similar to the suggestion made above regarding loss utilization, it would be possible to pay management fees from Elcar to NHC. These would again need to be at fair market value, reflecting the value of services provided by NHC's head office staff, but would allow Elcar a deduction and NHC would be taxed on this income at its lower tax rate.

For Assessment Opportunity #12 (Taxation), the candidate must be ranked in one of the following five categories:

Not addressed – The candidate does not address this assessment opportunity.

Nominal competence – The candidate does not attain the standard of reaching competence.

Reaching competence – The candidate identifies some methods of parent company financing and/or repatriation of income to NHC.

Competent – The candidate discusses some methods of parent company financing and/or repatriation of income to NHC.

Competent with distinction – The candidate discusses several methods of parent company financing and repatriation of income to NHC.

Assessment Opportunity #13

The candidate discusses Robin's tax planning strategies.

The candidate demonstrates DEPTH in the Taxation role.

CCPC Conversion

The proposed approach to claiming Canadian-controlled private corporation (CCPC) status must be examined.

The proposed agreement, forcing the sale back of Elcar to NHC Canada, would mean that de facto control has not transferred. Also, all options and rights are deemed exercised for the purpose of determining control for association. So, even if de facto control were transferred, the association rules would likely combine with the taxable capital grind to reduce or eliminate the small business deduction for Elcar, as well as for any other associated companies. Therefore, this strategy would not work.

Even if this proposal were to work, in order to claim the small business deduction, the company must be a CCPC throughout the entire fiscal period, and would have a deemed year end each time control was acquired (i.e., the day before the year end and again the day after), so this scheme would only work for one day per year, eliminating any potential benefit.

We advise strongly against this planning measure.

SR&ED

Qualification for scientific research and experimental development (SR&ED) does not depend on the name of a department or the clothing that staff wear. Qualification depends entirely on the nature of the activities performed.

To qualify for SR&ED, three criteria must be satisfied before the work may be eligible:

1. There was scientific or technological uncertainty. As Elcar is not certain that the techniques for battery improvement will work, this criterion is likely met.
2. Scientific or technical content was developed. This requires that a scientific process, including hypothesis development and testing, be followed. The testing performed by contractors, with Elcar personnel assisting, seems to meet this requirement.
3. There was a scientific or technological advancement. A longer-life battery is most definitely an advancement.

While further investigation would be required to conclude on this definitively, we believe that the following costs may qualify as SR&ED expenditures:

- a) Verifying the quality of third-party testing on battery prototypes
- b) Assisting with experiments on batteries' output and amperage

Finally, since Elcar is foreign-controlled and not a CCPC, there are no refundable SR&ED tax credits. Therefore, SR&ED credits accumulated are non-refundable and are creditable against future income taxes payable. These credits will carry forward for 20 years to reduce future taxes payable.

To file a claim, the company will complete Form T661, which calculates the amount of eligible expenditures. The filing will require a description of the scientific or technological uncertainties that were overcome, the work performed and the results. The company has 18 months after the taxation year in which the expenditures were incurred to file its claim.

Eligible SR&ED expenditures include:

- Salaries of employees directly involved in SR&ED activities
- Materials, excluding capital expenditures
- 80% of contract payments
- Overhead, which may be based on direct costing or may use the proxy method (55% of direct labour engaged in SR&ED activities)

If a claim was made based on the head of Quality Control's suggestions, and none of the activities qualified for SR&ED, this could be unethical. If tax credits were used and later disallowed, there could be interest and penalties on the Notices of Reassessment.

For Assessment Opportunity #13 (Taxation), the candidate must be ranked in one of the following five categories:

Not addressed – The candidate does not address this assessment opportunity.

Nominal competence – The candidate does not attain the standard of reaching competence.

Reaching competence – The candidate attempts to discuss either of the proposed tax planning opportunities.

Competent – The candidate discusses the CCPC status and the SR&ED claim in some depth.

Competent with distinction – The candidate discusses both the CCPC status and SR&ED claim in depth.

APPENDIX D

**SEPTEMBER 13, 2019 – DAY 3 SIMULATIONS,
SOLUTIONS AND MARKING GUIDES**

**COMMON FINAL EXAMINATION
SEPTEMBER 13, 2019 – Day 3**

Case #1**(Suggested time: 90 minutes)**

StillGood Food (SGF) is a newly-formed, not-for-profit organization with a mission of reducing food waste. Despite food safety standards indicating they can still be safely consumed, many companies discard food with minor blemishes and items approaching “best before” dates. SGF will collect this discarded food and sell it at reduced prices. SGF operations will begin on February 1, 2019, with the opening of one store (Appendix I). To support their own environmental sustainability goals, several grocery stores have agreed to donate discarded food.

It is January 3, 2019, and you, CPA, have been engaged by Jakob Janssen, SGF’s founder and executive director, as an advisor. To allow for contingencies, Jakob is targeting an excess of \$10,000 of revenues over expenses for the first year. Jakob has identified two sales pricing options SGF could follow. He asks you to analyse them and recommend one (Appendix II).

Jakob received an unsolicited proposal from RSS, a high-end clothing retailer. SGF would buy excess clothing from RSS at reduced prices and sell it in its store (Appendix III). He asks you to determine the amount of outside financing required to cover the monthly cash requirement of the first six months of the RSS initiative. He would also like you to discuss the strategic fit and other decision factors that should be considered.

Because the store lacks an office area, Jakob will do administrative work from his home office. He asks you to explain the taxation rules and to advise on the deductibility of the expenses on his personal tax return (Appendix IV).

Six individuals want to contribute to SGF immediately to fund the opening of more stores and further minimize food waste. Jakob is not prepared to open more stores until the first one is operating successfully. Since the contributors specified that the funds, and income earned on the funds, will be used solely to open new stores, the money will be invested until then, likely for 24 to 36 months. Jakob asks which investment option would be best suited for the funds (Appendix V).

Eldred Bank loaned SGF the start-up funds for the food operations. Eldred requires SGF to provide audited financial statements for its first year of operations, with an unmodified audit opinion. SGF has chosen to apply accounting standards for not-for-profit organizations (ASNPO) and Jakob would like you to explain the accounting treatment for the different contributions received by SGF. Because SGF will lease its refrigerators, Jakob would also like you to explain the accounting treatment for the lease.

Jakob would like you to advise him of any issues with the proposed processes that could jeopardize an unmodified audit opinion, and to suggest improvements. He asks you to discuss how each stakeholder might react if an unmodified opinion is still not possible.

APPENDIX I SGF OPERATIONS

Most grocery stores will donate whatever food they can, when they can. Several of the donors have stated that they would not do the same for a for-profit business.

Volunteers will perform most of the activities. They will pick up the food and deliver it to SGF's store, where other volunteers will sort it immediately. SGF is not intending to maintain records detailing the nature and quantity of food being collected.

Any food not suitable for sale will go into a compost bin, which will be picked up weekly. Minimizing landfill is important to Jakob, who has told stakeholders that SGF will be environmentally sustainable.

SGF will operate its store with basic displays. Items will clearly note the "best before" dates and recommend early consumption. Sales will be cash only, with hand-written receipts provided upon request. At the end of each day, Jakob will deposit the cash collected in the bank.

APPENDIX I (continued)
SGF OPERATIONS

Projected Statement of Operations for the First 12 Months

	Note	
Sales		\$ 509,500
Expenses		
Rent	1	126,000
Salaries	2	151,000
Trucks	3	35,000
Interest	4	10,000
Depreciation		62,500
Utilities, advertising and other		67,000
Compostable waste removal		8,000
Refrigerators lease	5	40,000
		499,500
 Excess of revenues over expenses		 \$ 10,000

Notes:

1. The landlord has agreed to charge \$10,500 per month because SGF's mission is to reduce food waste. If at any time the landlord believes that mission has changed, rent will increase to the market rate of \$15,000 per month.
2. SGF will have four full-time employees who will each be paid \$37,500 per year to operate the store. Jakob will take a token salary of \$1,000 per year as an employee to manage the store.
3. The \$35,000 is for insurance, repairs, gas, oil and other truck-related expenses for the trucks that SGF plans to purchase.
4. SGF will borrow \$125,000 from Eldred Bank at 8% interest to buy two used trucks and used fixtures.
5. SGF will lease its refrigerators, which have a market value of \$170,000, a useful life of six years and unguaranteed residual value of \$50,000 at the end of their useful lives. They will be leased for four years with annual payments of \$40,000, payable at the beginning of each year. There is no purchase option in the lease contract. The lease payments include maintenance, which would cost \$5,000 annually if purchased separately.

APPENDIX II SALES PRICING OPTIONS

Knowing that the sales price affects the volume of sales, Jakob has identified two pricing options.

Option 1: Lower

On average, goods would be sold for 50% of wholesale prices. The forecasted sales figure of \$509,500 is based on this “lower” price assumption.

Option 2: Higher

On average, goods would be sold for 75% of wholesale prices. Jakob expects the following variances from the “lower” price option:

- Sales volume would decrease by 25%.
- Utilities would decrease by \$1,000 per month due to reduced use of the refrigerators.
- Because of higher selling prices, SGF would allow returns of non-perishables, which would cost \$25,000 per year.
- Advertising would be increased by \$24,000 per year.
- Due to increased wastage, compostable waste removal costs would double.

APPENDIX III RSS PROPOSAL

RSS is offering to sell its unsold high-end clothing to SGF at the end of each season for 15% of retail prices, which RSS estimates would cost SGF a total of \$120,000 annually. All sales would be final, with payment due 15 days from delivery. RSS estimates that SGF can resell the clothing for 30% of retail prices, that purchases would be made once every quarter, and that sales would be spread over the three months after delivery, with an estimated 5% never being sold.

Protecting these items from theft will require either hiring a security guard for \$2,500 per month or installing a security tag system that would cost \$20,000 upfront and would last for three years. Otherwise, shoplifting losses would average 25% of the selling price of the clothes in the store. The clothing would also require special racks that would cost \$1,600 upfront and would last for two years, and SGF's insurance would increase by \$200 per month.

**APPENDIX IV
HOME OFFICE EXPENSES**

1. Jakob will work 40 hours per week for SGF, of which about 25 hours will be from home. The rest of the time, he will be meeting with suppliers and donors at their premises or at the store. He will also continue to use his office for personal matters.
2. The office square footage comprises 10% of Jakob's home.
3. Jakob's annual home costs are as follows:

Electricity	\$ 1,800
Property taxes	\$ 4,000
Home insurance	\$ 800
Mortgage interest	\$ 2,000

4. If his home is used for business purposes, Jakob's insurance company will charge an additional \$500 per year.
5. Jakob's home phone costs \$60 per month and his internet costs \$45 per month. He will use the home phone 50% of the time for SGF, for local calls only, and the internet 20% of the time.
6. Jakob paid \$500,000 for his house. He estimates \$300,000 was for the building and \$200,000 for the land. He would like to claim capital cost allowance for the home office component.
7. Jakob will be spending about \$10,000 on minor electrical work and painting for his home in the upcoming year, and estimates that \$900 of that will be spent on the home office.

APPENDIX V
INVESTMENT OPTIONS

1. A three-year term deposit with the bank that would provide a variable rate of return of prime minus 1.5% annually. Funds cannot be withdrawn before maturity.
2. An “investors’ account” at the bank that would return 1% annually. Funds can be added or withdrawn at any time.
3. An equity mutual fund that has returned 10% per year for the last two years.
4. A municipal bond denominated in U.S. dollars, maturing in two years, with a 6% overall return.

MARKING GUIDE 3-1
STILLGOOD FOOD (SGF)
ASSESSMENT OPPORTUNITIES

To: Jakob Janssen

From: CPA

Subject: StillGood Food (SGF)

Please find enclosed the advice on the various matters, as requested.

Assessment Opportunity #1 (Depth and Breadth Opportunity)

The candidate analyzes the two sales pricing options.

The candidate demonstrates competence in Management Accounting.

CPA Map Competencies:

3.2.2 Prepares, analyzes, or evaluates operational plans, budgets, and forecasts (Core – Level A)

3.5.1 Performs sensitivity analysis (Core – Level A)

3.5.2 Evaluates sustainable profit maximization and capacity management performance (Core – Level A)

You asked for an analysis of the two sales pricing options. The projected statement of operations uses the lower pricing option and produces an excess of revenues over expenses of \$10,000. The following incremental analysis calculates the impact that the higher pricing option would have on the excess of revenues over expenses.

Excess of revenues over expenses under lower price option		\$10,000
Increase in sales		
Sales at lower price	\$509,500	
Gross up to wholesale price	÷ .50	
	<u>1,019,000</u>	
Price factor	× 75%	
Volume factor (1-.25)	× .75	
Sales at higher price	<u>\$573,188</u>	
Sales at lower price	<u>(509,500)</u>	
Incremental sales		63,688
Decrease in utilities		12,000
Increase in advertising		(24,000)
Cost of returns of non-perishables		(25,000)
Bin removal costs		<u>(8,000)</u>
Excess of revenues over expenses under higher price option		<u><u>\$28,688</u></u>

The higher price option provides a greater excess of revenues over expenses. This could help you open more stores or pay back the loan for the trucks and fixtures faster than with the lower sales pricing option.

However, your primary objective is to minimize food waste, which therefore means to maximize the amount of food sold.

The higher price option reduces volume by 25%, which is inconsistent with that objective. With the higher price option, SGF would allow returns of non-perishables. As this could potentially increase waste, this also fails to maximize the amount of food sold.

In addition, with greater excess revenue, the landlord might perceive a change to the organization's mission to reduce food waste, which would increase the cost of rent by \$4,500 per month, or \$54,000 annually. This exceeds the increase in revenue over expenses estimated at \$28,688 and would put SGF in a loss position ($\$28,688 - \$54,000 = -\$25,312$).

With the higher price option and increase in excess revenue over expenses, SGF could be perceived as a for-profit organization. Given that several of the donors have stated that they would not donate food to a for-profit business, some grocery stores might stop making food donations. The additional profit might jeopardize SGF's not-for-profit organization status.

The lower price option achieves the target of \$10,000 in excess of revenues over expenses for the first year and maximizes the amount of food sold. Since the lower pricing option best aligns with SGF's mission, I recommend that you choose it.

For Assessment Opportunity #1 (Management Accounting), the candidate must be ranked in one of the following five categories:

Not addressed – The candidate does not address this assessment opportunity.

Nominal competence – The candidate does not meet the standard of reaching competence.

Reaching competence – The candidate attempts a quantitative and qualitative analysis of the two sales pricing options.

Competent – The candidate prepares a quantitative and qualitative analysis of the two sales pricing options and makes a recommendation.

Competent with distinction – The candidate prepares a thorough quantitative and qualitative analysis of the two sales pricing options and makes a recommendation.

Assessment Opportunity #2 (Breadth Opportunity)

The candidate determines the amount of outside financing required to cover the monthly cash requirement of the first six months of the RSS initiative.

The candidate demonstrates competence in Finance.

CPA Map Competencies:

5.2.1 Evaluates the entity's cash flow and working capital (Core – Level A)

Cash Flow Analysis							
	Month 0	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6
Sales (Note 1)		\$ 19,000	\$ 19,000	\$ 19,000	\$ 19,000	\$ 19,000	\$ 19,000
Cost of sales	30,000				30,000		
Security system (Note 2)	(30,000)	19,000	19,000	19,000	(11,000)	19,000	19,000
Racks	20,000						
Insurance	1,600						
		200	200	200	200	200	200
	\$ (51,600)	\$ 18,800	\$ 18,800	\$ 18,800	\$ (11,200)	\$ 18,800	\$ 18,800
Cumulative	\$ (51,600)	\$ (32,800)	\$ (14,000)	\$ 4,800	\$ (6,400)	\$ 12,400	\$ 31,200
Note 1:							
Monthly sales (\$120,000 / 12 × 30% / 15%)				\$20,000			
Unsellable @ 5%				<u>1,000</u>			
Net sales				<u>\$19,000</u>			
Note 2:							
Annual costs of security options:							
Guard (\$2,500 × 12 months)				30,000			
Security system (\$20,000 / 3 years)				6,667			
No security (25% of sales price × \$240,000)				60,000			
Best option - security system						6,667	

The security system requires a substantial upfront cash injection for the initial capital investment. This option provides the lowest annual cost and financially is the best long-term option.

The proposal would create short-term cash flow issues, but SGF would be cash-flow positive, on a cumulative basis, in five months. However, SGF would need sufficient cash flow to make the inventory purchases each quarter.

It should be noted that the figures come from RSS, and their reliability should be questioned. Also, all purchases from RSS are final, which puts SGF at risk if sales are below expectations.

Financing Required

As the bank loan only covers the food-related operations, and the investment funds for expansion are restricted to the opening of more store locations, it is not clear where the cash injection will come from.

The amount required upfront is \$51,600: \$30,000 for the first shipment; \$20,000 for the security system; and \$1,600 for the racks.

The cash flows are positive for the first, second and third month, and should be enough to recover the upfront cash needed, but another cash injection will be required at the beginning of the fourth month to purchase clothes for the next quarter. The purchases are forecast to be in the amount of \$30,000 but accumulated cash flows of only \$4,800 will be available by then. Therefore, \$25,200 should be required (\$30,000 - \$4,800). This shortfall will be recouped by the end of the fifth month and no further cash injections should be needed if sales are as forecast.

For Assessment Opportunity #2 (Finance), the candidate must be ranked in one of the following five categories:

Not addressed – The candidate does not address this assessment opportunity.

Nominal competence – The candidate does not meet the standard of reaching competence.

Reaching competence – The candidate attempts to determine the amount of outside financing required to cover the monthly cash requirement of the first six months of the RSS initiative.

Competent – The candidate determines the amount of outside financing required to cover the monthly cash requirement for each of the first six months of the RSS initiative.

Competent with distinction – The candidate determines the amount of outside financing required to cover the monthly cash requirement for each of the first six months of the RSS initiative and recommends a security system.

Assessment Opportunity #3 (Breadth Opportunity)

The candidate discusses the strategic fit and other decision factors to consider for the RSS proposal.

The candidate demonstrates competence in Strategy and Governance.

CPA Map Competencies:

2.2.1 Assesses whether management decisions align with the entity's mission, vision and values (Core – Level B)

2.3.3 Evaluates strategic alternatives (Core – Level B)

You asked me to discuss the strategic fit and other decision factors to consider for the RSS proposal. This would include evaluating the proposal's fit with SGF's mission.

Fit with Mission

Selling excess clothing could be perceived as a way to recycle it and avoid it from being thrown out, thereby reducing waste, which fits with a portion of your mission. However, selling high-end clothing appears inconsistent with SGF's mission to reduce food waste. It could also put SGF at risk of losing its not-for-profit organization status.

Other Decision Factors

Based on the quantitative analysis performed, the proposed clothing sales would positively contribute to the annual excess of revenues over expenses. This could help offset the uncertainty of the food donations and would help stabilize the cash flow, to ensure that SGF is able to continue to serve the community. However, this project poses risks for SGF and has implications for its stakeholders:

1. Several of your food donors have said they would not donate food to for-profit companies, and that they are doing so to support your mission as well as their own sustainability goals. If they perceive you to have changed SGF's mission, it could negatively affect their support. Food donations are at the core of the organization, and SGF cannot operate without those donations.
2. Your landlord has provided discounted rent specifically to support SGF's mission of reducing food waste. If these high-end sales change his perception of your status, you could lose the annual savings of \$54,000 $[(\$15,000 - \$10,500) \times 12]$, which would have a significant impact on SGF's operations.
3. A large portion of your workforce consists of volunteers, who might be less willing to donate their time to a store selling high-end clothing versus helping to reduce food waste.

4. The investors who have provided funds for expansion have done so on the basis of food waste reduction being the business's mission. It is not clear whether they would support an operation that gains about 40% of its revenue from the sale of high-end clothing.
5. It is not clear whether SGF's food customers would be the target market for this high-end clothing.
6. On the other hand, there could be synergies involved if customers are primarily interested in the environmental benefits of saving the various products from being wasted, or in getting a "discount" on the product that is in line with quality.
7. Selling clothing will entail extra effort, which will detract your already small number of staff from their food duties. You would likely need to implement a credit-card sale system, product-return systems, and a security system, and dedicate a portion of your space to change rooms. The quantity and nature of your advertising will also be affected and storage and display of the clothing will need to be considered, which will increase costs.
8. The price-per-unit is higher with clothing than with food, and as you mentioned, a more sophisticated security system will be needed than is required for food. If you select the tagging system, each item will need to be tagged, and the tags removed by employees when the clothing is sold. This could prove time consuming and would mean one more thing for you to manage.
9. Additional financing may be required to cover the initial start-up costs of this new venture. SGF will need to obtain a source for this financing.

Conclusion

Before pursuing this proposal further, a discussion with your lenders, landlord, and donors is warranted, to determine whether they would support this endeavour. If you position it as a way to support a lower margin, higher volume of food turnover, you may get their consent.

However, in the short term, it may be more sensible for you to limit your focus to food, at least until you have established a strong enough reputation that some non-food business will not detract from your mission.

For Assessment Opportunity #3 (Strategy and Governance), the candidate must be ranked in one of the following five categories:

Not addressed – The candidate does not address this assessment opportunity.

Nominal competence – The candidate does not meet the standard of reaching competence.

Reaching competence – The candidate attempts to discuss the strategic fit or identifies some of the decision factors to consider for the RSS proposal.

Competent – The candidate discusses the strategic fit and discusses some of the decision factors to consider for the RSS proposal.

Competent with distinction – The candidate discusses the strategic fit and discusses several of the decision factors to consider for the RSS proposal.

Assessment Opportunity #4 (Breadth Opportunity)

The candidate discusses the tax rules for home office expenses and the deductibility of the expenses.

The candidate demonstrates competence in Taxation.

CPA Map Competencies:

6.2.1 Assesses general tax issues for an individual (Core – Level B)

To be able to claim home office expenses, Jakob would have to meet one of two tests. He would have to either: (a) work there more than 50% of the time; or (b) meet clients, etc., there on a regular basis. As he will be working from home for 25 of the 40 hours he will work each week, Jakob meets the first test. Since he will be holding meetings at the suppliers' or donors' places of business or at the store, he does not meet the second test. However, only one of the two tests must be met.

Regarding the individual expenses that Jakob identified:

1. Jakob's annual electricity bill is \$1,800. As the home office comprises 10% of Jakob's home, a reasonable allocation to the home office is \$180 (10% × \$1,800).
2. Even though Jakob would have to pay some additional insurance to work at home, mortgage interest, property tax and home insurance are not claimable as a home office expense by an employee, in whole or in part.

3. As an employee, Jakob can claim the cost of long-distance calls from a home phone, but no portion of his home phone plan or his home internet plan.
4. As it is limited by paragraph 8(1)(j), employees cannot claim CCA on a home at all.
5. The maintenance costs are claimable. As \$900 of maintenance costs clearly relates entirely to the home office, that will be the amount claimable (not 10% of \$10,000). We should analyze the actual costs further to determine if any of them are related to the entire home, as opposed to specific rooms, in which case 10% of such costs would also be deductible.

The total expenses eligible for deduction are \$1,080 (\$180 + \$900).

The ceiling on claimable expenses is the amount of employment income earned, which, in Jakob's case, is \$1,000. Based on the above analysis, Jakob's expenses will exceed this amount. SGF should consider either giving Jakob a higher salary or reimbursing a portion of his costs. Otherwise, the excess amount of \$80 can be carried forward and used in a subsequent year.

For Assessment Opportunity #4 (Taxation), the candidate must be ranked in one of the following five categories:

Not addressed – The candidate does not address this indicator.

Nominal competence – The candidate does not meet the standard of reaching competence.

Reaching competence – The candidate attempts to discuss the overall tax rules for home office expenses or the tax treatment for some of the items listed.

Competent – The candidate discusses the overall tax rules for home office expenses and the tax treatment for some of the items listed.

Competent with distinction – The candidate discusses the overall tax rules for home office expenses and the tax treatment for several of the items listed.

Assessment Opportunity #5 (Breadth Opportunity)

The candidate discusses the investment options.

The candidate demonstrates competence in Finance.

CPA Map Competencies:

5.2.2 Evaluates the entity's investment portfolio (Core – Level B)

Objectives

In evaluating the options, we must first establish your objectives. I see them as the following:

1. First and foremost, to preserve the invested capital for use in the future expansion.
2. Second, to maintain flexibility in withdrawing and using the funds. As we do not know the exact timing of the expansion, it is important that the investment vehicle can be converted into liquid assets on a flexible basis.
3. Third, to provide for the highest rate of return possible while meeting the first two objectives.

Assessment of the Options

1. The term deposit is a relatively safe way to protect the invested capital, but the three-year term brings us to the end of the 24- to 36-month period in which you might need the funds to open new stores. Since this is a term deposit, there is no flexibility in terms of investment period. In addition, the rate of return is one of the lowest among the options.
2. The “investors’ account” gives you a lot more flexibility in terms of when the funds can be withdrawn. However, it also represents one of the lowest rates of return of the options. If there is a chance that you will need the funds within the next three years, the flexibility of the investors’ account might be a big advantage.
3. The equity mutual fund has had a higher rate of return (10% per year for the last two years) than the other investment options, but you could be putting the principal at risk. If you had an extended investment time frame, this might not be a critical concern, but with a 24- to 36-month time frame, you could be forced to cash in the fund at a time when the market is depressed. Accordingly, this option does not achieve the goal of capital preservation.
4. The municipal bond has two issues. First, it does not mature for another two years, so if SGF needs the funds sooner, it will be forced to sell the bond on the secondary market. There are many factors, such as changes in interest rates and in the financial status of the municipality, that could affect the market value of this bond if it is sold before maturity, so this does not achieve the goal of capital preservation. Second, the fact that it is denominated in U.S. dollars places SGF at risk for foreign exchange variations, which could also adversely affect the value realized when the bond matures or when SGF sells it.

Recommendation

As preserving capital is the primary objective, I recommend that you not pursue Options 3 or 4. Your choice between Options 1 (term deposit) and 2 (investors' account) should be based on whether you expect to need the funds within the next three years. You could also consider investing in more than one of the investment options that you have identified. Using an option that involves more risk, if mixed with an option that is safer, could provide higher return expectation with an acceptable level of risk. A mix of the options could also allow you to have some of the funds available earlier, in case you need them. Mixing options 1 and 2 could also allow for a better rate of return while only locking in some of the funds for a longer period.

For Assessment Opportunity #5 (Finance), the candidate must be ranked in one of the following five categories:

Not addressed – The candidate does not address this assessment opportunity.

Nominal competence – The candidate does not meet the standard of reaching competence.

Reaching competence – The candidate attempts to discuss some of the investment options.

Competent – The candidate discusses some of the investment options and provides a recommendation.

Competent with distinction – The candidate discusses several of the investment options and provides a recommendation.

Assessment Opportunity #6 (Depth and Breadth Opportunity)

The candidate discusses the appropriate accounting treatment for the contributions received by SGF.

The candidate demonstrates competence in Financial Reporting.

CPA Map Competencies:

1.2.1 Develops or evaluates appropriate accounting policies and procedures (Core 1 – Level A)

1.2.2 Evaluates treatment for routine transactions (Core 1 – Level A)

1.2.3 Evaluates treatment for non-routine transactions (Core 1 – Level B)

Part III Accounting Requirements

SGF has chosen to apply the accounting standards for not-for-profit organizations (ASNPO – Part III of the CPA Canada Handbook) and would like to understand how the standards in Part III would apply to the different contributions received. A not-for-profit organization applying Part III of the Handbook also applies ASPE (Part II of the CPA Canada Handbook) to the extent that the Part II standards address topics not addressed in Part III. Part III of the standards addresses contributions as follows:

“4410.16 An organization may choose to recognize contributions of materials and services, but should do so only when a fair value can be reasonably estimated and when the materials and services are used in the normal course of the organization's operations and would otherwise have been purchased.

4410.19 Contributions should be measured at fair value at the date of contribution if fair value can be reasonably estimated.

4410.20 A contribution of assets other than cash would be measured at fair value. Fair value would be estimated using market or appraisal values. For contributed materials and services that are normally purchased, fair value would be determined in relation to the purchase of similar materials and services.

4410.02 (f) Fair value is the amount of the consideration that would be agreed upon in an arm's length transaction between knowledgeable, willing parties who are under no compulsion to act.”

Therefore, if the above criteria are met, SGF would have the choice to recognize, or not, the materials and service contributions in its financial statements. However, once an accounting method has been chosen, it must be applied consistently between periods and for all contributions; therefore, if you choose to recognize the food contributions, you must also recognize the other types of contributions, such as the service contributions, and do so from year to year. Note that the contributions recognized would be offset by the recognition of a corresponding expense, so SGF must weigh the advantages and disadvantages in order to decide whether recognition of the contributions is worth the effort involved.

Contribution of Food

First test – reasonable estimation of fair value: Since it would otherwise have been disposed of, it may be difficult to determine the fair value of the food, and the value may be nil. However, stores often have a section of “marked down” items and this information could perhaps be used to reflect the fair value of selling “blemished” or “past due” items.

Second test – materials or services used in the normal course of business: If the goods were not donated, SGF would have to purchase the goods; therefore, this test is met.

Contribution of Services and Time by Volunteers

First test – reasonable estimation of fair value: Ascribing a value to donated time could be done by using market rates, such as minimum wages, when applicable.

Second test – materials or services used in the normal course of business: If volunteers were not used, SGF would have to pay for the labour hours to keep the store running; therefore, the volunteers are used in the normal course of operations.

Reduced Rent Payment

Rent would be \$15,000 a month but the landlord is willing to rent the space for \$10,500 a month as long as SGF's mission remains to reduce food waste. SGF is receiving a large discount, which, since the fair market rent is \$15,000, could be considered a contribution.

First test – reasonable estimation of fair value: In this case, the fair market value is available, being \$15,000. The fair value of the monthly contribution would therefore be \$4,500 (\$15,000 - \$10,500).

Second test – materials or services used in the normal course of business: SGF would have to pay market rate if the landlord decided to charge the full price.

All Materials and Service Contributions

If SGF decided to recognize the contribution in the financial statements, based on the requirements of 4410.24, it would have to *“disclose the nature and amount of contributed materials and services recognized in the financial statements.”* For example, it would have to disclose the difference between the actual and fair market rent as a contribution.

Funds to Open New Stores (Restricted Use)

The amounts contributed to SGF to finance future store locations would constitute restricted contributions, as they must be used for a specific purpose.

“4410.10 An organization should recognize contributions in accordance with either:

- (a) the deferral method (see paragraphs 4410.28-.56); or*
- (b) the restricted fund method (see paragraphs 4410.57-.77).*

Deferral method:

4410.28 Under the deferral method, restricted contributions for which the related restrictions remain unfulfilled are accumulated as deferred contributions. As a result, the organization's excess of revenue over expenses for the period represents the increase in resources that are not restricted to cover specific expenses of a future period. Organizations that choose to follow the restricted fund method would refer to paragraphs 4410.57-.77.

4410.33 Restricted contributions for the purchase of capital assets that will be amortized should be deferred and recognized as revenue on the same basis as the amortization expense related to the acquired capital assets.

4410.34 Restricted contributions for the purchase of capital assets that will not be amortized should be recognized as direct increases in net assets.

Restricted fund method:

4410.62 Restricted contributions for which a corresponding restricted fund is presented should be recognized as revenue of that fund in the current period.”

Depending on which method SGF chooses, the treatment of the expansion funds will differ. If using the deferral method, the funds would not be recognized as revenue until they are used (unless they are used for capital assets that are amortized, in which case they will be deferred and recognized over time), and will be presented as deferred contributions on the balance sheet. On the other hand, if using the restricted fund method, the full amount of the contribution can be recognized as revenue, if there is a restricted fund set up for the contributions related to the expansion. The nature and amount of changes in deferred contribution balances for the period need to be disclosed in the financial statements.

Recommendation

In deciding which option SGF should take, the needs of the users of the financial statements, and whether the information provided would be useful to them, should be considered. When assessing whether it is worth the information it provides to the stakeholders, the potential difficulties in applying the fair value test to quantify the value of the in-kind contributions should also be taken into account. Accounting for the donated time would also require a lot of administrative work, and SGF will need to assess whether it is worth the effort. Since the primary users will be the bank and possibly the food donors, who are completely familiar with SGF's operations, note disclosure of the accounting policy should suffice. As for the choice between the deferral method and the restricted funds method, the first one focuses on activities while the second one focuses on restrictions. As it is easier to apply, I recommend that you choose the deferral method, unless you believe that you will have other restricted contributions in the future, similar to the one received for the future expansion.

For Assessment Opportunity #6 (Financial Reporting), the candidate must be ranked in one of the following five categories:

Not addressed – The candidate does not address this assessment opportunity.

Nominal competence – The candidate does not meet the standard of reaching competence.

Reaching competence – The candidate attempts to discuss the accounting treatment of the contributions.

Competent – The candidate discusses the accounting treatment of the contributions.

Competent with distinction – The candidate thoroughly discusses the accounting treatment of the contributions.

Assessment Opportunity #7 (Depth and Breadth Opportunity)

The candidate discusses the accounting treatment for the equipment lease.

The candidate demonstrates competence in Financial Reporting.

CPA Map Competencies:

1.2.1 Develops or evaluates appropriate accounting policies and procedures (Core 1 – Level A)

1.2.2 Evaluates treatment for routine transactions (Core 1 – Level A)

Accounting for Leases

SGF is leasing refrigerators on a four-year lease. Jakob asked about the accounting treatment for the equipment lease.

“3065.06 From the point of view of a lessee, a lease normally transfers substantially all of the benefits and risks of ownership to the lessee when, at the inception of the lease, one or more of the following conditions are present:

- a) *There is reasonable assurance that the lessee will obtain ownership of the leased property by the end of the lease term. Reasonable assurance that the lessee will obtain ownership of the leased property is present when the terms of the lease result in ownership being transferred to the lessee by the end of the lease term or when the lease provides for a bargain purchase option.*

- b) *The lease term is of such a duration that the lessee will receive substantially all of the economic benefits expected to be derived from the use of the leased property over its life span. Although the lease term may not be equal to the economic life of the leased property in terms of years, the lessee is normally expected to receive substantially all of the economic benefits to be derived from the leased property when the lease term is equal to a major portion (usually 75 percent or more) of the economic life of the leased property. This is due to the fact that new equipment, reflecting later technology and in prime condition, may be assumed to be more efficient than old equipment that has been subject to obsolescence and wear.*
- c) *The lessor is assured of recovering the investment in the leased property and of earning a return on the investment as a result of the lease agreement. This condition exists if the present value, at the beginning of the lease term, of the minimum lease payments, excluding any portion thereof relating to executory costs, is equal to substantially all (usually 90 percent or more) of the fair value of the leased property, at the inception of the lease. In determining the present value, the discount rate used by the lessee is the lower of the lessee's rate for incremental borrowing and the interest rate implicit in the lease, if known.*
- .09 *A lease that transfers substantially all of the benefits and risks of ownership related to the leased property from the lessor to the lessee shall be accounted for as a capital lease by the lessee and as a sales-type or direct financing lease by the lessor.*
- .10 *A lease in which the benefits and risks of ownership related to the leased property are substantially retained by the lessor shall be accounted for as an operating lease by the lessee and lessor.”*

Applying these criteria to SGF's lease yields the following:

1. There is no bargain purchase option, or any other terms that would indicate that there is reasonable assurance that SGF will buy the equipment at the end of the four-year term.
2. The useful (economic) life of the equipment is six years, and the lease term is four years. The lease term therefore covers 66% of the equipment's useful life, which is less than the 75% guideline customarily used for this test.
3. The annual lease payments are \$40,000 each. However, they include \$5,000 for maintenance, which should be segregated from the lease amount for the purposes of this test. The present value of the lease payments is \$125,198 (8%, four periods, \$35,000 at the beginning of the period), which represents 74% of the fair market value of \$170,000. This amount is less than the 90% guideline customarily used to evaluate whether a lease is capital or operating.

Since none of the three tests above are met, the lease would be characterized as operating and SGF would show the annual lease cost of \$35,000 and the maintenance cost of \$5,000 as operating expenses.

For Assessment Opportunity #7 (Financial Reporting), the candidate must be ranked in one of the following five categories:

Not addressed – The candidate does not address this assessment opportunity.

Nominal competence – The candidate does not meet the standard of reaching competence.

Reaching competence – The candidate attempts to discuss the accounting treatment for the lease.

Competent – The candidate discusses the accounting treatment for the lease.

Competent with distinction – The candidate thoroughly discusses the accounting treatment for the lease.

Assessment Opportunity #8 (Breadth Opportunity)

The candidate discusses the issues that could jeopardize an unmodified audit opinion, suggests improvements, and discusses how each stakeholder may react if an unmodified opinion is still not possible.

The candidate demonstrates competence in Audit and Assurance.

CPA Map Competencies:

4.1.1 Assesses the entity's risk assessment processes (Core – Level A)

4.3.5 Assesses the risks of the project, or, for audit engagements, assesses the risks of material misstatement at the financial statement level and at the assertion level for classes of transactions, account balances, and disclosures (Core – Level B)

4.3.11 Prepares or interprets information for stakeholders (Core – Level B)

If sufficient and appropriate audit evidence cannot be obtained, the auditor would be unable to issue an unmodified audit opinion. With the current processes, and due to the nature of the business, there are several key financial statement balances for which the auditor would be unable to obtain sufficient audit evidence. I have identified the areas of concern and made recommendations that would alleviate some of the risk.

Donations from Grocery Stores

Issue: The donations from grocery stores are not tracked and quantified.

Impact: If SGF chooses to account for in-kind donations on the financial statements as previously discussed, the auditor would not be able to gather sufficient evidence that the contributions are all accounted for. There is a risk that the donations are not all accounted for, and that volunteers or employees keep the donations rather than keep them for SGF to sell.

Recommendation: A log of all donated goods should be maintained by the volunteers when the goods are received. Even if donated goods are not recorded or disclosed in the financial statements, those charged with governance and other stakeholders would expect management to have some controls over stewardship of goods donated to the entity. Segregating the duties related to the reception of the donations should also be done to avoid theft. Given the limited number of employees, this may not be possible.

Revenue and Cash

Issue: Since SGF conducts its business on a cash basis and only issues receipts when requested by the customer, this poses a significant control weakness, and completeness of revenue and cash could be a significant issue.

Impact: This could effectively preclude auditing of the sales amount after the fact, since there will be no audit trail of the sales proceeds received and therefore no evidence that the proceeds were indeed received by SGF.

Recommendation: A cash register should be installed that automatically provides receipts to customers for all sales and that provides a summary of sales for record-keeping purposes. An employee should count the cash and reconcile it to the sales receipts at the end of each day. Jakob should reconcile the total of receipts to the daily bank deposit. Segregation of duties between the people involved will be key.

A log of all goods disposed of (i.e., food waste thrown in the compost bin) should also be maintained. This, combined with the log of donated food and the sales receipts, should allow Jakob to determine whether theft is a significant problem.

Conclusion

SGF should strengthen the controls surrounding certain areas, especially the cash and revenue, as soon as possible, which may allow the auditor to perform an audit without a scope qualification. Since operations have not yet started, there is still time to implement proper controls. If controls over cash sales are implemented now, completeness of revenues and cash can be substantiated. If SGF decides not to recognize or disclose in-kind contributions in the financial statements, there should be no qualification in the opinion.

However, if proper controls are not implemented in the cash sales process, a qualification on revenue will be necessary. If SGF decides to recognize food contributions in the financial statements, a qualification on completeness of contributions might also be necessary, since donations are a significant (i.e., material) portion of SGF's revenues.

Impact of a Qualification on Stakeholders

The stakeholder most likely to be affected by a qualification would be the bank. It is possible that it could view the qualification as an indication of financial uncertainty or poor management of resources, and accordingly decline the loan to SGF.

It is possible that a qualified opinion could also impact the food donors. If they find out that SGF is not properly controlling the sale of goods that they donated, they may be unwilling to continue making food donations to SGF, which could result in going concern issues for SGF.

A third group who might be affected are the potential contributors of the funds for the opening of more stores. Again, a qualification regarding sales completeness may cause the potential contributors to decide not to contribute funds because, if the entity cannot manage sales for one store, it likely won't be able to manage it for multiple stores.

Similarly, the landlord may react negatively to a qualification relating to mismanagement of cash sales and may start charging rent at market prices, if he can make an argument that the entity's mission is not being fulfilled.

Other stakeholders (the employees and volunteers) would likely not react to a qualification, particularly since the employees and volunteers may be the ones benefitting from the theft of goods and/or cash.

Given the significant impact that a qualified opinion could have on several stakeholders, it is critical that SGF resolve some of the control weaknesses around cash sales before it starts operations.

For Assessment Opportunity #8 (Audit and Assurance), the candidate must be ranked in one of the following five categories:

Not addressed – The candidate does not address this assessment opportunity.

Nominal competence – The candidate does not meet the standard of reaching competence.

Reaching competence – The candidate identifies some of the issues that could jeopardize an unmodified audit opinion or discusses how some of the stakeholders may react if an unmodified audit opinion is not possible.

Competent – The candidate discusses some of the issues that could jeopardize an unmodified audit opinion, suggests improvements and discusses how some of the stakeholders may react if an unmodified audit opinion is not possible.

Competent with distinction – The candidate discusses several of the issues that could jeopardize an unmodified audit opinion, suggests improvements and discusses how each stakeholder may react if an unmodified audit opinion is not possible.

Case #2**(Suggested time: 75 minutes)**

Veza Eye Centre Limited (VEC) provides eye examinations and sells prescription eyewear and high-end sunglasses.

It is early 2019, and Dr. Michelle Veza, optometrist and VEC founder, is reviewing the financial results for VEC's first year, which ended December 31, 2018. She is surprised to see only a small profit and comes to you, CPA, looking for advice.

Wanting to better understand her business, Michelle has prepared a product line analysis (Appendix I). Because she is not sure she has done it right, she asks you to review her cost allocations and make all required revisions.

She is also thinking of eliminating the sunglasses line of business. She asks you to determine whether there is support for eliminating it, and the impact it would have on VEC's profitability.

Michelle realizes that she lacks the skill set and time to perform a detailed financial review. She has heard of business owners focusing on only a few key statistics, called "key performance indicators" (KPIs). Michelle asks you how KPIs could be useful to her and which KPIs you would recommend and why.

Because prescription eyewear sales increase with the number of patients, Michelle is considering partnering with a second optometrist. She would like your thoughts on the strategic advantages and disadvantages of such an arrangement, given the person she has in mind (Appendix II).

In addition, Michelle gathered information for VEC's and her own tax returns and has some questions (Appendix III).

Finally, Michelle has been approached by ABC Cloud (ABC) with a proposal to store VEC's data (Appendix IV). Michelle asks you to discuss the risks of using its services and the controls and other procedures that ABC should have in place to address those risks.

APPENDIX I
PRODUCT LINE ANALYSIS

For the year ended December 31, 2018

Note		Total	Cost Allocation		
			Eye Exams	Prescription Eyewear	Sunglasses
	Revenue	\$ 1,000,000	\$ 500,000	\$ 400,000	\$ 100,000
1	Salaries	160,000	80,000	64,000	16,000
2	Cost of sales	330,000	165,000	132,000	33,000
3	Rent	220,000	110,000	88,000	22,000
4	Utilities	44,000	22,000	17,600	4,400
5	Depreciation	55,000	27,500	22,000	5,500
6	Insurance	62,000	31,000	24,800	6,200
7	Office and other	66,000	33,000	26,400	6,600
8	Advertising	30,000	15,000	12,000	3,000
	Total expenses	<u>\$ 967,000</u>	<u>\$ 483,500</u>	<u>\$ 386,800</u>	<u>\$ 96,700</u>
	Profit	<u>\$ 33,000</u>	<u>\$ 16,500</u>	<u>\$ 13,200</u>	<u>\$ 3,300</u>

Michelle allocates all expenses based on gross revenues.

Notes:

- VEC has three employees: Michelle; Abby, who helps with sales; and receptionist Kevin. They spend their time as follows:

Employee	Salary	Managerial Duties	Eye Exams	Prescription Eyewear	Sunglasses
Michelle	\$80,000	40%	60%		
Abby	\$50,000		10%	80%	10%
Kevin	\$30,000		60%	30%	10%

- The cost of sales represents the amount paid for supplies, prescription eyewear and sunglasses sold in the year. Of this amount, 10% relates to eye exams, 65% to prescription eyewear and 25% to sunglasses.

APPENDIX I (continued)
PRODUCT LINE ANALYSIS

3. VEC has a four-year lease contract, during which time the space rented cannot be reduced. Of the 1,200 square-foot space, 700 relates to eye exams, 300 to prescription eyewear, 100 to sunglasses, and 100 to a reception area.
4. Utilities mainly include electricity, which is largely a function of square footage.
5. 90% of depreciation relates to eye exam equipment and 10% to furniture and fixtures.
6. \$40,000 is for professional liability insurance and \$22,000 is for general premise insurance.
7. Office and other includes expenses such as postage, internet, cleaning and minor repairs.
8. Advertising includes local print advertisements, VEC's webpage and related internet advertisements that focus on the eye examinations but also mention prescription eyewear and sunglasses sales.

APPENDIX II SECOND OPTOMETRIST

Tom Trabek has been identified as a potential partner. Tom is 28 years old, became an optometrist two years ago and has been working as an employee for another optometrist since then. He is ambitious and loves the “business side” of medicine. Tom’s goal is to become managing director of an optometry practice with a dozen optometrists within the next five to 10 years. His preference is to buy into an existing practice rather than be an employee, and to increase his share quickly over time while focusing on growth.

Tom’s wife just had their first child and plans to stay home with their daughter for now, so the family will be counting on Tom to earn a competitive salary. Tom and his wife have no savings with which to buy into the practice.

Michelle is 47 and married with two daughters, aged 17 and 21, who are students. Her family is wealthy, which allows her to take a below-market salary. Her goal is to expand her business slowly, without incurring additional debt. Michelle hopes to work for the next 10 to 15 years, and then sell her practice and retire. She is relying on realizing a significant profit when she sells the practice.

The addition of an optometrist would require purchasing a second set of examination equipment. As Tom is technologically well-informed, he would expect the most up-to-date equipment, which could be expensive.

APPENDIX III TAXATION QUESTIONS

Michelle would like your advice on the following questions:

1. To start VEC, Michelle borrowed \$400,000 as a second mortgage on her family's home. These funds went into an existing joint personal savings account that is shared with her husband. That account was used to invest in VEC's shares, pay for their daughters' school expenses and do some home renovations. Michelle asks whether the interest on the mortgage is deductible on her personal tax return.
2. In January 2018, to teach their daughters about investing, Michelle and her husband gave each of them the full amount needed for their future tuition and living expenses and told them to invest it in publicly-traded securities. The daughters earned interest income and dividends, and realized capital gains. Michelle wants to know how this impacts the family members' 2018 personal tax returns.
3. Michelle belongs to a local association where optometrists can meet, attend lectures given by medical researchers and suppliers, and dine. VEC pays for Michelle's annual membership. Michelle asks whether the association fees are deductible by VEC, and whether she will have a taxable benefit.
4. Michelle has a cell phone that she uses 90% for personal use and 10% for business because there is poor reception and unreliable WiFi at work. She asks whether some or all of the costs are deductible, either by Michelle or by VEC.
5. When Michelle first opened VEC, she paid an interior designer \$1,000 for advice on colours, placement of office furniture and use of space. She wonders if this cost can be deducted or, because she believes it provides a benefit beyond one year, whether it must be treated as a capital expenditure.

APPENDIX IV INFORMATION ON ABC

VEC's patients' medical information would be stored in the cloud by ABC. The information would be accessible through a browser from anywhere there is an internet connection. The files could be downloaded at any time and printed.

ABC incorporated last year and has since grown in popularity. It now stores data for hundreds of companies, mainly in the financial industry. Due to its quick growth, ABC has outsourced some of its data storage to a third party located next to ABC's only location. The intention is to eventually increase the storage capacity at ABC and eliminate the outsourcing arrangement.

To keep up with the higher volume, ABC has recently hired new employees with varying levels of experience in cloud computing. In order to provide timely service, all employees have access to every client's data.

ABC performs regular maintenance of its server. This is done by shutting it down for a few hours when needed.

MARKING GUIDE 3-2
VEZA EYE CENTRE LIMITED (VEC)
ASSESSMENT OPPORTUNITIES

To: Michelle Veza

From: CPA

Subject: Advice regarding VEC

Assessment Opportunity #1 (Depth and Breadth Opportunity)

The candidate reviews the product line analysis and revises the cost allocation.

The candidate demonstrates competence in Management Accounting.

CPA Map Competencies:

3.3.1 Evaluates cost classifications and costing methods for management of ongoing operations (Core – Level A)

3.3.2 Evaluates and applies cost management techniques appropriate for specific costing decisions (Core – Level B)

As requested, I reviewed your product line analysis and made revisions to your initial allocations, using the additional information that you provided. I have allocated the costs based on the more relevant basis of allocation.

		Total	Eye Exams	Prescription Eyewear	Sunglasses
Note	Revenue	\$1,000,000	\$500,000	\$400,000	\$100,000
1	Salaries	160,000	87,000	61,800	11,200
2	Cost of sales	330,000	33,000	214,500	82,500
3	Rent	220,000	140,000	60,000	20,000
4	Utilities	44,000	28,000	12,000	4,000
5	Depreciation	55,000	53,000	1,500	500
6	Insurance	62,000	54,000	6,000	2,000
7	Office and other	66,000	42,000	18,000	6,000
8	Advertising	30,000	27,000	1,500	1,500
	Total expenses	\$ 967,000	\$464,000	\$375,300	\$127,700
	Profit	\$ 33,000	\$ 36,000	\$ 24,700	\$ (27,700)

Notes:

1. Salaries are allocated based on time spent. Michelle's managerial duties are allocated based on revenue.

	Total	Exams	Prescription	Sunglasses
Michelle – exams (60%)	\$ 48,000	\$48,000		
Michelle – management (40%) (split based on revenue)	32,000	16,000	\$12,800	\$ 3,200
Abby (sales) (10%/80%/10%)	50,000	5,000	40,000	5,000
Kevin (reception) (60%/30%/10%)	30,000	18,000	9,000	3,000
	<u>\$160,000</u>	<u>\$87,000</u>	<u>\$61,800</u>	<u>\$11,200</u>

2. Cost of sales is allocated based on the nature of spending.

	Total	10% Exams	65% Prescription	25% Sunglasses
Cost of sales	\$330,000	\$33,000	\$214,500	\$82,500

3. Rent is allocated based on the square footage used: 700/1,100; 300/1,100; 100/1,100. *

	Total	63.6% Exams	27.3% Prescription	9.1% Sunglasses
Rent	\$220,000	\$140,000	\$60,000	\$20,000

*Note: 100 square feet of general space is considered "overhead" and excluded from total production space; allocations are therefore made on 1,100 square feet.

4. Utilities are allocated based on square footage.

	Total	63.6% Exams	27.3% Prescription	9.1% Sunglasses
Utilities	\$44,000	\$28,000	\$12,000	\$4,000

5. Depreciation is allocated based on the items depreciated: 90% to exams; the remainder is allocated by square footage.

	Total	90.0% Exams	0.0% Prescription	0.0% Sunglasses
Depreciation – exams	\$49,500	\$49,500		
Depreciation – other	\$5,500	\$3,500	\$1,500	\$500
	<u>\$55,000</u>	<u>\$53,000</u>	<u>\$1,500</u>	<u>\$500</u>

6. Professional liability insurance is allocated to eye exams; the remainder is allocated by square footage.

	Total	100% 63.6% Exams	0.0% 27.3% Prescription	0.0% 9.1% Sunglasses
Insurance – professional liability	\$40,000	\$40,000		
Insurance – other	22,000	14,000	\$6,000	\$2,000
	\$62,000	\$54,000	\$6,000	\$2,000

7. Office and other expenses are allocated based on square footage.

	Total	63.6% Exams	27.3% Prescription	9.1% Sunglasses
Office and other	\$66,000	\$42,000	\$18,000	\$6,000

8. Advertising is allocated primarily (90%) to eye exams as this is the core business. The remaining 10% is split between the two other lines, prescription and sunglasses.

	Total	90% Exams	5% Prescription	5% Sunglasses
Advertising	\$30,000	\$27,000	\$1,500	\$1,500

These allocations are based on full cost allocation and should be used with caution in making decisions. They are most useful in comparing your business to industry benchmarks.

Note: Candidates may have taken an alternative approach to allocating the costs and performed a segment margin analysis, where only those costs that have an allocation basis are allocated and the common costs remain unallocated:

	Eye Exams	Prescription Eyewear	Sunglasses	Total
Revenue	\$500,000	\$400,000	\$100,000	\$1,000,000
Cost of goods sold	33,000	214,500	82,500	330,000
Gross margin	467,000	185,500	17,500	670,000
Product line expenses:				0
Rent	128,333	55,000	18,333	201,667
Utilities	25,667	11,000	3,667	40,333
Depreciation	49,500			49,500
Insurance – liability	40,000			40,000
Insurance – general	0	0	0	0
Advertising	30,000			30,000
Salaries	71,000	49,000	8,000	128,000
Total product line expenses	344,500	115,000	30,000	489,500
Product line profit	\$122,500	\$70,500	\$ (12,500)	180,500

Common area costs (remain unallocated *):	
Reception area	22,000
Depreciation	5,500
Insurance – general	22,000
Office	66,000
Admin salary	32,000
Total common costs	<u>147,500</u>
Operating income	<u>\$ 33,000</u>

* Reasons for leaving certain costs out needed to be explained.

Candidates were not expected to provide more than one method of allocation – either was acceptable.

For Assessment Opportunity #1 (Management Accounting), the candidate must be ranked in one of the following five categories:

Not addressed – The candidate does not address this assessment opportunity.

Nominal competence – The candidate does not meet the standard of reaching competence.

Reaching competence – The candidate attempts to revise the product line analysis.

Competent – The candidate revises the product line analysis based on allocation factors more appropriate than the ones used by the client.

Competent with distinction – The candidate thoroughly revises the product line analysis based on allocation factors more appropriate than the ones used by the client.

Assessment Opportunity #2 (Depth and Breadth Opportunity)

The candidate calculates the impact on VEC's profitability of eliminating the sunglasses line.

The candidate demonstrates competence in Management Accounting.

CPA Map Competencies:

3.5.1 Performs sensitivity analysis (Core – Level A)

3.5.2 Evaluates sustainable profit maximization and capacity management performance (Core – Level A)

You asked me to determine whether there is support for eliminating the sunglasses line and how it would impact VEC's profitability.

To do so, we need to identify which costs are fixed and which ones are incremental to the sunglasses line. It seems that, other than the cost of sales, all of the costs are fixed and would not be avoided if the sunglasses line was eliminated. More specifically, Abby's and Kevin's positions would still be needed. The rent, which is based on a fixed contract, would not change either; it would not make sense to sublet only 100 square feet. There would be no material impact on costs related to utilities, insurance, office and advertising. The fixtures related to sunglasses could be sold and would no longer be amortized. We lack enough information to calculate how much this would impact profitability but it would likely not be material.

Therefore, to calculate the impact of eliminating the sunglasses line on VEC's profitability, I calculated the contribution margin for the line, to determine whether it is contributing to the fixed costs:

Revenue	\$100,000
Cost of sales	<u>(82,500)</u>
Contribution margin	<u>\$ 17,500</u>

Although the sunglasses line is not profitable on a total cost basis, it does provide a positive contribution of \$17,500 on an incremental cost basis. This is because the other lines of business would have to absorb some of the costs of the sunglasses line that would still be incurred without this product line. Eliminating the sunglasses line would reduce overall profitability by approximately \$17,500. Therefore, the sunglasses line should likely be continued.

That the sunglasses line is not profitable on a total cost basis could be due to a pricing issue. The contribution margin of the line is only 17.5% ($\$17,500 / \$100,000$) whereas the contribution margin on the prescription eyewear is 46.4% ($\$400,000 - \$214,500 / \$400,000$). There might be some room to improve profitability by increasing the selling price of the sunglasses. This would have to be investigated.

Before deciding to eliminate the sunglasses line, you should also consider other factors. For example, VEC might not be able to attract as many customers if the sunglasses line is eliminated. You know that eyewear sales increase with the number of patients, but it would be interesting to find out if there is a similar relation between the sunglasses sales and the revenue from the rest of your business. It would be worth investigating whether a portion of the eye exam revenue comes from customers entering the store to buy sunglasses, who end up getting an eye exam, or purchasing prescription eyewear. Some customers might also see VEC as a "one-stop shop" that takes care of all of their eyewear needs. Elimination of the sunglasses line might have a negative impact on the eye exam and/or prescription eyewear revenues. These factors should be considered before making a decision.

For Assessment Opportunity #2 (Management Accounting), the candidate must be ranked in one of the following five categories:

Not addressed – The candidate does not address this assessment opportunity.

Nominal competence – The candidate does not meet the standard of reaching competence.

Reaching competence – The candidate attempts to calculate or explain the impact on VEC's profitability of eliminating the sunglasses line.

Competent – The candidate calculates or explains the impact on VEC's profitability of eliminating the sunglasses line and concludes on whether there is support for eliminating it.

Competent with distinction – The candidate thoroughly calculates and explains the impact on VEC's profitability of eliminating the sunglasses line and concludes on whether there is support for eliminating it.

Assessment Opportunity #3 (Breadth Opportunity)

The candidate explains how key performance indicators (KPIs) could be useful to Michelle and proposes specific KPIs for her to use in her business.

The candidate demonstrates competence in Strategy and Governance.

CPA Map Competencies:

2.3.1 Evaluates the entity's strategic objectives and related performance measures (Core – Level B)

Applicability of KPIs to VEC

KPIs are not intended to replace a detailed review of an entity's financial situation and you should still be regularly performing reviews, such as the product line review. The implementation of KPIs will not eliminate the need to monitor the ongoing, detailed, financial results of the business.

However, KPIs can fill an important role for an executive who has limited time to spend on financial analysis, needs more regular feedback on business operations, and is intimately familiar with certain key business statistics. It appears that KPIs could fill an important role in your monitoring of VEC.

To be a good KPI, the indicators you choose should be focused on the business objectives, and specifically on what is material to the success of your business. This way, looking at the KPIs and their progress over time will help you assess how you are progressing towards your objectives. It will also help you identify what needs to change to better meet the objectives.

Which KPIs to Use

A KPI should focus on a driver of business success that has the potential to change over time. So, for example, rental expense would not be a KPI; it does not change and is not a driver of success.

You have noted that eyewear sales, and therefore eyewear profitability, increase with the number of patients you see. Therefore, the first KPI should likely be the number of patients you see, ideally relative to an expected standard, which could be for the industry or the region. For example, every week you could compare the number of patients seen to a target.

The second and third KPIs could be the number of sunglasses and prescription eyewear sold, in physical units, relative to the number of eye exams performed. For example, if you perform 90 exams in a week, you might expect 30 prescription eyewear sales and 15 sunglasses sales. The actual sales relative to these targets could be assessed.

Another KPI could be the average time spent per patient.

You might also want to consider financial KPIs, such as the average markup on prescription eyewear and sunglasses, and the average amount spent on each. A more general financial KPI, such as net profits before tax, could also be used.

When using KPIs, it is important to recognize that collecting data takes time and resources, and too many KPIs may cause you to lose focus and not give them the same level of attention. You need to ensure that you focus on those performance indicators that you consider important. Depending on the computer systems you choose for your business, there may be opportunities to automate the collection of this data.

For Assessment Opportunity #3 (Strategy and Governance), the candidate must be ranked in one of the following five categories:

Not addressed – The candidate does not address this assessment opportunity.

Nominal competence – The candidate does not meet the standard of reaching competence.

Reaching competence – The candidate explains how KPIs could be useful to Michelle or proposes some KPIs for Michelle to use in her business.

Competent – The candidate explains how KPIs could be useful to Michelle and proposes some KPIs for Michelle to use in her business.

Competent with distinction – The candidate explains how KPIs could be useful to Michelle and proposes several KPIs for Michelle to use in her business.

Assessment Opportunity #4 (Breadth Opportunity)

The candidate discusses the strategic advantages and disadvantages of partnering with a second optometrist.

The candidate demonstrates competence in Strategy and Governance.

CPA Map Competencies:

2.3.3 Evaluates strategic alternatives (Core – Level B)

Business Focus

Tom is very interested in the business side of the practice. He might be happy to take the managerial duties off your plate and might be satisfied spending a substantially lower portion of his time on eye examinations.

Conceptually, having you focus on the medical side of the practice, which you most enjoy, and having your business partner focus on growing and developing the business could be an excellent fit. It could also enhance the company value for when you sell your interest in VEC at a later date.

Growth

You prefer organic growth, funded internally and taking place steadily over time. You have not mentioned how big you envision VEC becoming. Tom seems more impatient, wanting faster growth (presumably funded by debt, as he has no savings) and to become the partner of a mega-firm. You must consider whether you are comfortable with this paradigm and whether it aligns with your vision and objectives. Again, though, this will be affected by the incremental revenue and profitability that Tom brings to VEC.

There is also the question of whether VEC can find enough clients to potentially double client revenue overnight, and whether there is enough demand for eye examinations to justify having another full-time optometrist. Whether Tom becomes an employee or a partner, this is an issue, but it might be a bigger challenge with his desire for fast growth.

Impact on Profitability and Initial Costs

Given that the number of patients seen seems to be the primary driver of profitability, having a second optometrist should have a significant impact. This is particularly true in VEC's case, where so many of the operating expenses are largely fixed and would not be expected to increase commensurately with increased revenue. However, it could be expensive to purchase the most up-to-date equipment and difficult to find funding for it. VEC itself does not have funds (as it only has a small profit in its first year), and neither does Tom. You have already borrowed \$400,000 against your house and your plan is to expand your business slowly and without incurring additional debt.

Timing

You are hoping to retire in 10 to 15 years but Tom hopes to be the managing director of an optometry practice within 5 to 10 years. This could result in Tom trying to force you out of the business, or you refusing to give Tom the flexibility and resources he feels he needs.

Employee versus Partner

Tom clearly sees himself as a partner rather than an employee, yet he proposes to take a competitive salary and has no financial resources to buy into VEC or to help fund the additional costs that a second optometrist would entail. It might be better to hire a second optometrist as an employee, fund the costs yourself, and retain the majority of the profits. Perhaps you can have Tom start as an employee and, based on certain conditions, have him later become a partner.

Compensation

Currently, you do not need a substantial salary or dividend draws and prefer to leave funds in VEC, to fund future expansion and lead to a higher value when you sell on retirement. Tom has indicated that he expects a competitive salary. This could lead to difficulties; either you will have to be underpaid relative to Tom, which is unfair and likely unworkable, or you will have to take a salary beyond what you need or want. This issue might not be as crucial if Tom's joining the practice significantly increases profits (for example, if he could create incremental revenues equal to VEC's \$1 million under the current one-optometrist system). There are also other ways to deal with this issue, so it is unlikely to quash the deal. Note that the additional salary would likely be payable whether VEC hires Tom or instead hires another optometrist as a conventional, non-partner employee.

If Tom wants to own a portion of VEC, and if he wants his portion to increase over time, this compensation issue could be exacerbated. As VEC will be his only source of income for the next few years, he might propose to borrow money for his buy-in, in which case he might need an even bigger salary to enable him to pay the interest.

Recommendation

Clearly, you and Tom have different objectives. At a minimum, if you are thinking of bringing him in as a fellow shareholder and business partner, you and Tom should have a detailed discussion about expectations and corporate vision and draft up clear partnership agreement terms. Otherwise, the potential for misunderstanding and disappointment is significant.

For Assessment Opportunity #4 (Strategy and Governance), the candidate must be ranked in one of the following five categories:

Not addressed – The candidate does not address this assessment opportunity.

Nominal competence – The candidate does not meet the standard of reaching competence.

Reaching competence – The candidate identifies some of the strategic advantages and disadvantages of partnering with a second optometrist.

Competent – The candidate discusses some of the strategic advantages and disadvantages of partnering with a second optometrist and provides a recommendation.

Competent with distinction – The candidate discusses several of the strategic advantages and disadvantages of partnering with a second optometrist and provides a recommendation.

Assessment Opportunity #5 (Breadth Opportunity)

The candidate discusses the tax implications of the issues raised by Michelle.

The candidate demonstrates competence in Taxation.

CPA Map Competencies:

6.1.2 Determines taxes payable for a corporation in routine situations (Core – Level B)

6.2.1 Assesses general tax issues for an individual (Core – Level B)

6.2.2 Determines income taxes payable for an individual in routine situations (Core – Level B)

Mortgage

Interest on funds borrowed for investment in income-producing assets (such as shares of your corporation, which will eventually pay dividends, or an interest-bearing shareholder loan) would generally be a deductible expense to the individual borrowing them. However, it is necessary that the tracing of the borrowing to the use of the funds be clear. In this case, since you put the borrowed funds in an existing joint personal savings account from which both investment and personal expenses (daughters' tuition, home renovations) were made, you might have broken this link and the Canada Revenue Agency (CRA) could argue that the borrowed funds were used for personal expenses.

It may be possible to provide the necessary link through other means, such as if the bank only approved the mortgage on the basis that it was being used for investment, or if the amount and timing of the mortgage and investment matched up closely. Since the transaction is recent, I recommend getting copies of your statements for the period in order to be able to show the trail of money going into and out of your account, to support the case that the amount borrowed was invested in the shares of the corporation, and then calculate the proportional interest related to these funds.

Income Attribution

Certain income earned by a minor child on funds given to them by a parent is attributed back to the parents. A minor child is defined as less than 18 years of age. As your elder daughter is 21, these rules would not apply. But your younger daughter is only 17. Therefore, any income (interest or dividends) earned by her would be attributed to the parent, who is deemed to be the transferor. Note that capital gains are not attributed back to the transferring parent and income earned on the income attributed is not itself attributed back.

Association Fees

The *Income Tax Act* does not permit a taxpayer to deduct club dues paid for a club, “the main purpose of which is to provide dining, recreational or sporting facilities for its members.” Since meetings and lectures seem to be the main purpose of the association, despite some dining, the local association does not appear to fall into any of these categories, so the membership fee should be deductible.

The question of taxable benefit is generally based on a “main purpose” test. If the primary reason for your membership is to enhance your abilities and connections for VEC’s benefit, then there should be no taxable benefit to you. But if the CRA found that the primary purpose was for you to enjoy the company of friends, a benefit could be imputed. Given that the purpose of your membership appears to be to keep yourself up-to-date on medical issues, I would argue that there is no taxable benefit to you.

Cell Phone

The business use component of a personal asset (in this case, 10%) would generally be deductible as a business expense. You would have to be able to substantiate the 10% business-use component, and the overall cost of the plan would have to be reasonable. For the corporation to deduct the cost, it would have to reimburse you for the business-use portion, but this reimbursement would not be taxable to you.

If you instead wanted to claim the expense on your personal tax return, you could have the corporation require you to incur the cell phone expense as part of your employment contract, which would allow you to deduct the 10% against your employment income. Alternatively, it may be more efficient to simply have the corporation reimburse you, and the corporation claim the deduction.

Interior Designer

In determining whether an expenditure should be capitalized, the CRA usually applies three tests:

- Does the expenditure provide a lasting benefit?
- Does it improve the property?
- Does the expenditure form part of the asset, or is it a separate asset?

The expenditure provides lasting benefit as colours and furniture are not routinely updated. There would be improvement to the space by way of the leasehold improvements and addition of furniture. Lastly, the expenditure does form part of other assets, namely office furniture and leasehold improvements. Therefore, the expenditure would be considered a capital expenditure.

For Assessment Opportunity #5 (Taxation), the candidate must be ranked in one of the following five categories:

Not addressed – The candidate does not address this assessment opportunity.

Nominal competence – The candidate does not meet the standard of reaching competence.

Reaching competence – The candidate attempts to discuss the tax implications of some of the issues raised by Michelle.

Competent – The candidate discusses the tax implications of some of the issues raised by Michelle.

Competent with distinction – The candidate discusses the tax implications of most of the issues raised by Michelle.

Assessment Opportunity #6 (Breadth Opportunity)

The candidate discusses the risks of using ABC Cloud (ABC) and the controls that should be in place to address them.

The candidate demonstrates competence in Audit and Assurance.

CPA Map Competencies:**4.1.2 Evaluates information systems, including the related processes (Core – Level B)**

Under the proposed arrangement with ABC Cloud (ABC), VEC's patients' medical information would be stored in "the cloud" by ABC.

You asked about the risks of using ABC, and the controls that ABC should have in place to address those risks.

Security

Risk: There is the risk that someone (hackers looking to cause trouble, identity thieves, competitors or people with business or social relationships with your patients) could access VEC's records using the browser interface. With outsourcing of the data storage to a third party, there could also be risks associated with those services provided to ABC, as controls at the third party may not be designed or operating effectively.

Implication: If an unauthorized third party is able to access the data somewhere along the value stream, they could obtain data that they are not entitled to or could modify data without permission.

Control/procedure: VEC will want to know that its data is being kept secure during transmission and while stored at ABC and/or at any third parties contracted by the service provider. ABC should have logical and physical access controls in place, including but not limited to, firewalls, multi-factor identification, strong passwords and access logs that are regularly reviewed.

Confidentiality

Risk: There is the risk that the information stored in the cloud would be accessed by an unauthorized party at ABC. This is also a concern because, with its recent growth, ABC has significantly increased the number of people who have access to its data by outsourcing and hiring new employees. The more people who have access to the data, the more risk there is of a data breach. ABC mainly deals with data from the financial industry; its management might not be aware of the high sensitivity of VEC's information, due to its medical nature. The same applies to the new employees hired; they have varying levels of experience in cloud computing and may not be trained to manipulate confidential data. In addition, in order to provide clients with timely service, every ABC employee has access to all client data. VEC's confidential data is accessible by users at ABC and by the third party where ABC is outsourcing, who do not need access to the data in order to serve VEC.

Implication: VEC's information is of a medical nature and therefore confidential. VEC would be liable if its patients' medical information was accessed without the patients' consent.

Control/procedure: Once the data is stored on ABC's system, VEC would need assurance that the data is being constantly protected against unauthorized access. There should be controls to prevent unauthorized internal access by ABC employees, such as different types and levels of access for different employees, where data access is restricted on a "need to know" basis, keeping ABC's files on a different server from other ABC clients, etc. You should also question ABC on the training provided to the employees and ensure that it is sufficient for the type of data they would be handling for VEC.

Privacy

Risk: There is the risk that ABC uses the personal data in some inappropriate way. For example, it could sell the data to third parties, such as insurance companies. It is not known whether the data is being stored on servers inside or outside of Canada, but foreign governments have different privacy laws, or lack thereof, and patient data that is stored outside of Canada may be released without your consent or theirs.

Implication: The information VEC deals with is personal information that is subject to privacy laws in Canada. It is also highly sensitive, since it relates to patients' medical information. A release of that information to a third party without patients' consent could result in a lawsuit for VEC.

Control/procedure: You should ensure that ABC has strong policies in place to ensure that the information it is storing is not to be shared with, or sold to, anyone at any time. Any contract you sign with ABC should explicitly state that data will not be accessed, let alone used, by ABC, and that no information will be shared or sold to third parties. You should ask about the controls it has in place to ensure the safety of personal information, as required by Canada's privacy laws. You should also make sure that ABC and the third party outsourcing the data are both storing their data in Canada.

Availability

Maintenance window

Risk: ABC performs regular maintenance on its servers, which is done through a shutdown of the server for a few hours when needed. It is unclear whether you would be given advance notice. This could happen during your working hours.

Implication: If you are not able to access your patients' information during an eye exam, this could cause a major disruption in your work.

Control/procedure: You should obtain a copy of ABC's maintenance scheduling policy to determine whether maintenance work is done during business hours or overnight, keeping in mind that ABC's time zones might not match yours. It would also be preferable to negotiate a service agreement with ABC to define the minimum service level, including the required availability of the system.

Wi-Fi and internet connection

Risk: Your Wi-Fi connection at the office seems unreliable. Since access to your files is done through the cloud, you could have problems accessing files during your working hours.

Implication: If you do not have access to the cloud and are therefore without access to their charts, it would be very difficult for you to see patients.

Control/procedure: To mitigate this risk, you should investigate whether your Wi-Fi problems could be resolved by replacing your modem, router or internet provider to ensure a better, more reliable internet connection. You will need a reliable connection if you move to a cloud-based solution, to ensure that you can access your patients' information when needed.

Provider viability

Risk: ABC is a fairly new company and has not yet gained a reliable reputation. There is a risk that ABC goes out of business.

Implication: If ABC goes out of business, patient information could be lost and your data would no longer be available to you.

Control/procedure: You should ask for ABC's financial statements and have a professional review them to assess its financial viability. To ensure that they are reliable, audited financial statements would be preferred.

Backups and disaster recovery

Risk: There is the risk that the data could be completely lost in case of a disaster. The risk is even greater due to ABC operating from one location only and outsourcing services from a third party located in the same area.

Implication: If a disaster were to happen in ABC's geographical location, VEC is at risk of losing access to its data temporarily, or even permanently.

Control/procedure: You should make sure ABC is backing up the data offsite on a regular basis, and that it has multiple backups. You should also ask about its disaster recovery program, including how long it would take to recommence operations on alternative servers used during the disaster. You should ask if ABC has a contractual agreement with another company to provide alternative servers during a disaster, and if ABC has done test runs on the alternative servers to ensure that they function properly. You would also want to know that the alternative site used during disaster recovery has the same controls and safeguards that you asked about above regarding ABC's system.

An overall control you could implement is to ask for a report that would give some assurance on the controls at ABC (e.g., CSAE 3416 report on controls at a service organization), which would give some assurance that the above controls are functioning effectively. Also, if any of your data will be stored at the outsourcing company (i.e., a sub-service organization), you should ask for a CSAE 3416 report on them too.

You should also develop a service level agreement (contract) between your business and ABC that requires all of the controls above, including the minimum service level, the availability of the platform, the acceptable utilization of the data and the redundancy of the storage. The agreement should also include indemnification from ABC for any information leaks.

For Assessment Opportunity #6 (Audit and Assurance), the candidate must be ranked in one of the following five categories:

Not addressed – The candidate does not address this assessment opportunity.

Nominal competence – The candidate does not meet the standard of reaching competence.

Reaching competence – The candidate attempts to discuss some of the risks related to the use of ABC or recommends controls that should be in place.

Competent – The candidate discusses some of the risks related to the use of ABC and the controls that should be in place.

Competent with distinction – The candidate discusses several of the risks related to the use of ABC and the controls that should be in place.

Case #3**(Suggested time: 75 minutes)**

Christopher Zane and his brother Shawn were born in Nova Scotia, where they became highly respected carpenters. Although both can be stubborn, they have a good working relationship. In 2009, Christopher moved to British Columbia and started Luxury Homes Co. (Luxury), which builds luxury homes.

In June 2018, Shawn moved to British Columbia to work for Luxury and to start a new company, TinyCo, with his brother in the tiny-house industry (Appendix I). As one of a small number of carpenters worldwide who specialize in high-quality, tiny-house construction, Shawn will provide TinyCo with his carpentry skills. While continuing to operate Luxury, Christopher will provide TinyCo with his business expertise.

You, CPA, work for Birks & Oogle LLP, a public accounting firm. It is February 1, 2019, and the brothers have come to you for advice.

Christopher begins: “We need to choose between two business models: either TinyCo designs and builds 100% of the house, or buyers participate in the building process. We have information about demand for, and estimated costs of, each business model at different selling prices (Appendix II). Please help us determine the best model given the demand for each selling price, and the selling price we should set for the chosen model.

“To start building this summer, we will need \$600,000 for start-up costs by the end of this spring. What are your views on the advantages and disadvantages of each funding source we have identified (Appendix III)?

“If we choose the grant, how would we account for the funds received and potential repayments under ASPE? In addition, what procedures would be performed for the level of assurance specified in the agreement?

“If we choose the grant, we will need to submit an assessment of TinyCo’s strengths, weaknesses, opportunities and threats as part of the grant application. Can you please provide us with this analysis?”

Shawn adds: “Friends said I can deduct all my moving expenses on my personal income tax return (Appendix IV). The \$5,000 relocation allowance Luxury gave me helped cover some of these costs. Are my expenses deductible and is there anything else I should know regarding the eligibility of the move?”

APPENDIX I INDUSTRY INFORMATION

Since its inception in North America about five years ago, the tiny-house movement has grown exponentially. Started by individuals who value affordable, sustainable housing, tiny houses are designed to make the most use of a limited space.

The North American tiny-house industry has grown from 10 companies three years ago to over 150 companies one year ago. Several Canadian construction companies have recently entered the market. A large amount of start-up capital is required. Lacking expertise in tiny-house construction, many sell poorly built houses and tend to undercut prices. Some of the smaller companies use lower-quality materials to increase their profit margins. As tiny-house customers value innovative, high-quality construction, these trends have hurt the industry's sales and reputation.

APPENDIX II DEMAND AND ESTIMATED COSTS

Demand

Construction of a tiny house requires several commodities, such as wood and steel, whose prices fluctuate. Market research shows a wide range in prices for tiny houses of similar quality. The projected annual demand for TinyCo is as follows.

Business model #1 – without buyer participation

Price per Tiny House (in Canadian dollars)	Projected Annual Demand for TinyCo Houses
\$100,000	6
\$ 75,000	11
\$ 50,000	16

Business model #2 – with buyer participation

Price per Tiny House (in Canadian dollars)	Projected Annual Demand for TinyCo Houses
\$97,000	8
\$72,000	13
\$47,000	18

The estimated number of customers in North America is 10,000 annually, of which 25% are in Canada.

The typical buyer:

- is 20 to 30 years old
- has an annual family income of \$50,000 or less
- is seeking affordable housing
- wants the builder to provide World Tiny House Organization (WTHO) certification as evidence of meeting environmental and sustainability standards
- is likely to donate \$20 to crowdfunding campaigns to encourage sustainability

APPENDIX II (continued)
DEMAND AND ESTIMATED COSTS

Estimated costs

Under both business models, TinyCo designs a customized floor plan for each house at an estimated cost of \$7,000 per house, and builds the house on a trailer base that costs \$25,000.

Construction of a tiny house costs \$10,000 in labour. If the buyer helps with construction, TinyCo can save \$8,000 in construction labour costs but could spend \$5,000 more in other labour costs, for training and supervision of the buyer.

TinyCo's costs for materials are estimated at \$15,000 per house without buyers' participation. With buyers' participation, TinyCo's costs will increase by \$4,000 because buyers make mistakes that require more materials.

Fixed overhead is estimated to be \$100,000 annually for up to 16 houses, and \$160,000 if more than 16 houses are built in a year.

All TinyCo houses will be WTHO-certified, which costs \$2,000 per house.

APPENDIX III FUNDING SOURCES

Options

- We might have enough personal savings by this spring to fund the start-up costs, but that would exhaust our savings. If we have not saved enough by then, we can use money from our RRSPs.
- Cash Mart would loan us \$600,000, repayable monthly over two years at an annual interest rate of 18%. The first payment would be due within 30 days of the loan being granted. If any scheduled payment is missed, the balance of the loan would become due immediately.
- An angel investor would contribute \$600,000 in exchange for a 60% ownership of TinyCo. The investor has extensive business experience and is well known in the Information Technology community.
- We can start a crowdfunding campaign.
- We can apply for a four-year grant (see below).

Grant agreement

To help expand the tiny-house movement throughout Canada, the Canadian Tiny House Association provides funding. Eligible companies will receive \$550,000 on April 1, 2019. The full amount is forgivable, conditional upon the company providing an audit report confirming it complies with the grant requirements.

The \$550,000 must be allocated as follows: \$350,000 for operating expenses, with at least \$60,000 to be spent in each of the four years of the grant; and \$200,000 for capital expenditures. Any amounts not appropriately spent at the end of the four years must be repaid.

The grant requirements are as follows:

- TinyCo must not compensate each shareholder more than \$75,000 annually.
- TinyCo must produce and sell a minimum of 10 tiny houses annually.
- Each tiny house must:
 - not exceed 400 square feet
 - not be sold for more than \$100,000
 - be WTHO-certified

If the requirements are not met, the full amount must be repaid by March 31, 2023.

APPENDIX IV MOVING EXPENSES

When Shawn moved his family from Nova Scotia to British Columbia to work for Luxury, he incurred the following expenses:

		Note
Shipping	\$ 25,000	1
Storage	2,800	2
Travel	5,250	3
Administrative	500	4
Old house	37,000	5
Temporary housing	1,500	6
New house	352,300	7
Moving truck	4,000	8
	\$ 428,350	

Notes:

1. Shipping costs were to move the family belongings from Nova Scotia.
2. The belongings were stored in British Columbia for one month.
3. Travel was for flights for Shawn, his wife and their three children from Nova Scotia to British Columbia.
4. Administrative expenses were: changing address – \$150; and replacing driver’s licences – \$350.
5. Costs incurred for the six months it took to sell the Nova Scotia home were: utilities – \$8,000; legal fees – \$1,500; realtor commission – \$15,000; property taxes – \$6,000; and insurance – \$6,500.
6. Shawn’s family rented a house in British Columbia for one month before buying a house.
7. Expenses related to the new home purchase were: purchase price – \$350,000; legal fees – \$2,000; and utilities connection – \$300.
8. A moving truck was rented to move the stored belongings to the new home.

Shawn’s 2018 income totalled \$140,000: \$90,000 from his job in Nova Scotia and \$50,000 from Luxury.

MARKING GUIDE 3-3
TINYCO
ASSESSMENT OPPORTUNITIES

To: Christopher and Shawn Zane

From: CPA

Subject: TinyCo

Assessment Opportunity #1 (Depth and Breadth Opportunity)

The candidate analyzes the two business models and recommends a price.

The candidate demonstrates competence in Management Accounting.

CPA Map Competencies:

3.3.1 Evaluates cost classifications and costing methods for management of ongoing operations (Core – Level A)

3.4.1 Evaluates sources and drivers of revenue growth (Core – Level B)

Cost per Tiny House

There are two business models proposed:

- Model #1 – without buyer participation
- Model #2 – with buyer participation

Before selecting a price for each tiny house, we need to calculate the cost to build a tiny house under both business models.

Building Costs	Model #1	Model #2	Note
Labour			
Design	\$ 7,000	\$ 7,000	1
Construction labour	10,000	10,000	2
Savings on labour	0	(3,000)	2
Total labour	\$ 17,000	\$ 14,000	
Materials			
Trailer base	\$ 25,000	\$ 25,000	3
Materials	15,000	15,000	4
Additional materials	0	4,000	4
Total materials	\$ 40,000	\$ 44,000	
WTHO-certification	2,000	2,000	5
Total direct costs per unit	\$ 59,000	\$ 60,000	

Notes:

1. Under both models, TinyCo will incur \$7,000 in design costs per tiny house.
2. Under Model #1, TinyCo's labour cost per tiny house is \$10,000, but under Model #2, TinyCo's labour cost decreases by \$3,000 (\$8,000 savings offset by additional \$5,000 for training and supervision of buyers).
3. Under both models, TinyCo will incur \$25,000 for the trailer base of the tiny house.
4. Under Model #1, TinyCo will incur \$15,000 in material costs per tiny house, but under Model #2, costs will increase by an estimated \$4,000 because buyers often make mistakes that require additional materials.
5. Under both models, the tiny houses will be certified by the World Tiny House Organization (WTHO), which costs \$2,000 per tiny house.

Profitability

Using the price and demand information provided, the cost per tiny house calculated above, and the estimated overhead costs provided, I have calculated the expected profit (loss) for each price point under both business models.

Model #1

Price per unit	\$ 50,000	\$ 75,000	\$ 100,000
Cost per unit	\$ (59,000)	\$ (59,000)	\$ (59,000)
Contribution margin	\$ (9,000)	\$ 16,000	\$ 41,000
Demand	16 units	11 units	6 units
	\$ (144,000)	\$ 176,000	\$ 246,000
Overhead	\$ (100,000)	\$ (100,000)	\$ (100,000)
Profit (loss)	\$ (244,000)	\$ 76,000	\$ 146,000

Model #2

Price per unit	\$ 47,000	\$ 72,000	\$ 97,000
Cost per unit	\$ (60,000)	\$ (60,000)	\$ (60,000)
Contribution margin	\$ (13,000)	\$ 12,000	\$ 37,000
Demand	18 units	13 units	8 units
	\$ (234,000)	\$ 156,000	\$ 296,000
Overhead (Note 1)	\$ (160,000)	\$ (100,000)	\$ (100,000)
Profit (loss)	\$ (394,000)	\$ 56,000	\$ 196,000

Note 1: Overhead will be \$160,000 if more than 16 houses are built in a year.

The most profitable option would be to include the buyer and to price each tiny house at \$97,000. However, there are factors other than profit and price point to take into consideration, such as the grant requirement that a minimum of 10 tiny houses be sold each year.

Therefore, I recommend that TinyCo select Model #1 and price each tiny house at \$75,000. This will provide the most profit to TinyCo while meeting the grant requirements. As my calculations are based on estimates, the recommendation may differ if actual demand varies from estimated demand.

For Assessment Opportunity #1 (Management Accounting), the candidate must be ranked in one of the following five categories:

Not Addressed – The candidate does not address this assessment opportunity.

Nominal competence – The candidate does not meet the standards of reaching competence.

Reaching competence – The candidate attempts to analyze the business model or the pricing options.

Competent – The candidate performs a reasonable analysis of the business model and the pricing options and makes a recommendation.

Competent with distinction – The candidate performs a thorough analysis of the business model and the pricing options and makes a recommendation.

Assessment Opportunity #2 (Breadth Opportunity)

The candidate discusses the advantages and disadvantages of the funding sources identified.

The candidate demonstrates competence in Finance.

CPA Map Competencies:

5.2.3 Evaluates sources of financing (Core – Level B)

Sources of Funds

TinyCo needs \$600,000 to fund the start-up costs. Based on the information provided, I have identified the following sources of financing, and the associated advantages and disadvantages of each.

Source	Advantages	Disadvantages
Personal funds from Shawn and Christopher	Using personal funds means that you retain ownership and complete control over TinyCo.	<p>There is no guarantee that you can gather sufficient personal funds by the time the capital is required.</p> <p>If the business is not successful, you will lose all your personal funds.</p> <p>Should a personal emergency arise, you will not be able to use these funds and, assuming you qualify, may need to take out a personal loan at greater cost.</p> <p>Using RRSPs in a risky venture like this one would be detrimental in two ways: an immediate tax impact would be triggered; and you are putting at risk funds designed to meet your retirement needs.</p>
Cash Mart loan of \$600,000 plus interest at 18% per year, payable over two years.	<p>You will retain complete control over the company.</p> <p>There is certainty over the amount of capital available and when it will be available.</p>	<p>The significant interest expense of \$108,000 per year puts TinyCo in a loss position with the preferred business model.</p> <p>Repayment of the loan begins within 30 days of receipt. The company may not have sufficient cash flow after 30 days to make the first payment, which would make the full amount of the loan due immediately. This would have a significant negative impact on the ability of the business to continue its operations.</p>
Angel investor – \$600,000 for 60% ownership	<p>There is certainty over the funds that are available and when they will be available.</p> <p>As it is an equity investment, there is no required repayment.</p> <p>As they have a significant amount of business experience, you could potentially gain knowledge from the angel investor.</p>	<p>As the angel investor requires 60% of the company shares, you would lose control over TinyCo. The angel investor may make strategic decisions that are not aligned with your objectives.</p> <p>This financing implies a valuation of \$1 million for TinyCo (\$600,000 / 60%). In addition to giving up 60% of ownership, you would also forgo 60% of any future growth in the value of the business, beyond the \$1 million implied. The angel investor could restrict your compensation, and even</p>

Source	Advantages	Disadvantages
		<p>sell TinyCo in the future, putting your employment at risk.</p> <p>The angel investor's IT knowledge is not related to the tiny house movement and may not be very useful to Christopher, who already has a significant amount of business knowledge.</p>
Crowdfunding	<p>Depending on the platform used, the cost associated with raising capital from crowdfunding is usually minimal. A fee of around 5% could be charged on some platforms.</p> <p>Using crowdfunding to raise capital will provide insight into the size of the tiny house market. A large number of individuals contributing could suggest that a large number of potential customers exist, or that contributors see the need to help low-income couples get into the housing market.</p> <p>If it is used to finance specific objectives of the company, crowdfunding can be used multiple times. For example, a crowdfunding campaign could be used to raise money for a specific tool required to build tiny houses and a different crowdfunding campaign could be used to raise money for specialized training of labourers.</p>	<p>There is a significant amount of uncertainty as to when and whether enough capital will be raised.</p> <p>The demographic targeted as likely to contribute may not have much disposable income. The targeted customer donates, on average, \$20 to crowdfunding and there are an estimated 2,500 Canadian customers ($10,000 \times 25\%$), resulting in an insufficient amount of capital being raised (\$50,000).</p> <p>The amount of crowdfunding received may be taxable, which would reduce the funding available.</p>
Grant (total of \$550,000 as of April 1, 2019)	<p>If TinyCo is eligible to receive the grant, there is certainty around the amount of capital TinyCo will receive (although it is conditional funding).</p> <p>As the grant agreement provides a timeline of when the funds will be provided, there is certainty around the timing of when funds will be available. This provides assurance</p>	<p>The grant agreement does not provide sufficient capital funds to cover TinyCo's needs. This option would have to be combined with another financing option.</p> <p>Because there is a requirement to spend at least \$60,000 of the operating grant each year, TinyCo would have to set aside \$180,000 ($\\$60,000 \times 3$ years) to spend in each of the second, third and fourth years</p>

Source	Advantages	Disadvantages
	<p>that sufficient funds will be available when required.</p> <p>If the audit requirements stipulated in the grant agreement are met, TinyCo would not have to repay any of the grant funds received.</p> <p>There are no costs associated with using grant funds (no interest expense).</p>	<p>of the grant. Therefore, the entire \$550,000 would not be available when the grant is received.</p> <p>If the grant audit requirements are not met, the full amount of the grant must be repaid, which could inflict financial hardship on the company.</p> <p>The costs incurred to complete the grant audit would be an additional expense.</p> <p>If the grant offer is accepted, the maximum Shawn can make is \$75,000, which is much lower than the \$140,000 he made last year. However, he may be able to supplement his funds through other means, including through work for Luxury.</p> <p>The grant requires that a minimum of 10 tiny houses be sold annually, at a maximum price of \$100,000. This will limit the options available to TinyCo in terms of pricing strategy and the demand for each price point.</p>

If TinyCo gets the grant, it must meet the requirements specified in the agreement or repay the grant funds. If TinyCo prices each of the tiny houses at the highest price, it will comply with the grant's requirement to not sell a tiny house for more than \$100,000.

Depending on the model picked, however, the estimated maximum demand at the highest price point is either six or eight units, less than the minimum of 10 tiny houses that the grant requires be sold each year. If TinyCo decides to go with the highest price point, it runs the risk of not being compliant with the grant. The demand data is from 2017, so hopefully sales will continue to increase, but TinyCo would be required to repay the grant if the minimum of 10 tiny houses is not met.

To comply with the minimum requirement of 10 tiny houses per year and to maximize its profit, TinyCo would have to pick the model without the buyer's involvement and set the price at \$75,000. By picking this model rather than the most profitable one, TinyCo is foregoing \$120,000 of profit a year (\$196,000 - \$76,000) and is foregoing \$480,000 of profit over the four years of the \$550,000 grant. Since the benefits exceed the cost, it appears worth doing, especially as the grant provides free financing. It would be worth exploring whether TinyCo would be able to switch to a more profitable pricing model once the grant is over without losing market share. If this is unlikely, the grant might not be worth pursuing, since you would forego a significant profit annually, for more than four years.

I recommend that you apply for the grant funding, which covers most of your financing needs (\$550,000 out of \$600,000). In order to determine whether the split matches the conditions set in the grant agreement, however, you would have to determine the portion of the \$600,000 needed for capital expenses and the portion needed for operating expenses. Because the grant states that \$60,000 of the \$350,000 granted for operating expenses needs to be spent each year, \$60,000 would have to be set aside for each of the second, third, and fourth years. This would only leave \$370,000 available [$\$550,000 - (3 \times \$60,000)$] in the spring of 2019. Another option is to use the entire amount of the grant when received and rely on the cash flows generated from operations in the subsequent years to cover the minimum operating expenditure requirements. There is the risk that the grant will have to be repaid if the grant requirements are not met. This risk seems minimal compared to the uncertainties and risks related to the other financing options. If you get the grant, there would be additional funding needed. However, you could see if some of your estimated \$600,000 financing needs could be deferred to the following years. Crowdfunding may generate an additional \$50,000. You could also ask customers to provide a deposit on the construction of their tiny house, which is a common practice in the construction industry. If any additional funds are required, you could use your personal savings.

For Assessment Opportunity #2 (Finance), the candidate must be ranked in one of the following five categories:

Not Addressed – The candidate does not address this assessment opportunity.

Nominal competence – The candidate does not meet the standards of reaching competence.

Reaching competence – The candidate discusses a few of the advantages and disadvantages of the potential sources of funds.

Competent – The candidate discusses several of the advantages and disadvantages of the potential sources of funds.

Competent with distinction – The candidate discusses most of the advantages and disadvantages of the potential sources of funds.

Assessment Opportunity #3 (Depth and Breadth Opportunity)

The candidate discusses the accounting treatment for the grant under ASPE.

The candidate demonstrates competence in Financial Reporting.

CPA Map Competencies:

1.2.1 Develops or evaluates appropriate accounting policies and procedures (Core – Level A)

1.2.2 Evaluates treatment for routine transactions (Core – Level A)

Grant Revenue Recognition

Based on the grant agreement, there are different recognition criteria applicable to each section of the grant.

\$350,000 towards operating expenses – recognition

This \$350,000 grant is to go towards operating expenses, with at least \$60,000 to be spent in each of the four years of the grant. This means that \$240,000 of the \$350,000 grant ($\$60,000 \times 4$ years) has to be spent in a specific time frame, and the remaining \$110,000 can be spent at any time during the four-year grant.

Per ASPE Section 3800.16 to .18:

Current expenses and revenues

“Many government programs provide for the reimbursement of certain current eligible expenses. Similarly, an enterprise may receive direct payments from the government to supplement selling prices. Since these types of assistance are related to current expenses or revenues, they are logically included in the determination of net income for the period.

“Government assistance toward current expenses or revenues shall be included in the determination of net income for the period.

“The presentation of government assistance in the income statement will depend on circumstances. The alternatives available are to show expenses net of assistance or to show the assistance as a deduction from aggregate expenses or as revenue.”

This accurately describes the \$240,000 portion of the \$350,000 operating expense grant. This means that, although TinyCo has received \$240,000 ($\$60,000 \times 4$ years) on April 1, 2019, it must recognize the lesser of \$60,000 or the actual amount spent on operating expenses as revenue annually over the four years of the grant period. The actual expenses incurred will be recorded to the appropriate expense accounts.

If only \$50,000 is spent during the first year, then \$50,000 will be recorded in the appropriate expense accounts and \$50,000 will be recognized as revenue. \$10,000 will be removed from deferred revenue and set up as a liability since it is repayable at the end of the four-year grant period. The balance in deferred revenue will be \$290,000 (\$350,000 - \$50,000 - \$10,000).

Per ASPE Section 3800.19 to .20:

Expenses of future periods

.19 Some types of government assistance are received or receivable in a period but relate to expenses that will be incurred in future periods. It would not be appropriate to apply all of the assistance to the expenses in the current period if subsequent accounting periods will continue to bear relevant expenses.

.20 When government assistance relates to expenses of future accounting periods, the appropriate amounts shall be deferred and amortized to income as related expenses are incurred.

If, for example, \$75,000 is spent during the first year, then \$75,000 will be recorded to the appropriate expense accounts. \$75,000 will be recognized as revenue based on \$60,000 of the \$240,000 portion of the grant and \$15,000 of the remaining \$110,000 of the \$350,000 operating expense grant. The balance in deferred revenue will be \$275,000 (\$180,000 + \$95,000).

In its financial statements, TinyCo can choose to show the revenue and expenses separately or to show the expenses net of the grant.

\$200,000 towards capital expenditures – recognition

Per ASPE Section 3800.21 to .22:

“Some government programs provide for assistance towards the acquisition of fixed assets. The net outlay is charged to income over the useful life of the related fixed assets. Government assistance towards the acquisition of fixed assets shall be either:

- a. Deducted from the related fixed assets with any depreciation calculated on the net amount; or*
- b. Deferred and amortized to income on the same basis as the related depreciable fixed assets are depreciated.”*

This means that if, for example, TinyCo purchased \$225,000 of capital items during the year, you could either:

- a. record \$25,000 to capital assets (\$225,000 - \$200,000) and depreciate the \$25,000 going forward; or

- b. record \$225,000 to capital assets and \$200,000 to deferred grant revenue, depreciate the \$225,000 going forward, and amortize the grant revenue to income on the same basis as the related capital assets are depreciated.

Possible Repayment

\$350,000 – Operating

Per ASPE Section 3800.28 and 28(d) - .29:

“Even though there is a basic presumption inherent in most government assistance programs that the assistance will not be repaid, the programs may stipulate conditions under which an enterprise may be required to repay the assistance in whole or in part. When circumstances arise that indicate that repayment will be required, an economic event has occurred that shall be accounted for prospectively.

“When the original receipt of government assistance was applied to reduce expenses or increase revenues, any repayment thereof shall be reflected in the current income statement.

“The liability to repay government assistance shall be accounted for in the period in which conditions arise that will cause government assistance to be repayable.”

This means that, if TinyCo does not meet the requirements specified in the agreement and is required to repay the grant, it would record an entry that increases liability as it will be repayable at the end of the four-year grant period and increases expenses (or decreases revenue if the initial entry credited revenue) by the amount that is repaid.

If TinyCo does not spend the entire operating grant, any unused funds must be returned. It would then record an entry that increases liability and decreases deferred revenue.

\$200,000 – Capital

If the requirements specified in the agreement are not met, the grant will need to be repaid. According to Section 3800.28:

- a. *“When the cost of fixed assets was reduced by the original receipt of the assistance, the cost of the assets shall be increased by the applicable repayment. The effect on depreciation shall be accounted for prospectively.*
- b. *When the original receipt of government assistance relating to fixed assets was treated as a deferred credit, the unamortized balance of the deferred credit shall be adjusted by the applicable repayment. Future amortization shall be based on the resulting balance.”*

Depending on how the original transaction was recorded, cash would be decreased (or the liability increased if paid at a later date) and you could either:

- a. record the amount repaid to capital assets and depreciate it going forward; or
- b. decrease the amount of deferred revenue by the repayment amount and adjust future amortization accordingly.

For Assessment Opportunity #3 (Financial Reporting), the candidate must be ranked in one of the following five categories:

Not Addressed – The candidate does not address this assessment opportunity.

Nominal competence – The candidate does not meet the standards of reaching competence.

Reaching competence – The candidate attempts to discuss the accounting treatment for the grant.

Competent – The candidate discusses the accounting treatment for the grant, recognizing the different treatments for operating and capital and/or the potential liability if terms are not met.

Competent with distinction – The candidate thoroughly discusses the accounting treatment for the grant, including the different treatments for capital and operating and the potential liability.

Assessment Opportunity #4 (Breadth Opportunity)

The candidate discusses the procedures that would be performed for the grant agreement requirements.

The candidate demonstrates competence in Audit and Assurance.

CPA Map Competencies:

4.3.6 Develops appropriate procedures based on the identified risk of material misstatement (Core – Level B)

Grant Audit Procedures

According to the grant agreement, there are different requirements to be met. The auditor would need to read the grant agreement to ensure that they understand the requirements fully. I have developed procedures for each requirement that the auditor might perform.

Expenditure Requirements

For the operating expenses, the auditor would typically ask for the annual financial statements. The auditor will vouch the operating expenses recorded to source documentation (invoices, cancelled cheques, statements, etc.), to ensure that expenditures were accurately recorded and relate to those operating expenses. The auditor would recalculate the operating expenses of TinyCo each year to ensure that at least \$60,000 of operating expenses have been spent and therefore qualify for the annual \$60,000 operating expense grant. In addition, the auditor would verify that at least an additional \$110,000 was spent on operating expenses over the four years of the grant.

For the capital items, the auditor would typically request TinyCo's capital asset listing and vouch the amounts recorded to source documentation (bills of sale, invoices, receipts, etc.), to ensure that the expenditures were accurately recorded, that they are capital in nature and that TinyCo has obtained ownership of the assets. The auditor would also verify that at least \$200,000 was spent on capital expenditures over the four years of the grant.

Requirement a)

The auditor would typically request the salary records (wage expense account records, personal income tax slips (T4s), etc.), to verify that neither Christopher nor Shawn received wages higher than \$75,000 annually from TinyCo.

To ensure that any other payments are valid (expense reimbursements, etc.) and are not an attempt to compensate them by classifying such payments as something other than wages, the auditor could also check for other payments made to Christopher or Shawn that are not recorded as wages. If TinyCo paid dividends to its shareholders, the auditor would have to determine, based on the details of the grant agreement, whether dividends are to be included in the \$75,000 compensation limit.

Requirement b)

The auditor would typically request TinyCo's inventory listing and sales records in each of the four years, to calculate the number of tiny houses produced and sold each year, and compare it to the minimum of 10 tiny houses specified in the agreement. As external validation that the sale occurred, each sale should also be traced to a bill of sale signed by the customer.

Requirement c)

The auditor would typically request the final floor plans and/or bill of sale for each of the tiny houses produced during the year, to verify that each was less than 400 square feet.

Requirement d)

The auditor would typically request the bill of sale for each of the tiny houses sold, TinyCo's sales records, and bank statements, to verify that TinyCo did not receive more than \$100,000 for each tiny house produced. Whether this includes GST should also be clarified in the agreement.

Requirement e)

The auditor would typically request the proof of WTHO-certification for each of the tiny houses, to verify that the tiny house has met the sustainability requirements. If TinyCo did not retain the proof of certification, the auditor could consider sending a confirmation request to WTHO.

For Assessment Opportunity #4 (Audit and Assurance), the candidate must be ranked in one of the following five categories:

Not Addressed – The candidate does not address this assessment opportunity.

Nominal competence – The candidate does not meet the standards of reaching competence.

Reaching competence – The candidate provides procedures for some of the grant agreement requirements.

Competent – The candidate provides procedures for several of the grant agreement requirements.

Competent with distinction – The candidate provides procedures for most of the grant agreement requirements.

Assessment Opportunity #5 (Breadth Opportunity)

The candidate provides an analysis of TinyCo's strengths, weaknesses, opportunities and threats (SWOT).

The candidate demonstrates competence in Strategy and Governance.

CPA Map Competencies:

2.3.2 Evaluates the entity's internal and external environment and its impact on strategy development (Core – Level B)

SWOT Analysis

You asked for an assessment of TinyCo's strengths, weaknesses, opportunities and threats for the grant application. The entity's internal environment is evaluated by identifying its strengths and weaknesses that relate to achieving its objectives. The entity's external environment is evaluated by identifying the opportunities and threats that relate to achieving its objectives.

	Strength	Weakness
Internal	<p>Shawn has specialized in tiny house carpentry. As there are very few individuals who have specialized in this type of construction, the tiny houses created by TinyCo may be of higher quality and more innovative than its competitors, which would be a competitive advantage.</p> <p>Christopher's significant experience in the home-building industry could benefit TinyCo through existing vendor relationships and process efficiencies.</p> <p>TinyCo may be able to gain economies of scale from Luxury.</p> <p>Christopher and Shawn are brothers and have worked well together in the past.</p>	<p>Christopher has experience building luxury homes and may struggle to keep costs down for houses to be sold at a much lower price. This may have a negative impact on the overall profit margin.</p> <p>TinyCo has not started production and is therefore very reliant on assumptions for operating costs.</p> <p>Although Christopher and Shawn have worked together in the past, they are both stubborn, which may cause friction between them.</p> <p>Christopher will continue to operate Luxury, so he will probably have less time to focus on TinyCo.</p>
	Opportunities	Threats
External	<p>TinyCo's eligibility for grant funding offers a less expensive source of financing.</p> <p>The tiny house industry is growing and there is opportunity for TinyCo to gain a large market share.</p> <p>Many of the new entrants into the tiny house market lack experience or expertise in tiny house construction and the quality of their construction is therefore poor. Shawn has specialized knowledge in producing high-quality, tiny houses, giving TinyCo a competitive advantage as</p>	<p>The tiny house industry is relatively new in Canada; as data provided is based on North America, the market information available may not be complete or could change drastically, which would have a significant impact on TinyCo's business model.</p> <p>Target customers are lower income; therefore, there is potentially less profitability per sale as the margins may be smaller if there is pressure to keep prices low.</p> <p>Target customers seek WTHO-certification; to continue to receive certification, TinyCo will have to ensure that it remains compliant with WTHO requirements, which may increase the cost of construction.</p>

	<p>customers still favour quality construction.</p> <p>Housing costs in British Columbia and across Canada can often be quite high, and this industry has found a way to reduce the cost of housing, which could mean large demand for the product.</p>	<p>The increasing number of competitors in the North American industry could mean less market share for TinyCo.</p> <p>There have already been a number of new entrants into the market and the quality of their workmanship is low. This could make it difficult for TinyCo to break into the industry, and could also mean that the industry does not have much of a future; if customers believe that high-quality, tiny houses cannot be built, based on existing homes, they may not be interested.</p> <p>TinyCo houses are constructed from commodity-based goods (e.g., wood and steel). The commodity market can be volatile, which could lead to significant variability in the cost of building materials required, making budgeting difficult for TinyCo. Improper budgeting could impact profitability.</p>
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Based on the analysis completed above, TinyCo has several internal strengths that would help it successfully take advantage of the opportunities that currently exist in the external environment.

For Assessment Opportunity #5 (Strategy and Governance), the candidate must be ranked in one of the following five categories:

Not Addressed – The candidate does not address this assessment opportunity.

Nominal competence – The candidate does not meet the standards of reaching competence.

Reaching competence – The candidate identifies some of the SWOT factors impacting TinyCo.

Competent – The candidate discusses some of the SWOT factors impacting TinyCo.

Competent with distinction – The candidate discusses several of the SWOT factors impacting TinyCo.

Assessment Opportunity #6 (Breadth Opportunity)

The candidate calculates the net moving expenses and allowable moving expenses.

The candidate demonstrates competence in Taxation.

CPA Map Competencies:

6.2.2 Determines income taxes payable for an individual in routine situations (Core – Level B)

Eligibility

As Shawn has moved more than 40 kilometers closer to his place of work at Luxury (moving from Nova Scotia to British Columbia), he is eligible to deduct moving expenses. There are restrictions regarding the amount and types of expenses that may be claimed as moving expenses, as well as restrictions over the income against which the expenses may be claimed.

Net Moving Expenses

Some of the expenses provided by Shawn are not deductible as they are considered ineligible. Based on the information provided, I have estimated deductible moving expenses at \$61,180 (\$66,180 - \$5,000 allowance).

Description	Note	Expenses	Adjustment	Net
Shipping	1	\$ 25,000	\$ 0	\$ 25,000
Storage	1	2,800	0	2,800
Travel	1	5,250	0	5,250
Administrative	1	500	0	500
Moving truck	1	4,000	0	4,000
Old house	2	37,000	(15,500)	21,500
Temporary housing	3	1,500	(750)	750
New house	4	352,300	(350,000)	2,300
Meals	5	0	4,080	4,080
Total		\$ 428,350	\$ (362,170)	\$ 66,180

Notes:

1. Amount is fully deductible.

2. The legal fees of \$1,500 and the realtor commission of \$15,000 incurred to sell the old home are eligible moving expenses and therefore remain included in the net moving expenses. The remaining expenses, totalling \$20,500 (\$8,000 + \$6,000 + \$6,500), for utilities, property taxes and insurance, are costs incurred to maintain the old home when vacant. Costs incurred to maintain the old home when vacant are eligible moving expenses; however, they are limited to \$5,000. Therefore, the net moving expenses must be reduced by \$15,500 (\$20,500 - \$5,000).
3. Since it is for one month, the temporary housing expense is not an eligible moving expense. Temporary living expenses can only be claimed for up to a maximum of 15 days for meals and temporary lodging. The \$1,500 paid to rent temporary lodging can be prorated based on the number of days in the month. Shawn arrived in British Columbia in June, which has 30 days. As the maximum claim is 15 days, the maximum temporary lodging that can be claimed is one-half of the total cost, being \$750.
4. The cost to purchase the new home is not an eligible moving expense and therefore the net moving expenses must be reduced by \$350,000. The legal fees incurred to purchase the home and the expenses incurred to hook up utilities to the new home are eligible, and remain included in the net moving expenses.
5. There are two methods for calculating the meal expenses: detailed or simplified. Using the detailed method, you must keep all your receipts and claim the actual amount that you spent. Using the simplified method, you may claim a flat rate per person of \$17 per meal, up to a total of \$51 per day per person. Since Shawn has not included meals in his list of moving expenses, I will use the simplified method. Since Shawn's family consists of five people (Shawn, his wife and their three children), the total eligible amount that can be claimed for the time spent waiting for their new house to be available is \$255 per day (\$51/day/person × 5 people). In addition to the 15 days, Shawn is also eligible to claim meals for the travel day—it is reasonable to assume that travel from Nova Scotia to British Columbia would require a full day. The maximum number of days you can claim is 16 (15 + 1) and so, the maximum meal expense you can claim is \$4,080 (16 × \$255).

Allowable Moving Expenses

Please keep in mind that the allowable moving expense is limited to net eligible income. Shawn's net eligible income is the amount he earned from working at his new location (Luxury), which is \$55,000 (\$50,000 salary + \$5,000 allowance). Therefore, the allowable moving expenses that Shawn can claim this year are \$55,000.

Net moving expenses	\$66,180
Versus	
Net eligible income	<u>55,000</u>
Allowable moving expense	<u>\$55,000</u>

Since Shawn's moving expenses are greater than his net eligible income, the difference is carried forward as unused moving expenses, available to be deducted against his future net eligible income in the following year.

Net moving expenses	\$66,180
Less: net eligible income	<u>55,000</u>
Carryforward moving expenses	<u>\$11,180</u>

If Shawn received a reimbursement or allowance from his employer for eligible moving expenses, he can only claim his moving expenses if he includes the amount of allowance received in his income, or if he reduces his moving expenses by the allowance received. As it is not considered a reasonable allowance, the \$5,000 relocation allowance received from Luxury must be included in Shawn's income. Alternatively, the net moving expenses may be reduced by this amount.

For Assessment Opportunity #6 (Taxation), the candidate must be ranked in one of the following five categories:

Not Addressed – The candidate does not address this assessment opportunity.

Nominal competence – The candidate does not meet the standards of reaching competence.

Reaching competence – The candidate attempts to discuss or calculate the allowable moving expenses.

Competent – The candidate discusses or calculates the allowable moving expenses.

Competent with distinction – The candidate discusses or calculates the allowable moving expenses and discusses the carry forward of the unused moving expenses.

APPENDIX E

RESULTS BY ASSESSMENT OPPORTUNITIES FOR DAY 2 AND DAY 3

THE LEVEL 2 DEPTH TEST (DAY 2 and DAY 3)**Financial Reporting:**

		NA	NC	RC	C	CD	C+CD
Day 2 Common							
AO4	Foreign exchange transactions	4%	14%	31%	46%	5%	51%
AO5	Revenue recognition	1%	16%	37%	44%	2%	46%
AO6	Onerous contract and ARO	1%	9%	20%	62%	8%	70%
Day 3 – Q1 StillGood Foods							
AO6	NPO Contributions	6%	38%	21%	30%	5%	35%
AO7	Equipment Lease	3%	21%	28%	35%	13%	48%
Day 3 – Q3 TinyCo							
AO3	Grant	5%	30%	31%	31%	3%	34%

Management Accounting:

		NA	NC	RC	C	CD	C+CD
Day 2 Common							
AO1	Variance analysis	2%	10%	36%	49%	3%	52%
AO2	Contract analysis	1%	6%	32%	55%	6%	61%
AO3	Reporting improvements	5%	20%	29%	43%	3%	46%
Day 3 – Q1 StillGood Foods							
AO1	Pricing options	1%	21%	32%	35%	11%	46%
Day 3 – Q2 VEC							
AO1	Revised cost allocations	1%	14%	0% ¹	84%	1%	85%
AO2	Sunglasses line	2%	34%	25%	34%	5%	39%
Day 3 – Q3 TinyCo							
AO1	Pricing alternatives	3%	23%	34%	32%	8%	40%

¹ Candidates at RC were awarded C on this AO due to a question ambiguity

THE LEVEL 3 DEPTH TEST ROLES (DAY 2)

Audit and Assurance		Papers	NA	NC	RC	C	CD	C+CD
AO7	Artwork	6179	6%	39%	36%	18%	1%	19%
AO8	Audit planning memo	6179	1%	7%	24%	63%	5%	68%
AO9	Procedures (for the accounting issues)	6179	3%	24%	22%	42%	9%	51%
AO10	Procedures (cash flow forecast)	6179	3%	31%	25%	38%	3%	41%
AO11	Procedures (agreement)	6179	2%	19%	25%	50%	4%	54%
AO12	Internal control weaknesses	6179	1%	10%	33%	50%	6%	56%
AO13	Environmentally responsible statements	6179	5%	26%	21%	42%	6%	48%

Finance		Papers	NA	NC	RC	C	CD	C+CD
AO7	Forecast assumptions	429	2%	4%	54%	39%	1%	40%
AO8	Funding options	429	8%	14%	37%	40%	1%	41%
AO9	DCF valuation	429	4%	13%	48%	34%	1%	35%
AO10	Asset-based valuation	429	9%	30%	23%	37%	1%	38%
AO11	Government funding offer	429	13%	11%	37%	38%	1%	39%
AO12	Battery testing device	429	7%	13%	31%	48%	1%	49%
AO13	Platinum hedging	429	10%	12%	32%	45%	1%	46%

THE LEVEL 3 DEPTH TEST ROLES (DAY 2)

Performance Management		Papers	NA	NC	RC	C	CD	C+CD
AO7	Compare 2017 forecast to actual	1338	11%	22%	17%	45%	5%	50%
AO8	Risks and mitigation	1338	4%	18%	43%	34%	1%	35%
AO9	Cash projections / cost-cutting	1338	17%	27%	32%	23%	1%	24%
AO10	Piece work	1338	7%	11%	45%	36%	1%	37%
AO11	Electric bicycle project	1338	5%	7%	29%	54%	5%	59%
AO12	Parent co oversight / structure	1338	3%	9%	41%	46%	1%	47%
AO13	Measures and incentives	1338	5%	11%	42%	41%	1%	42%

Taxation		Papers	NA	NC	RC	C	CD	C+CD
AO7	2019 Taxes	390	1%	8%	31%	41%	19%	60%
AO8	Jitcoin & partnerships	390	2%	16%	42%	28%	12%	40%
AO9	Loss planning	390	7%	32%	20%	32%	9%	41%
AO10	CEO compensation	390	2%	5%	41%	42%	10%	52%
AO11	Employee residence	390	2%	8%	32%	42%	16%	58%
AO12	Financing structures	390	13%	34%	26%	21%	6%	27%
AO13	Tax planning proposals	390	3%	10%	34%	40%	13%	53%

THE LEVEL 4 BREADTH TEST (DAY 2 AND DAY 3, BY COMPETENCY AREA)**Financial Reporting:**

		NA	NC	RC	C	CD	RC+C+CD
Day 2 Common							
AO4	Foreign exchange transactions	4%	14%	31%	46%	5%	82%
AO5	Revenue recognition	1%	16%	37%	44%	2%	83%
AO6	Onerous contract and ARO	1%	9%	20%	62%	8%	90%
Day 3 – Q1 StillGood Foods							
AO6	NPO Contributions	6%	38%	21%	30%	5%	56%
AO7	Equipment Lease	3%	21%	28%	35%	13%	76%
Day 3 – Q3 TinyCo							
AO3	Grant	5%	30%	31%	31%	3%	65%

Management Accounting:

		NA	NC	RC	C	CD	RC+C+CD
Day 2 Common							
AO1	Variance analysis	2%	10%	36%	49%	3%	88%
AO2	Contract analysis	1%	6%	32%	55%	6%	93%
AO3	Reporting improvements	5%	20%	29%	43%	3%	75%
Day 3 – Q1 StillGood Foods							
AO1	Pricing options	1%	21%	32%	35%	11%	78%
Day 3 – Q2 VEC							
AO1	Revised cost allocations	1%	14%	0% ¹	84%	1%	85%
AO2	Sunglasses line	2%	34%	25%	34%	5%	64%
Day 3 – Q3 TinyCo							
AO1	Pricing alternatives	3%	23%	34%	32%	8%	74%

¹ Candidates at RC were moved to C by the BOE due to a question ambiguity

THE LEVEL 4 BREADTH TEST (DAY 2 AND DAY 3, BY COMPETENCY AREA)

Strategy and Governance		NA	NC	RC	C	CD	RC+C+CD
Day 3 Q1-AO3	Strategic fit and decision factors	4%	19%	33%	35%	9%	77%
Day 3 Q2-AO3	KPIs	5%	6%	52%	30%	7%	89%
Day 3 Q2-AO4	New partner decision	1%	5%	39%	41%	14%	94%
Day 3 Q3-AO5	SWOT	4%	19%	18%	50%	9%	77%

Audit and Assurance		NA	NC	RC	C	CD	RC+C+CD
Day 3 Q1-AO8	Audit Opinion	3%	9%	40%	27%	21%	88%
Day 3 Q2-AO6	ABC cloud risks & controls	2%	5%	35%	44%	14%	93%
Day 3 Q3-AO4	Procedures	13%	13%	14%	52%	8%	74%

Finance		NA	NC	RC	C	CD	RC+C+CD
Day 3 Q1-AO2	Outside financing	1%	19%	49%	25%	6%	80%
Day 3 Q1-AO5	Investment options	2%	13%	30%	39%	16%	85%
Day 3 Q3-AO2	Funding sources	2%	7%	31%	52%	8%	91%

Taxation		NA	NC	RC	C	CD	RC+C+CD
Day 3 Q1-AO4	Home office expenses	0%	17%	46%	29%	8%	83%
Day 3 Q2-AO5	Tax implications of issues	2%	14%	40%	35%	9%	84%
Day 3 Q3-AO6	Moving expenses	3%	18%	36%	38%	5%	79%

APPENDIX F

BOARD OF EXAMINERS' COMMENTS ON DAY 2 AND DAY 3 SIMULATIONS

**APPENDIX F
BOARD OF EXAMINERS' COMMENTS ON DAY 2 SIMULATION**

Paper/Simulation:	Day 2 (Elcar) – Role Case COMMON REQUIRED
Estimated time to complete:	300 minutes
Simulation difficulty:	Average/ Above Average
Competency Map coverage:	Management Accounting (3); and Financial Reporting (3)

Evaluators' comments by COMMON Assessment Opportunity (AO) for all roles

AO#1 (Platinum Variance Analysis) (Mgmt Acct)

Candidates were asked to perform a variance analysis between the budgeted and actual platinum costs relating to the development of the G1 battery, and report their findings. Information regarding Elcar's purchases and usage of platinum was provided in Appendix III. To demonstrate competence, candidates had to perform a reasonable calculation of the efficiency and price variances for the platinum costs and provide a meaningful interpretation of the results.

Candidates performed as expected on this AO. Most candidates were able to calculate the difference between the actual and budgeted platinum costs and the unit variance by price and grams used, although candidates used a variety of approaches when performing their calculations. Most candidates accurately calculated the price variance, yet struggled to calculate the efficiency variance, as they often did not incorporate the standard quantity into their analysis. Most candidates were able to provide a reasonable interpretation of the results of their quantitative analysis, which typically included at least one plausible explanation for the variances noted.

Strong candidates were able to calculate both the price and efficiency variances and incorporated the concept of standard price and standard quantity into their quantitative analysis. These candidates also provided additional depth when interpreting the variances, integrating case facts to explain the reasons for Elcar being over budget. They often noted that the efficiency variance may be due to wastage as a result of weak internal controls or theft, integrating the information presented in Appendix I, which stated platinum is a precious metal that is susceptible to theft.

Weak candidates provided quantitative analyses that were incomplete, often simply calculating the increase in the price of platinum or the amount of platinum used per battery. These candidates did not usually approach this calculation using the standard flexible budget formula. While these candidates were likely to attempt to interpret the results of their calculations, they often did so in a superficial manner, for example, by simply explaining the math of their calculations or only discussing the cost of platinum without considering the quantity used.

AO#2 (K3Press Contract Analysis) (Mgmt Acct)

Candidates were asked to provide quantitative and qualitative support in assessing whether Elcar should continue or cancel its contract with K3Press. Information regarding the K3Press contract was presented in Appendix III. To demonstrate competence, candidates were expected to perform a reasonable quantitative analysis of the costs associated with the contract, discuss any relevant qualitative considerations, and form a supported conclusion.

Candidates performed well on this AO. Most candidates provided a reasonable calculation of the costs to continue with the contract and included the cost of purchasing the units, revenue from the sale of excess units, and associated commission and advertising expenses. Many candidates did not recognize the potential cost savings of purchasing units at the lower market rate after cancelling the contract, and as a result, did not calculate an accurate cost of cancelling the contract, assuming instead that the cost to cancel would be simply equal to the cancellation fee. Most candidates provided a discussion of qualitative considerations, although it often focused solely on the potential impact to the Elcar-K3Press customer-supplier relationship. Most candidates provided an appropriate conclusion.

Strong candidates recognized the cost savings associated with cancelling the contract as a result of the discrepancy between market and contracted prices for the units. These candidates provided reasonable calculations of both the costs to cancel and to continue in the contract, with limited errors. Strong candidates also provided qualitative considerations that identified both the pros and cons of cancelling the contract, and had a well-supported conclusion that incorporated these qualitative considerations.

Weak candidates often had significant errors in their calculations. These candidates often compared the cancellation fee with the remaining costs to continue in the contract rather than with the loss associated with continuing in the contract, thus comparing two different scenarios. As these candidates often stated a conclusion without qualitative support or simply discussed the math of their calculations, they were unable to demonstrate an understanding of the qualitative aspects that were required to be considered in the analysis.

AO#3 (Reporting Improvements) (Mgmt Acct)

Candidates were asked to review the key measures report that Elcar provides to NHC and recommend improvements that would allow NHC to better monitor Elcar's financial results. Appendix III provided a copy of the most recent key measures report as well as additional information regarding the content that NHC's director of Canadian investments wishes to receive. To demonstrate competence, candidates were expected to provide several valid and supported recommendations for the content of the report that would meet the specific needs of NHC.

Candidates struggled with this more difficult AO. Most candidates provided some suggestions for improving the reporting package; however, these recommendations were often generic in nature, such as simply stating that the new package should contain information on sales or should contain Elcar's current ratio. As a result, these candidates did not directly address how the report could be improved in order to provide information on NHC's specific areas of concern. Those candidates who did address NHC's specific concerns usually limited the number of recommendations to one or two, typically focusing their discussion on Elcar's cash usage or battery development progress.

Strong candidates provided recommendations specific to the concerns identified by NHC, suggesting several reports or metrics that would address the current deficiencies with the reporting package and that were tailored to the situation, such as a sales report with specific metrics, including vehicle sales in units, average sales price per vehicle and orders by geography. These candidates were also able to explain how their recommendations would address NHC's needs, for example, by stating that the sales report and metrics recommended would help determine whether Elcar's strategy of competing at a lower price point has been effective.

Weak candidates listed generic reports and metrics or focused their discussion on process-related improvements, such as the need to formalize the reporting process or conduct the updates in-person, rather than discussing recommendations regarding the content of the report. Many weak candidates misinterpreted the required and provided a variance analysis of the existing report.

AO#4 (Foreign Exchange Transactions) (Fin Rep)

Candidates were asked to assess the accounting treatment of Elcar's foreign currency transactions. Details regarding Elcar's foreign currency transactions were provided in Appendix III. To demonstrate competence, candidates were expected to identify the error in the accounts payable module and provide a reasonable analysis of the foreign exchange transaction issues. Candidates were expected to apply case facts to the fundamental principles (found in IAS 21) and provide a reasonable conclusion that summarized any necessary adjustments.

Candidates generally performed well on this AO. Most candidates identified and understood the cause of the error in the accounts payable module. They also understood that Elcar's functional currency had already been determined. Most candidates recognized that the closing rate should be used for the balances in accounts payable. These candidates were able to calculate the adjustment required, using the table provided in the simulation and the May 31 closing rate. In general, candidates did not attempt to assess the treatment of the foreign exchange on intercompany transactions.

Strong candidates clearly understood the fundamentals of foreign exchange accounting and knew when to use the spot rate versus another rate. They provided additional analysis beyond the adjustment to accounts payable, most often by recognizing the error in how Elcar recorded its intercompany balances, and recommended a valid treatment for the error. For example, they suggested that Elcar revalue the intercompany account, using the CAD-USD rate at the reporting date.

Weak candidates were typically able to identify the error in the accounts payable module. However, many focused their discussion on determining the functional currency of Elcar, which was already stated in the case. Weak candidates often had difficulty applying the fundamental concepts of foreign exchange accounting to the case facts, often using incorrect rates in their calculations; as a result, they did not fully demonstrate their understanding of how the module issue should be corrected.

AO#5 (Revenue Recognition) (Fin Rep)

Candidates were asked to assess the accounting treatment of revenue from car sales made under the new marketing program. Details of the new marketing program were provided in Appendix III. To demonstrate competence, candidates were expected to provide a reasonable analysis of the revenue to be recognized under the new marketing program by incorporating case facts and applying fundamental revenue recognition criteria (guidance found in IFRS 15), and forming a supported conclusion.

Candidates struggled with this AO. While many candidates knew the five revenue recognition criteria found in IFRS 15 and applied case facts to some of those quite well, such as, for example, identification of the contract, most struggled to adequately assess the more critical component of the analysis, which was whether the battery upgrade and the sale of the car should be considered separate performance obligations. Candidates often recognized that separate performance obligations existed but could not explain their rationale for why. When determining the transaction price, candidates often used the cost of the battery to allocate the transaction price rather than basing their analysis on the consideration to be received. Most candidates concluded consistently with their analysis and recognized that the revenue associated with the battery should be deferred.

Strong candidates were able to incorporate case facts into their analysis of each of the five steps of revenue recognition, typically focusing their discussion on performance obligation, and making a supported conclusion that there were two performance obligations. These candidates provided a valid and consistent overall conclusion that the portion of revenue associated with the battery should be deferred and suggested a reasonable figure for the adjustment to make, based on using cost plus margin figures in their analysis.

Weak candidates provided an incomplete analysis, often limiting their discussion to identification that a contract existed. Weak candidates appeared to struggle with the scenario presented, often assuming that, because an electric car cannot be used without a battery, there must be only one performance obligation. Weak candidates often recognized that an adjustment was required for the revenue associated with the battery; however, as their analysis of the performance obligation criteria led them to conclude that no deferral was necessary because there was only one performance obligation present, their conclusion was often inconsistent with the rest of their analysis. Weak candidates often attempted to discuss the treatment of the battery with an inappropriate starting point, such as, for example, from a warranty or provision perspective.

AO#6 (Onerous Contract / Asset Retirement Obligation) (Fin Rep)

Candidates were asked to assess the accounting treatment of the K3Press contract and the future dismantling of Elcar's battery construction facility. Details of the K3Press contract and the battery construction facility were provided in Appendix III. To demonstrate competence, candidates were expected to recognize that the K3Press contract represented an onerous contract and that the future dismantling of the battery construction facility represented an asset retirement obligation. Candidates were expected to provide a reasonable discussion of one of the two issues and attempt to discuss the other issue. Reasonable discussions were considered those that applied case facts to the accounting principles and formed a supported conclusion.

Candidates performed well on this AO. Most candidates were able to provide a reasonable discussion of the asset retirement obligation (ARO) issue, and attempted to provide some analysis of the onerous contract issue. Most candidates were able to assess the ARO issue, often drawing on the appropriate principles, using case facts to support their analysis and form a conclusion. These candidates typically did not attempt to calculate the present value of the ARO, instead assuming that this calculation had already been performed and stating this as their assumption.

Most candidates recognized the onerous contract issue, which was the more difficult of the two issues. However, they often assessed the issue from a liability perspective and assumed that the liability or provision would be equal to the full amount of the remaining contract, instead of measured at the lower of the cost of fulfilling the contract and any penalties arising from failing to fulfil it. Even candidates who followed the relevant accounting principles (guidance found in IAS 37) often assumed that the amount of the onerous contract provision would be equal to the cancellation fee, and did not recognize that the provision should be the lessor of either the cost to cancel or the loss associated with continuing in the contract. Candidates who did not identify the onerous contract issue often provided additional depth on the ARO issue, most often by providing a calculation of the present value of the ARO or discussing the future impacts of the obligation.

Strong candidates discussed both issues. These candidates provided a reasonable discussion of the ARO issue, and provided additional depth by attempting to calculate the present value of the provision and discussing the future impacts of the obligation. Strong candidates also provided a reasonable discussion of the onerous contract issue, understanding that this was a provision, and applied case facts to support their accounting treatment analysis, concluding that a provision should be recorded at the lessor of the cost to cancel or the loss associated with continuing in the contract.

Weak candidates did not address the onerous contract issue, often assuming that they had addressed the K3Press contract issue in their response to AO#2. Many weak candidates attempted to assess the onerous contract issue using the principles for inventory and impairment, which was incorrect because Elcar did not hold any such inventory. Weak candidates were also unable to demonstrate a complete understanding of the correct treatment of the asset retirement obligation, often assuming that the amount to record would be equal to the current estimated cost, without recognizing the need to present value the cost of the future obligation or stating their assumptions.

Paper/Simulation:	Day 2 (Elcar) – Role Case ASSURANCE
Estimated time to complete:	300 minutes
Simulation difficulty:	Average
Competency Map coverage:	Audit and Assurance role (7 Assessment Opportunities)

Evaluators' comments by Assessment Opportunity (AO) for the ASSURANCE ROLE

AO#7 (Artwork)

Candidates were asked by Denise to assess the accounting for the recently acquired high-value artwork. Information on the artwork was provided in Appendix IV (Assurance). Candidates were told that Elcar purchased a piece of artwork by a famous artist, that it is being kept in a temperature-controlled storeroom, and that Robin believes it will increase significantly in value. Candidates were also told that the artwork has been recorded as a cash equivalent at cost on the statement of financial position. To demonstrate competence, candidates were expected to explore the various options for how the artwork could be accounted for in the financial statements, given that there is no specific *Handbook* section related to artwork under IFRS.

This was the hardest AO on the Assurance exam. The board specifically designed the AO to test a candidate's ability to discuss financial reporting issues that require more application of judgment. Candidates struggled with this AO and had difficulty performing analysis for a financial reporting issue for which there was no clear guidance on how to account for the item in question. In addition, they seemed very uncomfortable concluding that there may not be an obvious IFRS that would apply. Instead, most candidates chose a single IFRS and typically forced the analysis of the artwork to fit the related criteria, even though some criteria did not apply. For example, some candidates chose to analyze the artwork using the IFRS principles for inventory; they stated that selling artwork was in Elcar's normal course of operations and concluded that the artwork was therefore inventory, despite clear case facts that Elcar is in the business of selling electric cars and that this was an extraordinary purchase. Many candidates also missed first analyzing why the artwork might not have been a cash equivalent or discussing why accounting for the artwork that way was not appropriate. Although some candidates concluded that the artwork is not a cash equivalent, they did not support their statement, either with appropriate analysis of case facts or relevant accounting principles.

Strong candidates were able to appropriately support why artwork is not a cash equivalent, and then explore alternatives that could be considered when determining how to account for the artwork. In their analysis, they were able to apply specific case facts to the relevant accounting principles for the possible treatments they identified. They seemed more comfortable concluding that there may not be an IFRS that directly applies, and sometimes discussed going back to the IFRS accounting framework to determine how to account for the artwork. These candidates were able to demonstrate a logical thought process for how to account for an unusual item.

Weak candidates did not seem to know where to start. They generally provided very poor analysis for only one treatment option or selected treatments that were clearly not applicable, such as, for example, intangible assets. Weak candidates also tended to focus on the measurement of the artwork, discussing guidance related to fair value measurements instead of focusing on the artwork's classification, which was the more important issue.

AO#8 (Audit Planning Memo)

Candidates were asked by Denise to draft an audit planning memo. Information relevant to the audit plan, such as risk factors, users and control deficiencies, was provided throughout the case. Candidates were expected to understand the situation related to Elcar and use specific case facts from both the common and assurance portions of the case in their discussion of the audit plan. To demonstrate competence, candidates were expected to provide an audit planning memo that included a reasonable discussion of risk, approach, and materiality.

Candidates performed relatively well on this AO. Most candidates provided a reasonable risk discussion that included several risk factors and explained how each factor impacted the risk of material misstatement, and concluded on the overall financial statement risk. The most commonly discussed risk factors were Elcar's overall weak internal control environment, Sam's and Shelagh's potential lack of financial expertise, and the fact that there were already several accounting errors noted. Most candidates also suggested a reasonable audit approach, using specific case facts to support their recommendations. Most candidates also provided a reasonable materiality analysis by discussing multiple users of the financial statements and choosing an appropriate basis that would address their needs, and calculated a planning materiality using an appropriate percentage, given their selected benchmark. Candidates generally recognized that net income was a loss in the current year and were able to provide a reasonable alternative benchmark for materiality that was adequately justified, based on case facts.

Strong candidates provided more risk factors in their risk assessment and often provided better explanations for the impact each of those factors would have on the risk of material misstatement. In addition, their audit approach discussions were in more depth, as they would often consider all aspects of the factors that would impact the audit approach, such as recognizing that Shelagh's absence would weaken the overall control environment but also that her absence of only two months might not have impacted the rest of the year. Strong candidates also identified more of the relevant users and provided a more in-depth discussion of them. They discussed each user's needs in greater detail and often justified both the basis they chose that would reflect the users' needs as well as why they chose a specific percentage within the acceptable range, by linking their choice to the sensitivity of the users. Some strong candidates also recognized the fact that revisions to materiality would be required once the accounting adjustments were quantified, and provided a good discussion and calculation of performance materiality.

Weak candidates generally did not provide an adequate risk assessment, and either identified an insufficient number of risk factors or simply listed risk factors without explaining how they would impact the overall financial statement risk. Some weak candidates also provided business risk factors instead of focusing on financial statement risk factors, and therefore had difficulty providing a useful analysis. They often proposed an audit approach that would be inconsistent with their risk assessment, for example, concluding that a combined approach could be taken despite a weak control environment and without providing further explanation. Weak candidates also often had materiality discussions that contained technical errors. For example, some used an inappropriate benchmark, such as net loss, or an unusual benchmark, such as inventory. Others used an inappropriate percentage, given their chosen benchmark, such as proposing that 5% to 10% be used for a gross (not net) benchmark such as revenue. In addition, many did not justify the use of either the benchmark or the percentage chosen with relevant case facts. Some weak candidates attempted to justify their choice of percentage based on the overall financial statement risk, instead of basing it on the sensitivity of the users, making it difficult to demonstrate competence in this area.

AO#9 (Procedures – Accounting Issues and Control Deficiencies)

Candidates were asked by Denise to document the audit procedures they would recommend be undertaken for the areas in which errors or control deficiencies have been found. To demonstrate competence, candidates were expected to provide a reasonable number of procedures that were specific to the accounting issues or internal control deficiencies identified.

Candidates performed adequately on this AO. Most candidates were able to provide a sufficient number of procedures that appropriately addressed the risks related to the specific accounting issues or control deficiencies. The most commonly addressed procedures were related to the foreign exchange transactions, the new marketing program and the decommissioning liability. Candidates were less likely to address procedures related to the control deficiencies than to the accounting issues identified in the case.

Strong candidates were able to provide precise and well-described procedures that were clearly tied to the significant risks identified. Strong candidates covered more of the specific accounting issues or control deficiencies, and provided more procedures for each. Many provided auditing procedures immediately following each accounting discussion, which was an efficient way to ensure that the procedures provided addressed the most relevant risk areas related to each accounting issue.

Weak candidates provided vague procedures, which made it difficult to determine exactly what they were proposing to do and what risk they were trying to cover. Weak candidates tended to address only the typical risks for those accounts that were impacted by the accounting issue identified. For example, many weak candidates proposed testing the cut-off of sales by selecting a sample of invoices before and after year end, as opposed to testing the risks related to the new marketing program, such as reviewing sales contracts for performance obligations related to the battery replacement.

AO#10 (Procedures – Cash Flow Forecast)

Candidates were asked by Denise to describe what audit procedures the team should perform on Elcar's updated cash flow forecast. Information on the updated cash flow forecast was provided in Appendix IV (Assurance), including the amount of cash that Elcar is projected to have in 12 months' time and the assumptions used by management to develop the forecast. Some of the case facts required to understand the context of the assumptions were provided in the common section of the case and in Appendices I, II and III. To demonstrate competence, candidates were expected to provide a reasonable number of procedures, to audit the assumptions of the cash flow forecast.

Candidates struggled with this AO. While most candidates understood the risks related to the assumptions to be tested, they had difficulty with the future-oriented context of this AO, and often provided procedures that were historic in nature. For example, related to the assumption of the platinum price being \$33 per gram for the duration of the forecast, candidates often ignored the case fact that stated that platinum prices are volatile, and suggested looking at purchase invoices in the past year to verify the assumption instead of looking at future-oriented evidence, such as contracts with suppliers. While historic evidence may provide adequate support for some of the assumptions, this was not the case for many of the others. Most candidates attempted to address several of the assumptions provided, with the most common being the inflation rate, the exchange rate, and Elcar's intention to renew the line of credit.

Many candidates also provided a generic discussion of going concern procedures, often simply copying and pasting sections from the *Handbook*. While Denise said she wanted to ensure that Elcar's going concern assumption had been properly assessed, candidates were not provided with management's assessment of going concern; as a result, the discussions provided by candidates could have applied to any situation and therefore did not provide much value. In addition, Denise's specific request was to audit the cash flow forecast. Candidates were expected to spend their time on the direct request from Denise rather than on providing generic discussions on going concern.

Strong candidates were able to provide precise and well-described procedures that clearly considered the future-oriented context of this request. Strong candidates also provided more procedures that covered the full range of the assumptions provided. Some strong candidates also challenged the assumptions used by management, such as recognizing that \$33 per gram of platinum may not be a realistic assumption, given the volatility of the price.

Weak candidates provided procedures that were vague and not well described. They were often unable to determine what external documents could help with the auditing of assumptions, only suggesting that the assumptions be discussed with management. These candidates did not seem to understand that, since management provided the forecast and determined the assumptions, corroborating these assumptions with management is of limited use. Weak candidates also tended to focus on auditing the going concern assumption rather than the cash flow forecast itself, which led them to provide generic procedures. For example, many candidates suggested that the team obtain a cash flow forecast from management, even though it was clear in the case that the forecast was already obtained, and the request was to provide procedures for auditing it.

AO#11 (Procedures – Provincial Grant)

Candidates were asked by Denise to document the procedures that an external auditor would need to perform for an audit report on compliance with the provincial government grant agreement related to training. The terms of the grant included conditions related to spending and to other conditions that Elcar must meet. Information related to the conditions of the grant was provided in Appendix IV (Assurance). To demonstrate competence, candidates were expected to provide a reasonable number of procedures that addressed the specific conditions of the grant.

Candidates performed below expectations on this AO. While most candidates attempted to address the conditions specified in the grant, the procedures provided did not always test the relevant risk of the grant condition. For example, candidates often suggested obtaining a bank confirmation in order to test whether a separate bank account or general ledger account existed for the grant. Candidates did not seem to understand that a bank confirmation of the grant account would provide no assurance that it was separate and not used for other purposes. Most candidates attempted to provide procedures for the majority of the grant conditions. The most frequently addressed grant conditions were the separate bank/ general ledger account requirement, the fact that no monies are to be spent prior to actual receipt of the funds, the minimum cash balance requirement and the fact that a minimum of 15% of the grant must have been spent by May 31, 2019.

Many candidates also provided special reporting options for the provincial grant agreement. Denise did not ask for this to be provided, and in fact had explicitly stated that she wanted procedures related to an audit report on compliance with an agreement. Therefore, candidates who chose to discuss the various options, such as a Section 9100 report or a review on compliance with agreement, spent time discussing a topic that provided very little value.

Strong candidates often attempted to provide procedures for all the grant conditions and were able to provide precise and well-described procedures that clearly addressed the risk related to the conditions. Instead of testing only one component, they often provided more complete procedures related to the condition. For example, strong candidates recognized that, in order to test whether spending occurred related to the grant prior to its receipt, an auditor would have to test both when the grant was received by vouching to the deposit slip or bank statement, as well as review expenses prior to the date of receipt and vouch these expenses back to supporting invoices. They also often recognized the need to validate that the expenses incurred under the grant were in fact allowable, even though that was not one of the explicit conditions.

Weak candidates often attempted to provide procedures for a fewer number of grant conditions, and often simply stated that the auditor would need to test the condition, without explaining how to do so. For example, weak candidates often stated that an auditor should ensure that no provincial labour laws were violated but did not explain how an auditor could actually do so. Weak candidates also demonstrated some technical weakness or failed to incorporate case facts into their suggested procedures. For example, they often seemed confused with the dates associated with the grant or ignored them altogether, such as suggesting that procedures be performed to ensure that Elcar does not obtain any other funding throughout the entire year, even though the grant only disallowed additional funding during a very specific time period.

AO#12 (Internal Control Deficiencies)

Candidates were asked by Denise to discuss any control deficiencies related to platinum inventory, as well as those identified from a review of Elcar's activities. Information on processes related to the platinum inventory was provided in Appendix III. Candidates were expected to note some of the significant deficiencies related to the platinum activities, including the fact that platinum inventory counts are only performed by one person, platinum is not being counted frequently enough, there is no one person responsible for oversight of the inventory, scientists have 24-hour access to the platinum and there is no tracking of disposed batteries/platinum. Information on the parent company oversight, where there were also some control deficiencies, such as that there appears to be no formal approval of Elcar's policies and board oversight is poor, given that the board only consists of Robin, was provided in the background information, and information related to a payroll fraud was provided in Appendix IV (Assurance). To demonstrate competence, candidates were expected to identify several of the control deficiencies, explain the implication of each deficiency, and provide a reasonable recommendation to address the problem.

Candidates performed slightly below expectations on this AO. While most candidates were able to identify the control deficiencies that were present at Elcar, and provided valid recommendations to address the issue, they struggled to adequately explain the implication of the deficiency in sufficient detail. The internal control deficiencies presented in this case mainly involved one area of the company, that of platinum inventory. Candidates appeared to find it more challenging to separately identify the different deficiencies, as many candidates discussed all the deficiencies related to the platinum inventory in one big discussion. This approach prevented them from demonstrating that they understood the different implications of the different deficiencies. The most commonly identified deficiencies were that the inventory was only counted by one person, there was no general oversight of the inventory, and there was a lack of tracking of batteries/platinum disposal.

Strong candidates were able to better explain the implications of each control deficiency identified. For example, instead of simply stating that the implication of the platinum inventory control deficiencies was the ability for someone to steal the platinum, they better explained how the theft could be performed and why the deficiencies would contribute to it. They were also more likely to identify the control deficiencies in the other areas of the company, such as those that related to parent company oversight or the payroll fraud.

Weak candidates often did not explain the implication of the control deficiencies identified, or did so in very vague terms. In addition, the recommendations they provided were often vague or were simply a restatement of case facts. For example, many weak candidates suggested that platinum inventory be counted more frequently without specifying what that frequency would be. As another example, they would state that "someone" needed to be in charge of inventory oversight without specifying who that person might be. Recommendations that were not sufficiently specific were of limited use to Elcar, making it difficult to demonstrate competency in this area.

AO#13 (Environmentally Responsible Actions)

Candidates were asked by Denise to indicate, for each environmentally responsible action statement on Elcar's website, whether it can be independently verified, and to either explain how it could be verified or describe the challenges the statement may pose in terms of independent verification. Information on the environmentally responsible action statements was provided in Appendix IV (Assurance). The statements provided contained some for which independent verification would be straightforward, and others that posed significant challenges to independent verification. To demonstrate competence, candidates were expected to address a reasonable number of statements and discuss how they could be verified, or what challenges to verification existed.

Candidates struggled somewhat on this AO. Most candidates attempted a discussion of the majority of the statements provided in the case but struggled to adequately explain how the statements provided could be verified. Candidates seemed to have difficulty with the unique nature of the statements, and often provided incomplete procedures and/or ignored the case facts. For example, candidates often stated that an auditor should look at Elcar's electricity bills to test electricity usage, without addressing the fact that the statement notes that it is electricity usage per square foot, so the number of square feet would also have to be verified. While most candidates provided at least one challenge to verifying the statements presented, most chose to focus most of their discussions on how the statements can be verified and less on the challenges they pose in terms of verification. The areas where candidates were most often able to provide valid procedures were the existence of the environmental impact committee and the fact that no employees have filed Worker's Compensation claims for environmental-related injuries during the past fiscal year.

Strong candidates were able to clearly explain how the statements could be verified by explaining what documents the auditor could review and what they should be specifically looking for. Strong candidates typically addressed both aspects of the required, that of how to verify the statements and the challenges, for each of the areas, providing a more complete discussion.

Weak candidates often provided vague procedures that did not offer adequate detail on how the statement would be verified. Other times, they provided procedures that were not realistic. For example, some weak candidates suggested that, to verify that the average number of pages printed per employee was less than five, the auditor should stand beside the printer at Elcar and count the number of pages printed by each employee. Others tried to force a challenge onto statements where no real challenge exists. For example, some candidates suggested it would be impossible to determine the number of pages printed. Other weak candidates seemed to have misinterpreted the required and/or their role entirely for this AO, taking on an internal role rather than the role of an external auditor. For example, some weak candidates discussed measures that could be implemented to ensure that Elcar meets the statements, some discussed how Elcar could demonstrate that they have met these statements, and some suggested changes to the statements so that Elcar could more easily meet them. These discussions did not address the required and candidates who took these approaches struggled to demonstrate competence on this AO.

Paper/Simulation: Day 2 (Elcar) – Role Case FINANCE

Estimated time to complete: 300 minutes

Simulation difficulty: Average

Competency Map coverage: Finance (7 Assessment Opportunities)

Evaluators' comments by Assessment Opportunity (AO) for the FINANCE ROLE

AO#7 (Forecast Assumptions)

Candidates were asked to analyze and comment on the assumptions used in the latest forecast prepared by Elcar as part of its most recent funding request, and to calculate Elcar's cash position at the end of each fiscal year from 2020 to 2023. An income statement forecast was provided in Appendix IV (Finance), and additional information regarding Elcar's operations was presented throughout the case. To demonstrate competence, candidates were expected to discuss several of the assumptions used in the forecast and provide a cash flow forecast based on the income statement forecast.

Candidates generally performed well on this two-part AO. Most candidates focused on the quantitative component of this AO and provided a reasonable calculation of Elcar's cash position for each year, integrating several non-cash adjustments. Most candidates addressed the easier amortization adjustment but had difficulty with the more complex working capital adjustment, where they often made errors such as using sales rather than cost of sales, not considering the change in working capital, or not incorporating opening working capital. Few candidates attempted the capital adjustment but those candidates who did generally did so correctly. Discussing the assumptions was the harder part of the AO. Many candidates did not consider the case facts in determining which assumptions to discuss. Many candidates simply restated the case-provided assumptions and suggested that they should be changed without explaining why. Typically, candidates who attempted the qualitative component focused on sales volume, sales price, cost of sales and selling expenses.

Strong candidates calculated the cash flow forecast, starting with net income, and incorporated correct adjustments for amortization, capital and working capital. In particular, strong candidates were more likely to provide a reasonable working capital adjustment, which was more a complex calculation. Strong candidates discussed a number of forecast assumptions, incorporating case facts where applicable, to question the validity of the assumptions.

Weak candidates attempted a cash flow forecast, starting with net income, and typically incorporated an adjustment for amortization but made no other adjustments, or attempted tax adjustments that were incorrect or not relevant. Weak candidates either did not discuss any forecast assumptions, or listed some assumptions but did not assess whether they were reasonable, or simply suggested that the reader investigate the assumptions.

AO#8 (Funding Options)

Candidates were asked to describe the other financing options that Elcar could consider, or whether Elcar could reduce its need for external financing by decreasing certain operating costs. Candidates were provided with Elcar's historical income statement in Appendix II and a forecast income statement in Appendix IV (Finance), which candidates could have used to identify and support a reduction of certain operating costs. To demonstrate competence, candidates were expected to discuss both the external financing options and the reduction in operating costs in sufficient depth.

Candidates generally performed well on this AO. As there were minimal case facts presented to the candidates to work with, candidates were required to be creative in presenting Elcar with options, based on their understanding of the case facts. Alternative funding options are familiar to candidates, but the operating cash flow improvements required more creative thinking. Most candidates offered alternative financing solutions such as debt financing, equity financing, the sale of Barkser and/or the sale-leaseback of PPE, and provided either high-level operational cash flow improvements or a minimal discussion of some operational cash flow improvements. For the operational cash flow improvements, many candidates lacked an explanation of why their suggested improvements would be appropriate for Elcar, or did not consider the negative impacts, such as, for example, that a reduction in battery development costs could delay or halt new battery development, which would have a long-term impact on Elcar.

Strong candidates discussed alternative financing solutions, in depth, by tying in case facts, such as, for example, the specific assets that Elcar might have the ability to borrow against (receivables, PPE). Strong candidates also discussed reasonable operational cash flow improvements and explained why these improvements were reasonable, or recognized that they could have longer-term impacts on Elcar. For example, reducing battery development costs could result in a longer development time.

Weak candidates identified alternative financing solutions without considering whether they would be appropriate for Elcar. For example, their debt financing solutions might consist of a list of debt options without differentiation between the applicability of each option. Weak candidates generally either did not discuss operational cash flow improvements or discussed it briefly, often without identifying specific line items where savings could be achieved and/or without explaining how Elcar could achieve these savings.

AO#9 (DCF Valuation)

Candidates were asked to determine the percentage of Elcar that would have to be sold to a new equity investor in order to cover Elcar's cash requirements, based on a discounted cash flow valuation of Elcar, and to discuss the qualitative impact of this financing strategy on NHC. An income statement forecast was provided in Appendix IV (Finance), and additional inputs to the discounted cash flow valuation were provided throughout the case. In their calculation of the percentage of Elcar that would need to be sold, candidates were also expected to integrate their analysis in AO#1 by incorporating Elcar's annual cash flow and the cash requirement. To demonstrate competence, candidates were expected to provide a reasonable discounted cash flow calculation, and to provide either a reasonable calculation of the percentage of Elcar that would need to be sold or a discussion of the qualitative impact of this financing strategy on NHC in sufficient depth.

Candidates struggled on this multi-part AO, which was considered difficult by the BOE. Most candidates were able to calculate the value of Elcar by incorporating a reasonable discount rate of 25% or a variant of this, a present value analysis and a terminal value. Few candidates attempted any adjustments to the present value of the cash flows; applicable adjustments would include the fair value of Barkser and tax losses. Most candidates attempted a calculation of the percentage of Elcar that would have to be sold to cover its cash requirements, although this calculation was often incorrect or utilized incorrect assumptions. For example, candidates did not consider the additional cash injected in Elcar as a result of this transaction, or add up the annual cash flows from all years to determine the amount of financing required. Most candidates also attempted a qualitative discussion of the impact of this financing strategy on NHC, often focusing on the control and ownership of Elcar.

Strong candidates incorporated additional components in their discounted cash flow analysis by considering the fair market value of redundant assets such as the investment in Barkser. Strong candidates provided a correct percentage sold calculation, recognizing that new shares would need to be issued in order for Elcar to receive the proceeds as cash, which could be utilized for their operations. Strong candidates discussed qualitative factors associated with the equity transaction based on the outcome of their discounted cash flow and percentage sold analysis, such as, for example, the types of acquirer that Elcar could attract.

Weak candidates attempted a discounted cash flow value of Elcar but did not demonstrate an understanding of present value and/or terminal value. Errors included using an incorrect discount rate, excluding a terminal value or not considering the discrete forecast years, thereby effectively using a capitalized cash flow approach. Weak candidates either did not calculate the percentage of Elcar that would need to be sold or made a weak or incorrect attempt at this calculation. Weak candidates did not discuss the qualitative factors associated with the equity transaction, or identified some considerations without discussing them in depth.

AO#10 (Asset-Based Valuation)

Candidates were asked to prepare a second valuation of Elcar using an asset-based approach. Elcar's historical statement of financial return was provided in Appendix II and candidates were provided with additional information in Appendix IV (Finance), which could have been used to make adjustments to Elcar's net book value. To demonstrate competence, candidates were expected to provide a reasonable calculation of Elcar's value using an asset-based valuation method.

Candidates struggled on this AO, which was considered difficult by the BOE. Most candidates started with the net asset value of Elcar and made adjustments, including the fair value of the PPE, Barkser and/or the tax losses, to arrive at the adjusted net asset value of Elcar. Candidates were more likely to attempt the PPE or Barkser adjustments. Some candidates also attempted to compare the adjusted net asset value to the discounted cash flow value. A high percentage of candidates (10%) did not attempt this AO.

Strong candidates made more appropriate adjustments to Elcar's net book value, including a correct tax loss adjustment. Strong candidates compared the adjusted net asset value to the discounted cash flow value and/or discussed reasons for the discounted cash flow value being a more reliable value (i.e., value of battery development, goodwill, strong expected improvement in Elcar's future cash flows).

Weak candidates did not start with the net asset value of Elcar, either starting with the book value of Elcar's assets or the fair value of the PPE and/or Barkser, without incorporating other assets or liabilities of Barkser. Weak candidates sometimes also made one-sided adjustments, for example, adding the fair value of PPE or Barkser without deducting their book value. Weak candidates made a "fatal flaw" in their calculation by capitalizing the net asset value, demonstrating that they did not understand the concept of the net asset value methodology.

AO#11 (Government Funding Offer)

Candidates were asked to evaluate a grant offer that Elcar received from the provincial government and recommend whether Elcar should accept the offer. A summary of the terms and criteria of the grant was provided in Appendix IV (Finance). To demonstrate competence, candidates were expected to assess the terms and criteria of the grant and conclude as to whether Elcar should accept the grant.

Candidates performed reasonably well on this AO. Most candidates discussed some advantages and disadvantages of the government funding offer, based on the terms and criteria provided in the case, and provided an overall recommendation as to whether Elcar should accept the funding offer. Candidates often focused on the criteria, categorizing each criterion into advantages or disadvantages and questioning whether Elcar would be able to fulfil each criterion. Some candidates addressed the terms of the grant, often focusing on the interest rate and repayment requirements. A significant number of candidates (14%) did not attempt this AO.

Strong candidates discussed many advantages and disadvantages of the government funding offer, explaining why each term or criterion would be an advantage or disadvantage to Elcar based on case facts, and provided an overall recommendation. Strong candidates balanced the discussion of advantages and disadvantages, discussing both the terms and criteria of the offer.

Weak candidates often provided a brief or rushed response. Typically, they identified some advantages and disadvantages of the government funding offer by categorizing the terms and criteria into a list of pros and cons, without further explanation of why they were advantages or disadvantages. Weak candidates did not provide a clear, supported conclusion.

AO#12 (Battery-Testing Device)

Candidates were asked to provide a capital budgeting analysis of the possible purchase of a battery-testing device, and determine whether it could be justified for Elcar. Information regarding the cost and benefits and of the battery-testing device was provided in Appendix IV (Finance). To demonstrate competence, candidates were expected to provide a net present value analysis of the battery-testing device and a qualitative discussion of factors that could impact Elcar's decision.

Candidates performed reasonably well on this AO. Most candidates calculated the net present value of the battery-testing device, using an appropriate rate of return of 25% or a reasonable variant, and incorporated the various upfront costs of purchase, installation and freight, the annual costs of electricity and maintenance and the cost savings of chemicals and labour. Most candidates did not consider the impact of taxes. Most candidates discussed some qualitative factors associated with the purchase of the battery-testing device, but discussions were often brief and reiterated case facts without explaining why these factors were important to Elcar.

Strong candidates incorporated various components in their net present value analysis, including the impact of either the tax shield on the upfront costs or taxes on the savings. Strong candidates also discussed many qualitative factors associated with the purchase of the battery-testing device, such as, for example, time savings and the impact on morale of severing employees, explaining whether they were advantages or disadvantages to Elcar.

Weak candidates attempted a capital budgeting analysis but either did not apply net present value analysis or did not incorporate all costs and cost savings, and often utilized an incorrect discount rate. Weak candidates either did not provide any qualitative discussion or their qualitative discussion was very brief, restating the case facts without an explanation of why these case facts were advantageous or disadvantageous to Elcar.

AO#13 (Platinum Hedging)

Candidates were told that Shelagh was concerned about the impact of platinum price increases on Elcar's future financial position and were asked to discuss hedging strategies, including futures, options or acquiring a mine. Additional information regarding the mine acquisition was provided in Appendix IV (Finance). To demonstrate competence, candidates were expected to discuss the hedging strategies presented and explain why they would, or would not, be appropriate for Elcar.

Candidates performed reasonably well on this AO. Most candidates discussed how futures and options worked and discussed the advantages and disadvantages associated with utilizing either of these derivatives or with acquiring a South African mine. Some candidates provided a supported recommendation as to which option(s) would best fit Elcar's needs. A large number of candidates (10%) did not attempt this AO.

Strong candidates explained the three hedging options suggested in the case facts (future, options, South African mine) and either discussed additional hedging options or integrated case facts into their analysis, for example, by recognizing the impact of the upfront purchase cost of options and/or that the South African mine could impact Elcar, given its current cash constrained position. Strong candidates provided a supported recommendation as to which option(s) would best fit Elcar's needs.

Weak candidates discussed the derivatives in the wrong context, such as, for example, in the context of hedging currency, or demonstrated significant technical weaknesses in describing how options and futures work. For example, some candidates confused futures with forwards and/or did not understand the difference between acquiring a put or a call option.

Paper/Simulation:	Day 2 (Elcar) – Role Case PERFORMANCE MANAGEMENT
Estimated time to complete:	300 minutes
Simulation difficulty:	Average
Competency Map coverage:	Performance Management Role (7 Assessment Opportunities)

Evaluators' comments by Assessment Opportunity (AO) for the PERFORMANCE MANAGEMENT ROLE

AO#7 (Comparison of Actual Performance to 2016 Proposal)

Candidates were asked by Denise to review the four-year forecast included in a proposal provided in 2016 to NHC, the parent company owning 100% of Elcar's shares, to support a cash injection, and to comment on Elcar's actual performance relative to that initial proposal. Candidates were provided with the proposal in Appendix IV (Performance Management), and with numerous other elements of information throughout the case. Candidates were expected to analyze each element of the plan, one by one, and assess Elcar's actual performance in each of 2017, 2018 and 2019 relative to the commitments made in the proposal.

Overall, candidate performance was as expected on this AO, but varied significantly. This AO was considered more challenging and a large number of candidates had trouble understanding the required, failing to see that they could use the proposal presented as a check list that could be used to verify, one by one, whether these commitments had been met by Elcar in the last three years. Of those candidates who understood the required, the majority identified a sufficient number of relevant elements, for which they assessed Elcar's actual performance relative to the commitment. The elements addressed most often were the number of cars sold, the unit price, the gross margin ratio, the lack of online sales and the employee headcount.

Strong candidates addressed a larger number of the commitments made by Elcar in 2016, and also included the more "qualitative" ones, such as, for example, the type of car, the design awards, the purchase of a manufacturing plant and the presence on the European market.

Weak candidates seemed puzzled by the required, and either did not attempt the AO or misinterpreted it. Weak candidates did not seem to make the link with the plan presented, and performed a financial analysis (often using ratios) to determine whether Elcar had performed well during this period. Others mistakenly believed that the plan was current and proceeded to analyze whether the plan itself was realistic, not realizing that it was historical, having been presented to NHC three years ago. Some candidates chose to revisit the original plan in order to improve it retroactively, which was not what was requested. In general, those that attempted the correct required addressed few or none of the commitments made by Elcar in 2016.

AO#8 (Risk Analysis and Mitigation Strategy)

Candidates were asked by Denise to discuss the risks that Elcar is facing and suggest ways to mitigate them. Relevant information for this AO could be found throughout the case, in Appendices I, III and IV (Performance Management). Candidates were expected to identify any elements that could generate risk for Elcar. For each risk identified, candidates were expected to suggest ways to mitigate it.

Overall, candidate performance was weaker than expected on this AO. The required was not unusual or difficult. Candidates were directly led to three risks through their analysis of the common AOs: the theft of platinum (through the variance analysis performed); the volatility of platinum prices (through the same analysis); and the foreign exchange risk (through the financial reporting analysis of the trade payables labelled in U.S. dollars). Most candidates limited their analysis to these three risks and failed to identify the most critical and meaningful risks for Elcar, those linked with the specific nature of its industry and Elcar's situation within that industry. These included the uncertainty linked to battery development and to the selling prices of electric cars compared to fuel powered cars, the lack of charging outlets, the lack of variety of models and features being offered and the lack of financing options offered to clients. A relatively small number of candidates identified and addressed these more critical risks.

In addition to the three most commonly identified risks, strong candidates identified risks more specific to the electric automobile industry, such as battery development, high sales price, charging outlets and speed, and made a reasonable attempt to mitigate them. They also attempted a mitigation strategy, working with the few facts that were available to provide more details on the implementation plan to put in place in order to provide an effective mitigation of the risk.

Weak candidates generally addressed one or two risks, all among the three most commonly addressed ones mentioned above, and identified none of the most significant ones linked to Elcar's industry. They generally focused on internal weaknesses rather than on actual risks that the company was facing. Many weak candidates expanded the notion of "risk" and considered the governance issues that Elcar was facing. Their discussion was rewarded in AO #12.

AO#9 Review of six-month cash projection and recommendations on cost-cutting measures)

Candidates were asked by Denise to review the six-month cash flow forecast recently submitted by Elcar to NHC and make the necessary adjustments, as well as to recommend potential cost-cutting measures. The forecast and accompanying notes were presented in Appendix IV (Performance Management). Candidates were expected to: 1) identify the assumptions behind the projections without being specifically directed to them; 2) determine the accuracy or reasonableness of each assumption; and 3) adjust the ones deemed inaccurate or unrealistic. This required was considered difficult due to its unusual nature, that of having to assess cash flow projections where the underlying assumptions for the projections were not presented to the candidates. On first perusal, the cash flow projections seemed quite adequate; candidates needed to analyze the data provided to determine what the underlying assumptions were.

This AO is easily the one that candidates struggled with the most. Many candidates did not attempt this AO or addressed it very succinctly. Most candidates had difficulty identifying any of the adjustments to be made to the projections (quantity and prices of goods sold, fixed and variable costs) and instead focused only on cost-cutting measures. In general, very few candidates attempted to quantify the adjustments they suggested, and a minority of candidates restated the cash projections in order to determine whether Elcar met the \$3 million month-end cash balance threshold that Denise mentioned.

Strong candidates attempted to identify three or four adjustments to the cash flow projection, including that some variable costs had been treated as fixed costs, the sales price had not been updated, and that the assumption on the number of cars sold was overly optimistic, and made an attempt at several cost-cutting measures. Strong candidates also included a revised cash flow projection and an assessment as to whether the \$3 million month-end cash balance threshold imposed by the parent company was met. Very few candidates accomplished all of these tasks. Most strong candidates demonstrated their competence by correctly identifying several adjustments to be made, and justifying them.

Weak candidates usually identified one adjustment to be made to the cash flow projection, which was generally the number of cars or the unit selling price, or attempted one or two of the cost-cutting measures.

AO#10 (Piece Work Compensation Proposal)

Candidates were asked by Denise to analyze the proposal to pay the vehicle assembly workers strictly by piece work, and provide a recommendation. The information required was presented in a single paragraph in Appendix IV (Performance Management). Candidates were provided with the preliminary unit piece work rate being considered and enough information to calculate the current unit direct labour cost, the current standard unit direct labour cost and the fixed costs that would be saved by Elcar under this proposal. The case also mentioned that early discussions with workers indicated that they were interested but that there were quality and safety concerns. Candidates were expected to calculate an indifference point between piece rate and current costs and compare it to Elcar's current volume, as well as incorporate qualitative factors into their analysis.

Candidate performance on this AO was as expected. Most candidates attempted a calculation of the impact of piece work compensation on the company's net income, and incorporated the main components, such as, for example, the piece work unit rate and the savings in fixed supervision costs. Most either calculated the direct labour costs for both options using Elcar's current volume or performed a sensitivity analysis of the direct labour costs under both options for numerous volume assumptions. Many candidates were confused by the presence of the unit standard labour cost, and some candidates mistook that to be the piece work rate. Most candidates also attempted to identify qualitative elements to support their analysis.

Strong candidates provided a near-perfect calculation. They realized that, quantitatively, the proposal consisted of transforming fixed costs into variable costs (the piece work rate was higher than the current actual and standard unit direct labour cost, but fixed costs would be saved by the proposal), and that the favourable or unfavourable impact of the proposal on Elcar's profits depended on the number of cars sold. The higher the production level, the more the status quo should be favoured, and vice versa. These strong candidates also saw the numerous practical difficulties associated with this form of compensation in an assembly line.

Weak candidates attempted a calculation of the impact of impact of using piece work compensation on the company's net income, which contained numerous errors or omissions and generally overlooked one of the main components of the calculation, that of the piece work unit rate or the savings in fixed supervision costs. The qualitative component of their answer was generally a repetition of the quality and safety issues mentioned in the case, with little added value.

AO#11 (Electric Bicycle Proposal)

Denise asked CPA to perform a quantitative and qualitative analysis of the electric bicycle proposal and to make a recommendation as to whether to pursue the venture. The information required for the analysis was presented in Appendix IV (Performance Management). An Elcar employee developed a prototype of an electric bicycle and obtained a letter of intent from a client in Taiwan for an order of 300 bicycles. A second decision was embedded, which was to determine the type of frame that should be used if the venture was undertaken. Candidates were expected to attempt to quantify the impact of this project on Elcar's annual net income, and to realize that the financial success of the venture was dependent on the number of bicycles to be sold. This should have led them to perform a traditional cost-volume-profit analysis to determine the break-even point, and to assess the qualitative factors in order to provide a useful recommendation.

Overall, candidates performed very well on this AO. Most candidates were able to perform a quantitative and qualitative analysis that was useful for Denise. Most candidates either calculated a break-even point that was much higher than the 300 bicycles sold via the letter of intent, and identified that the success of the project depended on the ability to significantly increase that volume. Some candidates used other valid approaches, such as calculating the expected profit using various volume scenarios, or calculating the additional number of bicycles required to be sold in order to generate an acceptable return on investment.

Strong candidates attempted to calculate the contribution margin of each bicycle sold, and compared it to the incremental fixed costs generated by the project in order to determine the break-even point. As the break-even point was much larger than the committed 300 bicycles from the letter of intent, a good response highlighted the uncertainty linked with this proposal.

Weak candidates often committed numerous errors in the calculation of the annual profit generated by the project. Other weak responses limited the scope of volume to the 300 committed bicycles and did not realize that the potential volume sold could be much more than the volume committed via the letter of intent. Other weak responses displayed a misunderstanding of the required; they focused the analysis on the type of frame to select rather than on the more pervasive decision of whether to go forward with the idea of selling electric bicycles to complement the electric car product offering.

AO#12 (Governance issues)

Denise asked CPA to recommend changes that would improve the governance and oversight of Elcar by NHC. She specified that this should include possible changes to the board, structure or policies and processes. While this required was the most directed one in the Performance Management role, the information necessary to answer the required was presented in different sections of the case and had to be integrated. For example, some information about the board and the current oversight done by NHC was found in the background information on Elcar in the Common section, whereas Appendix IV (Performance Management) pointed to three instances where the CEO, the only member on the board, used this lack of oversight to circumvent company approval, namely potentially approving his own bonus, obtaining financing without proper approval from NHC and modifying the budget during the year. Numerous hints were included in the case to direct candidates to the most important flaws in Elcar's governance structure.

Candidates were expected to realize that, in the context of a parent company operating in a foreign country and owning 100% of the shares of its subsidiary, a formal board would provide the oversight that a passive investor such as NHC would benefit from. Candidates were also led to this realization by the work they had done in one of the Common AOs, which revealed the very limited reporting package that was used by the parent company to monitor its subsidiary. Candidates were expected to note that a board that consists of only one member, who is also the CEO, has no real oversight role, and that major improvements to the governance structure were required.

Given that candidates generally have little practical experience in governance and that the information required was disseminated throughout the case, candidates performed as expected on this AO. Most candidates were generally able to make an acceptable number of valid recommendations to Elcar on its governance issues, and were able to justify their recommendations with case facts specific to Elcar. Most candidates attempted to address both components of the required, those being board issues and policies.

Strong candidates attempted an analysis of both components of the required, made valid and useful recommendations specific to Elcar's situation, such as that the only board member was the CEO, the only shareholder was located in a foreign country and little oversight was being done. Strong candidates addressed the policy issue by discussing the specific issues linked with the bonus policy, the budgets being altered or the financing having been obtained without permission. They not only recommended a course of action but also explained the underlying reasons behind their recommendations, and how they would help Elcar going forward, considering its specific characteristics.

Weak candidates generally ignored the requirement to discuss Elcar's governance policies, only addressing the issue concerning Elcar's board. The board analysis usually only included generic recommendations, without a reasonable attempt to justify them by using case facts specific to Elcar.

AO#13 (Departmental Performance Evaluation)

Denise mentioned that Elcar's performance could be improved if each department had better performance indicators. She asked CPA to comment on the current performance measurement system and provide suggestions for improvement. The information required for this AO was presented in Appendix IV (Performance Management). Candidates were provided with a description of the 360-degree feedback system currently used by Elcar. They were also provided with a list of Elcar's four departments, with an accompanying description of the respective departmental responsibilities. Candidates were expected to provide a critique of the current system, including both positive and negative elements, that expanded on the comments from employees presented in the case. They were also expected to suggest either objectives or indicators that could enable Elcar's senior management, and eventually the board, to assess the performance of each department on the basis of their respective responsibilities, and explain to Denise how these indicators or objectives would help evaluate and motivate performance in the company.

Candidate performance on this AO was weaker than expected. The current 360-degree feedback system was unusual, and a large number of candidates limited their critique of it to a repetition of the comments made by the employees. Most candidates were able to provide a brief critique of the current system, generally containing an example of how personnel could obtain a good evaluation by selecting friends as reviewers. They also provided a list of valid objectives or somewhat relevant indicators for each of the four departments. Many candidates appeared to run out of time on this final required of the simulation.

Strong candidates generally provided a more insightful critique of the current 360-degree performance evaluation system by giving numerous specific examples of dysfunctional behaviour that it could eventually lead to. They also made a reasonable attempt to identify performance indicators or objectives for all four departments, a few of which were specific to Elcar's situation or industry. For example, they adapted the indicators recommended for the sales department to the fact that distribution was made through dealerships, or they adapted the indicator recommended for the Research and Development department to the specific context of battery development.

Weak candidates generally provided a very brief discussion of the current 360-degree performance evaluation system, repeating the comments mentioned in the case, and provided a list of indicators or objectives that were entirely generic. For example, for the Research and Development department, although Elcar's development team works on a direct material (battery) and not on the finished product (car), they recommended performance indicators such as "number of new products developed."

Paper/Simulation:	Day 2 (Elcar) – Role Case TAXATION
Estimated time to complete:	300 minutes
Simulation difficulty:	Average
Competency Map coverage:	Taxation role (7 Assessment Opportunities)

Evaluators' comments by Assessment Opportunity (AO) for the TAXATION ROLE

AO#7 (2019 Taxes)

Candidates were asked to calculate the loss for income tax purposes for the May 31, 2019, taxation year, and to explain the impact of the financial reporting issues discussed in the common AOs on the current and future tax returns. Financial statements were provided in Appendix II, and the common financial reporting issues were presented throughout the case. Appendix IV (Taxation) provided details about legal fees, a donation, insurance, and capital cost allowance (CCA). To demonstrate competence, candidates were expected to provide a calculation of the loss and some explanations for the adjustments made, or not made, in their calculation. Candidates were rewarded for tax analyses consistent with whatever conclusion they reached in their common analyses, regardless of whether the financial reporting conclusion was correct.

Candidates performed reasonably well on this AO. Most candidates calculated the loss for tax purposes and integrated several adjustments. Candidates usually focused on the easier adjustments, such as the integration of their accounting adjustments, the donation, the insurance premiums, depreciation, and CCA. Most candidates provided explanations for their adjustments in their spreadsheet workbook, either as footnotes or side notes, but many did not provide in-depth discussions of the tax treatment of their accounting adjustments.

Strong candidates typically included more adjustments in their calculations and demonstrated further depth of knowledge by tackling the more difficult adjustments related to the financial reporting issues they had discussed in the common section of their responses, such as the foreign exchange loss and onerous contract. Strong candidates usually provided more thorough analyses of each of the issues and explained specifically what adjustments needed to be made and why.

Weak candidates attempted a calculation of loss for income tax purposes, often failing to integrate their accounting adjustments or to consider the tax impact of the accounting adjustments proposed. Weak candidates often provided little or no explanation for their adjustments, or simply explained the math, such as, "I added this back," rather than stating why they made those adjustments. Others made significant technical errors by, for example, stating that tax was exclusively on a cash basis, or that CCA can never be used to increase a business loss.

AO#8 (Jitcoin and Partnerships)

Candidates were asked about the taxation of Jitcoin, a cryptocurrency, acquired by Elcar this year, and of two partnership unit investments. Information about both investments was provided in Appendix IV (Taxation). To demonstrate competence, candidates were expected to discuss at least one of the investments with some amount of depth.

Candidates struggled on this AO, which was considered difficult. Most candidates attempted to discuss the Jitcoin and at least one of the partnership interests. Candidates often identified that the Jitcoin gains or losses would only be taxed when the Jitcoin was sold, and not just when the price fluctuated, but struggled to provide any additional depth on this issue. Despite being provided with the relevant case facts, most candidates did not discuss the tax treatment of barter transactions or the income-versus-capital issue. Candidates who discussed the partnership interests typically focused on explaining that the partnership income would be included in Elcar's income for tax purposes for the year, and rarely provided additional depth by considering the need to adjust for the stub period or the at-risk rules.

Strong candidates discussed the tax treatment of Jitcoin and recognized that the gain/loss would only be taxed when the Jitcoin was sold, not when accrued; they addressed either the income-versus-capital issue or the nature of barter transactions, but rarely both. Strong candidates also addressed the partnership interests, and explained briefly why the income was to be included on Elcar's tax return by, for example, explaining the flow-through nature of partnerships, and that the at-risk amount would limit the losses it could claim in the May 31, 2019, taxation year to \$30,000.

Weak candidates usually attempted a discussion of either the Jitcoin or the partnerships. Those who attempted the Jitcoin issue concluded that the Jitcoin would be treated as being held on account of capital, and that gains are therefore only included in income at 50%. In doing so, these candidates sometimes indirectly concluded that the gain/loss would only be taxed when realised, and generally did not discuss the nature of barter transactions. However, even though there was the possibility that the Jitcoin could be held on account of income, these candidates never identified that an argument needed to be made to support the treatment as on account of capital. Those who attempted the partnership interests often treated the partnerships as corporations and said that the income would not be taxable to Elcar until distributed.

AO#9 (Loss Planning)

Candidates were asked to advise Elcar and NHC of any ways to use Elcar's tax losses against the income of a sibling corporation, FilterH2O Corporation. They were told that Elcar was expected to continue to lose money, incurring about \$5 million in losses, before becoming profitable. An organizational chart and further description of FilterH2O was provided in Appendix IV (Taxation). To demonstrate competence, candidates were expected to provide at least one valid method for how to share losses between the two corporations, and briefly explain how that method would work.

Candidates struggled on this AO. Most candidates were able to identify one method of sharing losses from Elcar with FilterH2O. The most common proposal was to perform a horizontal amalgamation of Elcar and FilterH2O, which would allow Elcar's past losses to be used against FilterH2O's future income. Candidates often struggled to explain how the amalgamation would achieve this goal, or the mechanisms behind how the transaction would work.

Strong candidates typically discussed several different methods of sharing losses between Elcar and FilterH2O, and often addressed management fees or transfers of assets in addition to amalgamation and/or wind-ups. Strong candidates usually provided additional depth in each of their analyses, and explained not only the mechanism, but also how that mechanism would achieve the goal.

Weak candidates made significant technical errors and usually concluded that the losses could not be shared. Seemingly confusing this with the acquisition of control rules, they frequently concluded that, since Elcar and FilterH2O were in different lines of business, Elcar's losses could never be used against FilterH2O's income, regardless of the legal structure. Candidates sometimes proposed a valid solution and then said it would not work because of the different types of income. More often, weak candidates failed to understand that Elcar and FilterH2O were separate corporations and concluded that, while there would normally be no problem sharing losses, Elcar would not qualify because it was in a different business from FilterH2O. Other weak candidates said that related corporations could share losses no matter what, making statements such as, "Corporations that are related for tax purposes are allowed to share tax losses since they are considered to be associated for tax purposes." In other cases, weak candidates understood that the two were separate corporations, but used that fact to eliminate any further discussion, saying things such as, "Elcar and FilterH2O are two separate entities for tax purposes. Therefore, it is not possible to transfer the losses from one company to another company."

AO#10 (CEO Compensation)

Candidates were asked to provide Elcar and Robin, the CEO, with the tax implications of some proposed alternatives for providing additional compensation to the CEO. Appendix IV (Taxation) provided a list of proposed benefits, including the information that Robin could choose a combination of the options. To demonstrate competence, candidates were expected to explain the tax implications of several of these proposed benefits and provide a recommendation for which one(s) to choose.

Candidates performed well on this AO. Most candidates discussed several of the benefits, from both Elcar's and Robin's perspectives, and recommended one benefit or a combination of several benefits. Candidates usually attempted to discuss all five benefits, although they sometimes made technical errors or jumped directly to making conclusions on one or two benefits, particularly on the payment to Robin's spouse. Overall, however, candidates demonstrated good technical knowledge in this area. Candidates often provided additional depth, not only by identifying that something was, or was not, taxable/deductible, but by explaining why or how the calculations were performed.

Strong candidates typically discussed all five of the proposed benefits and usually had in-depth and technically correct discussions of all five. Strong candidates consistently provided clear recommendations for which mix of benefits to select and often ranked the order in which to select the benefits; for example, they often recommended that Elcar should make the RRSP contribution up to Robin's limit first, to maximize the tax deductions available.

Weak candidates attempted only a few of the benefits and often made unsupported conclusions, using a “yes/no” or “taxable/ not taxable” list. Weak candidates often made technical errors, such as suggesting that the car provided to Robin would be fully deductible to Elcar immediately, or that attribution or the tax on split income would apply on employment income payments to Robin’s spouse. Weak candidates rarely provided an overall recommendation of which combination to use.

AO#11 (Employee Residence)

Candidates were told that Elcar would be sending its staff member, Amber, to a university in Grenada in order to do some research, and were asked about the income tax implications of this temporary assignment. Appendix IV (Taxation) provided candidates with information about Amber’s residency situation, and candidates were told that she was willing to rearrange some of her affairs if it would help reduce income taxes. To demonstrate competence, candidates were expected to use the case facts provided to assess her residency situation and determine whether she would give up Canadian residency.

Candidates performed well on this AO. Most candidates discussed a number of residential factors for Amber, often focusing on the fact that she has neither a spouse nor dependants, on the land she owns, and on her bank account, and concluded on whether she would become a non-resident; they usually explained either some of the implications of her status or provided recommendations for how to sever more ties, but often not both.

Strong candidates generally discussed many residential factors for Amber and often addressed more difficult issues, such as the time period and the conflicting nature of the tie related to her land. Strong candidates then concluded on whether Amber would become a non-resident and explained the implications of her status, and made some recommendations for how to sever more ties. Strong candidates usually had a more logical approach to their analyses, organising them by significant and secondary ties, clearly linking each case fact to the type of residential tie, and concluding on whether each supported residency or non-residency.

Weak candidates often provided a brief or rushed response. Typically, they listed the case facts under headers, sometimes under “arguments for resident / arguments for non-resident” and sometimes under “primary tie / secondary tie.” In either approach, these candidates provided little or no explanation as to whether those facts indicated that Amber would be resident or not, or why. Many weak candidates either reached the conclusion that she was, or was not, resident with little supporting analysis. Others provided some analysis but did not conclude. Weak candidates rarely explained the implications of Amber becoming non-resident or provided any recommendations for how to help her meet that goal.

AO#12 (Financing Structures)

Candidates were told that Elcar's parent company, NHC, was contemplating providing additional financing to Elcar and that it might be advanced either in the form of a loan or of additional shares. This investment could also be made either directly by NHC or through its Canadian holding company, NHC Canada. Candidates were asked for a discussion of the tax implications of each form of financing and their associated income, and for suggestions for ways to transfer income to the U.S., should Elcar become profitable in future. In addition to the background information in the common section, candidates were provided with an organizational chart in Appendix IV (Taxation) to assist with managing this structure. To demonstrate competence, candidates were expected to provide some discussion of issues associated with these options.

Not surprisingly, candidates struggled with this AO, which addressed some difficult concepts in taxation. Candidates generally attempted to discuss the loan and share investments, frequently focusing on financial considerations rather than tax ones. Candidates typically identified that interest was deductible but struggled to provide much more analysis. They rarely considered the impact on NHC or NHC Canada of the investment. Candidates also often attempted to discuss deemed interest benefits, which were not applicable. Candidates often did not address even the simple components of the debt/equity discussion, such as the taxation of dividends paid on shares.

Strong candidates discussed both the share and loan investment options, usually considering both sides of the transaction, that of Elcar and either NHC or NHC Canada. Their analyses usually considered the taxation of interest and of dividends, as well as some other tax considerations of these options. They usually attempted to suggest at least one method of moving income to the U.S., often identifying management fees as the best option.

Weak candidates often did not address this AO at all or provided only a very cursory response, not getting very far beyond identifying the required. Those who did address the issues often made significant technical errors; for example, some stated that the receipt of a loan or shares would be considered taxable income to Elcar, or that dividends paid to a corporation would be grossed up and provided with a dividend tax credit. Weak candidates also more frequently failed to identify the simpler components of this analysis, such as interest deductibility or the taxation of dividends.

AO#13 (Tax Planning Proposals)

Candidates were asked to evaluate two tax planning ideas proposed by Elcar employees, to determine whether they were worth pursuing, and to discuss the risks associated with each. The two ideas were presented in Appendix IV (Taxation). To demonstrate competence, candidates were expected to explain why each of the proposals would be unsuccessful.

Candidates performed reasonably well on this AO. Most candidates discussed both proposals, although they usually addressed one in more depth than the other. When addressing the CCPC proposal, they usually explained that it would not work, either recognising that de facto control would not be changed or that, if it would be changed, the deemed taxation year ends would prevent this strategy from being beneficial. Candidates also usually identified the nature of SR&ED and used that knowledge to explain why the SR&ED proposal would not work, or where it might work. Candidates often attempted to consider each stage of the quality control process in the context of the SR&ED program in order to determine which stages would qualify.

Strong candidates discussed both proposals, identifying the nature of SR&ED and using it to explain which components of Elcar's business might qualify, and explaining why the CCPC proposal would not work, focusing on de facto control, which was the major issue. Strong candidates usually provided more in-depth discussions of both issues, bringing in specific case facts to clearly explain why the strategies were not appropriate. These candidates often also addressed the ethics considerations, or the risks, that of interest and penalties, associated with proceeding with bad tax planning.

Weak candidates attempted the CCPC or the SR&ED discussion, but usually not both. They often made technical errors on the CCPC discussion, either conflating CCPC with QSBC share criteria, or responding as though the proposal would work by explaining the benefits and pitfalls of being a CCPC. Weak candidates often did not address the SR&ED issue, or simply listed the different stages in the process and concluded "met/not met" with respect to SR&ED qualification, without any explanation or analysis.

BOARD OF EXAMINERS' COMMENTS ON DAY 3 SIMULATIONS

Paper/Simulation:	Day 3, Case 1 (SGF)
Estimated time to complete:	90 minutes
Simulation difficulty:	Average 2
Competency Map coverage:	Finance (2); Taxation (1); Management Accounting (1); Audit and Assurance (1); Financial Reporting (2); and Strategy and Governance (1)

Evaluators' comments by Assessment Opportunity (AO)**AO#1 (Pricing Options) (Mgmt Acct)**

Candidates were asked to analyze the two sales pricing options for SGF identified by Jacob and to recommend which option to adopt. Appendix I provided details of SGF's operations, including a projected statement of operations. Appendix II provided information on sales pricing options (Option 1: Lower, and Option 2: Higher). Adjusting the revenue required changes to the price and volume. Adjustments to expenses were straightforward. To demonstrate competence, candidates were required to prepare both a quantitative and qualitative analysis and provide a recommendation. The quantitative analysis could be done using an incremental analysis, or by preparing a statement of operations under Option 2 and comparing it to the statement of operations in Appendix I of the case, which reflected Option 1. The qualitative analysis required candidates to integrate the details of the options with SGF's objectives and discuss the potential implications on operations, such as on donations, rent and not-for-profit status.

Candidates performed as expected on this AO. Some candidates failed to provide both a quantitative and qualitative analysis. Most candidates did one or the other well. Candidates who performed well on the quantitative aspect attempted to adjust sales and incorporate changes to expenditures from the reduction in utilities expense and the increase relating to returns, advertising and compost disposal. Most candidates attempted all three components of the sales adjustment, bringing the sales figure under the 50% pricing model back to wholesale and then applying the 25% price reduction and 25% volume reduction accordingly. Candidates who did well on the qualitative aspect focused on alignment of the pricing strategy with the objective of the not-for-profit organization, discussed the risk of a potential rent increase or donation decrease resulting from a perceived shift in focus, and the misalignment of the increased waste under the higher pricing model with the mission to reduce food waste. A majority of candidates made a recommendation that was consistent with their analysis, but often did not take the not-for-profit context into account when making that recommendation.

Strong candidates recognized the need to do both a quantitative and a qualitative analysis. They typically provided a perfect or near-perfect quantitative analysis, making the revenue adjustment for Option 2 correctly, whereas many candidates did not. Strong candidates recognized the need to provide a clear recommendation for Jakob that focused on the not-for-profit context, thus recommending the most appropriate alternative, which was not necessarily the most profitable scenario.

Weak candidates struggled with the quantitative analysis, either by failing to correctly handle the three components of the sales adjustment or by making errors in the directionality or amounts of the various expenditure adjustments. Some candidates spent time recasting the income statement rather than focusing on the incremental difference between the two pricing models, creating the potential for additional errors in transcribing the information provided in Appendix I. Many weak candidates failed to recognize the need to perform a qualitative analysis, often making a recommendation that was based purely on their quantitative analysis.

AO#2 (Monthly Cash Requirements) (Fin)

RSS, a high-end clothing retailer, has approached Jakob with an offer: SGF would buy excess clothing from RSS at reduced prices and sell it in its store. Candidates were asked to determine the amount of outside financing required to cover the monthly cash requirements of the first six months of the RSS initiative. Details of the proposal were provided in Appendix III. In addition, Appendix III provided three options for a security system to protect items from theft, and costs of special racks that would be required. This finance request required candidates to take a cash flow perspective rather than address profitability. Candidates were expected to prepare a monthly cash flow for the next six months. Within the quantitative analysis, candidates needed to accurately incorporate the sales and cost of sales as well as the sales returns, upfront cost of the racks, insurance increases and security costs. In addition, when determining the amount of financing required over the first six months, candidates needed to recognize either that there were a number of costs that would need to be incurred before the venture even began, such as the upfront cost of the racks, the security system and the payment for the clothing shipment, or to recognize that over the six-month period, the cash flow needs, and therefore the financing required, would vary.

Candidates struggled on this two-part AO, which was considered more difficult. Candidates generally approached their analysis from a finance perspective; however, they had difficulty determining either the upfront cash flow requirements or the monthly variation in financing required. Several candidates attempted to address the financing needs as a lump sum over the six-month period, thereby failing to recognize either the upfront costs or the variability of cash flows in each of the six months. By providing a lump sum calculation, it was much harder to demonstrate understanding of the two key components, those being the larger upfront costs that needed to be financed and the month-to-month cash requirements that needed to be financed.

Strong candidates were able to clearly recognize and demonstrate that the cash flows were variable throughout the six-month term, either by providing a breakdown of the cash inflows and outflows in each of the six months, or by clearly recognizing the significant costs required at the outset of the project. These candidates were also able to accurately calculate sales and costs of sales for the six-month period and correctly incorporate several of the costs that were presented in Appendix III. Strong candidates also briefly analyzed the two security options and provided a recommendation for how to proceed, incorporating that choice into their main analysis of the RSS proposal.

Weak candidates struggled to determine the appropriate amounts to incorporate for sales and costs of sales, with mathematical errors and inconsistencies in annual versus six-month costs. Errors were often made when attempting to incorporate the costs relating to the security system into the analysis, often amortizing the cost rather than including the cash outflow. Other weak candidates failed to recognize the need to determine the amount of financing required, focusing instead on performing a net present value analysis or a calculation of net income in order to determine whether to invest in the venture.

AO#3 (Strategic Fit and Decision Factors for RSS Proposal) (Strat & Gov)

Candidates were asked to discuss the strategic fit and other decision factors that should be considered with respect to the RSS proposal. The details of the RSS proposal were included in Appendix III. Candidates were required to integrate this information with SGF's mission and the information on SGF operations presented in Appendix I. Candidates were required to discuss how the sale of excess clothing fit with SGF's mission to reduce food waste. They were also required to address some of the other factors, such as the impact on donors, landlord, volunteers and customers. There were ample case facts provided to permit candidates to address how the offer was aligned or not aligned with SGF's current mission, and to identify other decision factors that would need to be considered.

Candidates performed to expectations on this two-part AO. However, many candidates did not discuss both the strategic fit of the RSS proposal with SGF's mission and the other decision factors that should be considered prior to accepting or declining the unsolicited offer. The decision factors part of the required was considered more difficult as it necessitated that candidates step back and integrate information from other areas of the case. The average candidate addressed the strategic fit but limited this to the obvious fact that selling clothing did not fit with SGF's mission to reduce food waste. They usually considered one decision factor in addition to this, such as the potential impact on rent or the likelihood that donations of food would be impacted.

Strong candidates were able to address both the strategic fit of the RSS proposal and the other decision factors to be considered, with a good balance between both discussions. For example, they discussed how the RSS proposal was not aligned with SGF's mission to reduce food waste, and saw how it was potentially aligned with SGF's vision of being environmentally sustainable. Strong candidates also discussed multiple other decision factors, often focusing on the potential reduction in donations, risk of rent increase, impact on volunteers, impact on the target customers and the extra costs and effort the new proposal would require.

Weak candidates more often focused solely on the strategic fit and did not adequately consider other decision factors. They often stated that it was not a good strategic fit and stopped there. Other weak candidates attempted to question the assumptions or estimates underlying the quantitative analysis of AO#2 rather than focus on the other decision factors. Weak candidates were often brief and repetitive, failing to fully explain the implications of the factors discussed or not going much beyond a listing of the case facts provided. Some weak candidates attempted to create their own mission, which was not appropriate in the circumstances.

AO#4 (Home Office) (Tax)

Candidates were told that Jakob will do administrative work from his home office. Note 2 of Appendix I stated that Jakob will take a token salary of \$1,000 per year as an employee to manage the store. Candidates were asked to explain the taxation rules and advise on the deductibility of the expenses on his personal tax return. Details of the expenses were presented in Appendix IV. Candidates were required to determine whether Jakob could claim home office expenses, and the limits that would apply. They were expected to identify which of the individual expenses presented in the appendix were deductible, given his status as an employee.

Candidates performed weaker than expected on this AO. While often able to identify that there were criteria that would need to be met in order to deduct home office expenses, candidates struggled to analyze these criteria within the context of the case facts provided. More candidates than expected failed to recognize that Jakob was an employee of SGF, and therefore attempted to apply the criteria within a business or self-employment context. As a result, they often incorrectly stated that the majority of costs provided in Appendix IV were deductible against the business income of SGF. In terms of the general criteria, many candidates appeared to believe that both criteria (working more than 50% from home and using the space to meet with clients on a regular and continuous basis) were required to be met in order to deduct any of the expenses.

Strong candidates clearly recognized that Jakob was an employee of SGF and, as such, would not be able to deduct property taxes, insurance, mortgage interest, phone and internet or CCA on his house from his employment income. Strong candidates also recognized that Jakob would be limited to deducting expenses up to the \$1,000 salary earned from SGF, with the ability to carry forward unused deductions to the subsequent year.

Weak candidates appeared to lack technical knowledge or an understanding of the specifics of Jakob's situation. They attempted to analyze the criteria from a business or self-employment perspective, failing to identify that most of costs presented would not be deductible to Jakob as an employee of SGF. They often concluded that 10% of the annual home costs and the business use of the home phone and internet were fully deductible from business income. Some weak candidates attempted to explain that CCA was not deductible; however, they used the rationale that this would limit the ability to use the principal residence deduction rather than recognizing that the deduction was not permitted within the *Income Tax Act*.

AO#5 (Investment Options) (Fin)

Six individuals have offered to contribute funds for SGF to open additional stores. The funds will need to be segregated and invested until SGF is ready to open new stores, which is estimated to be in 24 to 36 months' time. Candidates were presented with four investment options in Appendix V and were asked to assess which would be best suited for investing the funds. Candidates were expected to consider how the investment options fit with SGF's objectives, which included preserving the capital and having it accessible in the time needed, that of 24 to 36 months. A recommendation was required.

Candidates generally performed well on this AO. Most candidates attempted to analyze all four investment options and provided a recommendation for SGF. Candidates were generally able to incorporate the case facts provided in order to recommend an appropriate investment, such as, for example, the three-year term for the term deposit and the possibility that funds would be required before the deposit matured, the low interest on the term deposit, the fact that the investor's account would allow the funds to be accessed at any point as needed and the low rate of return on it, the uncertain return on the equity fund and the foreign exchange risk on the U.S. bond. However, they did not always consider the not-for-profit context.

Strong candidates kept within the context of the not-for-profit organization and were cognizant of the fact that the option with the highest returns was not necessarily the most appropriate option for SGF. These candidates recognized that the funds had been donated for the purpose of opening stores within the next two to three years, and that SGF therefore has a fiduciary responsibility to protect the funds. As such, these candidates were able to assess the risk of the various investments within the context of capital preservation. Strong candidates were also able to recognize the importance of flexibility in accessing the funds, in case the timeline for the opening of the new stores was shorter than the two to three years projected. These candidates provided a recommendation that reflected the importance of preserving capital while providing access to the funds when needed.

Weak candidates generally failed to assess the investments within the context of the situation presented. They often focused solely on ranking the investments, based on the returns available. Weak candidates often downplayed the risks associated with the equity mutual funds and the foreign exchange on the municipal bond, saying that the reward far outweighed the risk to SGF. They also failed to recognize that it would be important to SGF to have earlier access to the funds, focusing instead on the three-year window for building the stores. As such, they failed to identify that locking funds in for three years would be a problem. Weak candidates often provided superficial or contradictory recommendations, often not addressing or considering the risks previously identified for the investment being recommended.

AO#6 (Contributions) (Fin Rep)

Candidates were asked to explain the accounting treatment for the different contributions received by SGF. Contributions included the donated food, volunteer time and below-market rent, as presented in Appendix I. These contributions were unrestricted and related to current operations. Individuals also want to contribute to SGF immediately to fund the opening of new stores, and have specified that the funds and interest earned on the funds are to be used solely for the new stores. Candidates were required to discuss the options available under ASNPO to account for the different contributions.

Candidates generally struggled on this AO, which was considered more difficult by the BOE. It was evident that many candidates were uncomfortable working with ASNPO. Candidates generally struggled to apply the technical knowledge of ASNPO to the specific case facts, mixing up terminology and incorrectly applying the accounting principles to the case facts. Many of the discussions focused solely on the accounting treatment of the funds contributed to the opening of the new stores, presumably because that was the "contribution" identified on the first page of the case. However, there were additional contributions that candidates were not directed to, such as rent, food and volunteer labour, that could also be discussed. Candidates generally understood that the funds for the store should not be recognized as revenue until the stores were opened and the funds were spent. Those who discussed the other types of contributions usually discussed the food or the labour, and often understood that a value needed to be determined in order to record a transaction. Few candidates discussed the discounted rent.

Strong candidates applied correct technical knowledge to case facts to arrive at the correct accounting treatment for the contributions. They were able to recognize that SGF had a choice in accounting policy, either in relation to recording contributed materials (food) and services (volunteer labour), or between the deferral and restricted fund methods of accounting for contributions to fund future stores. They recognized that a fair value, or some transactional value (cost to purchase), was required in order to be able to record the items.

Weak candidates often cut and pasted information from the ASNPO section of the *Handbook* into their response without any application of that information to the case facts provided. Pasting the *Handbook* alone added no value. When they attempted a discussion, they often suggested that SGF had a choice in policy, but did not appear to understand the alternatives, tending to confuse the types of funds being received, often calling the funds "endowments," for stores, or "restricted funds," for the food.

AO#7 (Lease) (Fin Rep)

SGF plans to lease its refrigerators and candidates were asked to explain the accounting treatment for the leases. Details of the leases were presented in Note 5 of Appendix I. Candidates were required to apply the ASPE accounting standards for leases to the specifics of the lease presented in the case, to determine whether the lease is capital or operating.

Candidates performed below expectation on this AO. This issue was considered a “bread and butter” issue and candidates were expected to do well on it. The majority of candidates were easily able to identify the criteria correctly but failed to perform a correct present value calculation, either attempting to incorporate the residual value of the equipment or deliberately including the maintenance portion of the lease payments. A surprising number of candidates tried to apply IFRS rather than ASPE to this lease.

Strong candidates were able to clearly integrate case facts into their analysis. They accurately calculated the present value of the minimum lease payments, recognizing that the residual value of the equipment was not relevant to the calculation. Strong candidates concluded that the lease was an operating lease that should be expensed within the statement of operations on the basis that the three criteria were not met.

Weak candidates struggled to adequately analyze each of the three criteria using the relevant case facts. Some candidates added the \$5,000 maintenance payment to the \$40,000 payment although the case stated that the amount was included in the \$40,000, or included the maintenance payments in their calculations, despite having cut and pasted the *Handbook* section that specifically stated they were excluded from the calculation of the NPV. Another typical error was including the unguaranteed residual value in the NPV calculation or attempting to calculate an IRR based on including the unguaranteed residual value in a calculation.

AO#8 (Issues that Jeopardize Unmodified Opinion) (Assur)

SGF will borrow funds from Eldred Bank for start-up of the store. The bank requires SGF to provide audited financial statements with an unmodified audit opinion for its first year of operations. Candidates were asked to advise Jakob of any issues with the proposed processes that could jeopardize an unmodified audit opinion, and to suggest improvements. In addition, they were to discuss how each stakeholder might react if an unmodified opinion is still not possible. Information on the processes was presented in Appendix I. Candidates were required to identify weaknesses in the processes (donations from grocery stores, revenue and cash) and suggest improvements. They were also required to discuss how stakeholders, bank, various donors, employees and volunteers might react to an unmodified opinion.

Candidates performed as expected on this AO. Most candidates discussed the weakness in the current processes by structuring their analysis in a “weakness-implication-recommendation” format, which resulted in them identifying a number of process weaknesses, such as, for example, no tracking of donations from grocery stores, no requirement for cash receipts and poor cash handling procedures. They usually suggested reasonable improvements. However, many did not do so in the context of the audit opinion, treating this more as a normal internal-controls weakness analysis.

Strong candidates clearly identified the impact of more than one process weakness on either the quality of the audit evidence available or on SGF's operations, viewing the issues from management's perspective. They identified appropriate and effective improvements for these weaknesses that would add value to SGF's operations, such as a log for donated products and use of a cash register. Strong candidates also clearly explained the impact of a modified audit opinion on the stakeholders identified, addressing more than one stakeholder. For example, they identified that the grocery stores might stop donating food if they thought the business was not well controlled, which might mean that SGF could not continue to operate, and that the bank might not be willing to continue to provide funding.

Weak candidates failed to discuss both the process improvements and the impact of the modified audit report on the stakeholders. More often, they did not provide sufficient analysis on the process aspect of the required, either proceeding directly to the improvement or limiting their analysis to one of the processes. When discussing the stakeholders, weak candidates often focused on the impact of the process weaknesses rather than on the impact of the modified audit report.

Paper/Simulation:	Day 3, Case 2 (VEC)
Estimated time to complete:	75 minutes
Simulation difficulty:	Average 2
Competency Map coverage:	Taxation (1); Management Accounting (2); Audit and assurance (1); and Strategy and Governance (2)

Evaluators' comments by Assessment Opportunity (AO)

AO#1 (Product Line Analysis) (Mgmt Acct)

To help her better understand her business, Michelle prepared a product line analysis. Because she is unsure whether she has done it correctly, she asked CPA to review her cost allocations and make all required revisions. Appendix I provides the analysis prepared by Michelle, which explains that she allocated all expenses based on revenue. The information provided specifics that should have been used to allocate salary, rent, utilities, advertising and professional insurance. For some of the expenses, including the portion of Michelle's salary related to managerial duties, general insurance and office and other, no additional information was provided. To demonstrate competence, candidates were required to prepare a revised product line analysis. Because use of the product line analysis "to help her understand her business" was open to different interpretations, there were different approaches that candidates could take that were considered valid.

Candidates performed very well on this AO. The majority of candidates were able to use the information presented to revise the cost allocation prepared by Michelle, including most of the expense items. Some candidates used the information in the case to reallocate the directed and semi-directed expenses. Others included a managerial or overhead column with the undirected expenses remaining unallocated. Where candidates sometimes did not meet expectations was in providing a clear explanation for the approach they took. It was assumed that the costs were being intentionally unallocated when costs were left in a fourth column without further explanation, however it was unclear.

Strong candidates added value to their analysis by explaining their assumptions for the undirected expense line items, the management portion of salary, general insurance, furniture and fixture depreciation, reception rent and utilities, and office and other costs. The explanation was important as it would allow Michelle to understand why her initial cost allocation was not appropriate.

Weak candidates either left their analysis incomplete by excluding several expense line items, without an explanation for why these expenses were excluded, or had significant errors in their calculated allocations. Their allocations often ignored the case facts available. For example, the fact that advertising focused on eye exams, or that \$40,000 of the insurance was for professional liability, which inferred that it should be allocated to eye exams, was ignored. Alternatively, the allocations were not explained at all. For example, some candidates divided the management portion of salary, general insurance, and furniture and fixture depreciation allocations evenly across the product lines without explaining why.

AO#2 (Elimination of Sunglasses Line) (Mgmt Acct)

Michelle is considering eliminating the sunglasses line and candidates were asked to determine whether there is support for eliminating it, and the impact it would have on VEC's profitability. The information for this analysis is contained in Appendix I. Candidates were expected to provide a reasonable calculation of the impact on profitability of dropping the line, and to discuss the impact of dropping it on the rest of the business. To demonstrate competence, candidates were expected to recognize that most, if not all, of the costs allocated to the sunglasses line would not significantly change if the line was dropped, and that therefore the impact on profit would be a reduction equal to the contribution margin generated by the line. Candidates could also offer business advice around how to improve the results of the sunglasses line, which they were not directed to do.

Considering that this is a basic management accounting concept, candidate performance on this AO was lower than the BOE expected. Some candidates used the analysis they performed in AO#1, with full cost allocation, to assess the impact on profit. Since their calculations typically resulted in a loss for the sunglasses line, this was an acceptable approach as long as they also explained what happens with the fixed costs when the line is eliminated. Most candidates did not provide the necessary explanation, instead simply concluding that the product line had a loss and should therefore be closed. Other candidates calculated the gross profit but left the analysis incomplete; they did not address the remaining costs or the impact on the bottom line, or the potential impact on sales for the remaining product lines.

Strong candidates generally took one of two approaches. Some candidates calculated the gross profit / contribution margin on the sunglasses line and explained that other costs would not be eliminated if the line was dropped, and that therefore the impact on profit would be the loss of the margin being contributed. Others were able to assess the impact on profitability of eliminating the sunglasses line by providing a revised cost allocation schedule that removed revenue and cost of goods sold for the sunglasses line and reallocated costs to other product lines. Strong candidates often also discussed non-financial, qualitative factors, such as cross selling or bringing in customers to purchase other products, which demonstrated a good understanding of VEC's business model.

Weak candidates often took their cost allocation calculation from AO#1 and concluded on the impact on profitability by using the sunglasses line total loss/profit, and suggested that the overall profit would increase/decrease by the sunglasses line total loss/profit. These candidates did not recognize that the fixed or common costs would not be eliminated and would have to be reallocated to the other product line, decreasing their profitability and thus overall company profitability.

AO#3 (KPIs) (Strat & Gov)

Michelle asked CPA how KPIs could be useful to her and which KPIs would be recommended, and why. In responding to this request, candidates were expected to use information presented in the body of the case and in Appendix I. Candidates were required to address both portions of the request: suggesting KPIs and explaining why or how they would be useful. Candidates were expected to provide financial and non-financial KPIs specific to Michelle's business.

Given that it was considered difficult, candidates performed as expected on this two-part AO. Candidates generally suggested KPIs but often did not explain how or why they would be useful to Michelle, thereby only addressing one of Michelle's requests. Other candidates struggled to provide KPIs that were specific to Michelle's optometry business, instead only providing KPIs that were more generic in nature and could be applied to any business, such as gross margin, ratios, or customer satisfaction in general terms.

Strong candidates provided several KPIs specific to VEC by incorporating case facts related to VEC and Michelle, or specific metrics that were well tailored to the optometry profession. The KPIs provided were usually a mix of financial and non-financial KPIs that were tailored to VEC and Michelle's goals, based on the case facts presented. Strong candidates also directly responded to Michelle's request to explain how KPIs could be useful to her.

Weak candidates did not seem to understand what KPIs were; rather than provide KPIs and valid metrics to assess the performance of VEC, they often provided actual-to-budget variance analysis or key success factors. Some weak candidates limited the KPIs they provided to financial KPIs only, focusing on standard ratios and other financial statement analysis.

AO#4 (Second Optometrist) (Strat & Gov)

Candidates were asked to provide the strategic advantages and disadvantages of partnering with a second optometrist. Details of the person being considered, Tom, were provided in Appendix II. There were many case facts provided that allowed candidates to provide a balanced, insightful analysis for Michelle's consideration, recognizing the likely misalignment between the two individuals' goals. In order to demonstrate competence, candidates needed to consider the strategic elements of having a partner in the business, based on the specific details presented.

Candidates performed as expected on this AO. Most candidates were able to use the case facts to show that Tom's and Michelle's goals and objectives differed, and to explain the strategic advantages and disadvantages of partnering with Tom. Most, but not all, candidates then provided a recommendation that was consistent with their analysis; however, some noted significant differences and risks and still recommended proceeding with the partnership. Some candidates provided a more general discussion of the case facts and discussed what was a "pro" or a "con," but did not step back to assess the strategic implications.

Strong candidates identified several considerations relevant to the decision to have Tom as a partner. They discussed decision factors, explaining how Tom's skills, goals and objectives could be beneficial, such as, for example, Tom's interest in the "business side of medicine" and Michelle's lack of skills and time to address this area of her practice. They also recognized that there was a potential misalignment of goals and objectives, such as Tom's desire for rapid growth compared to Michelle's preference for slower growth. Some candidates went further and advised Michelle as to how the potential differences could be dealt with if Michelle decided to proceed with a partnership, such as through terms of an agreement or a specially designed compensation formula.

Weak candidates often failed to see the potential misfit and discussed the partnership from a positive perspective only. Weak candidates often restated the case facts, sorted into advantages and disadvantages of Tom, without further analyzing how his objectives and goals could be a strategic advantage or disadvantage to VEC and Michelle. Other weak candidates often did not recognize that they were responding to Michelle, provided a comparison of Tom and Michelle, and recommended that VEC choose Michelle over Tom as a potential partner.

AO#5 (Tax Implications) (Tax)

Candidates were asked to respond to Michelle's questions about VEC's and her personal tax returns. Appendix III provided a list of points to be addressed. In order to demonstrate competence, candidates were expected to draw on their tax knowledge and respond to Michelle's questions.

Candidates performed as expected on this AO. Candidates generally addressed the less complex taxation issues: association fees, cell phone costs and interior design. However, many did not understand the more complex concepts of mortgage interest deductibility and attribution. Those discussing the mortgage interest, understood that only the portion related to the business was deductible, but did not usually explain how to allocate the interest or the need to be able to track the documentation in order to support it being business related. When discussing the tax implications of gifting securities, they struggled with the concept of attribution, in both the income analysis and capital gain analysis. Most did not discuss how the daughters were to treat each source of income, or that one daughter was a minor and the other was not.

Strong candidates provided an analysis of the mortgage interest and association fees, identifying the tax consequences to Michelle or VEC. Strong candidates were more likely to also attempt a discussion of the attribution rules, recognizing the different tax treatment for the two daughters, and discussed the interior design fees in more depth, assessing whether they have a lasting benefit or not.

Weak candidates did not address a sufficient number of the tax concepts or performed little or no analysis. They often lacked technical knowledge, for example, stating that the mortgage interest was entirely deductible, or not deductible, without incorporating case facts of the different uses of the borrowed funds, not recognizing that there were different attribution rules for income and capital gain and for the two daughters, stating that RESPs should be used instead of gifting funds and discussing dividend gross up and tax credit rates. Weak candidates also often provided conclusions on the deductibility of association fees and cell phone costs without explaining the underlying taxation concepts.

AO#6 (Risks and Controls over ABC Cloud) (Assur)

Candidates were asked to discuss the risks of using ABC's services for storing VEC's data. They were also asked to suggest controls and other procedures that ABC should have in place in order to address those risks. Appendix IV provided information on ABC, and Appendix III provided additional information that could be used. In order to demonstrate competence, candidates were required to both identify some of the risks and provide some controls that ABC should have in place to address the risks. Candidates were expected to identify that there were different types of risks, recognize the impact these risks would have on VEC's operations, and suggest controls that should be implemented.

Candidates generally performed well on this AO. Candidates typically addressed more than one risk, often choosing to apply a "weakness, implication, recommendation" approach that proved effective. Most candidates were able to address more than one area of risk, recognizing that some risks related to security while others related to confidentiality/privacy or availability.

Strong candidates were able to discuss several risks by explaining the impact or implication of the risk to VEC and providing a well-supported control to address the stated risk. They were able to suggest practical controls that, when implemented, would be effective. They were also able to address more than one area of concern, such as security, availability or confidentiality/privacy, providing a greater breadth of analysis. Strong candidates also integrated information from Appendix III into their risk analysis, which noted that there was poor reception and unreliable WiFi at VEC. They used this information to support the potential risk of storing data in the cloud, and accessibility issues.

Weak candidates often recommended controls without first identifying or explaining the risk that the control was meant to address. Other weak candidates provided unlinked discussions by identifying the weakness but not providing either an adequate implication and/or recommendation for control. Some candidates focused solely on one area, such as security, and failed to see the other important risk areas.

Paper/Simulation:	Day 3, Case 3 (TinyCo)
Estimated time to complete:	75 minutes
Simulation difficulty:	Average 1
Competency Map coverage:	Taxation (1); Management Accounting (1); Finance (1); Assurance (1); Strategy and Governance (1); and Financial Reporting (1)

Evaluators' comments by Assessment Opportunity (AO)

AO#1 (Business Model Options and Price) (Mgmt Acct)

Candidates were advised to choose between two business models: either TinyCo designs and builds 100% of the house; or buyers participate in the building process. The required read, "Please help us determine the best model given the demand for each selling price, and the selling price we should set for the chosen model." Appendix II provided information on the two models under consideration: model #1 – without buyer participation; and model #2 – with buyer participation. The selling price, demand at each price and cost information, both variable and fixed, was provided for each model at different selling prices. To demonstrate competence, candidates were required to calculate the profit for each of the three prices for the two models and recommend a model and price.

Candidates struggled with this AO. Most candidates recognized the need to recommend a model. However, many candidates thought they could build all price points within the model, so they took a total revenue and cost approach rather than perform a calculation of the profitability for each price point. Because they assumed they were going to build all houses, these candidates were unable to recommend a price at which to sell the houses. Some candidates also had difficulty applying the case facts correctly, often omitting costs or misclassifying them as fixed rather than variable. For example, many candidates included the floor plan or the trailer base as fixed when it was variable. Candidates sometimes had significant calculation errors or did not conclude on, or interpret, their calculations.

Strong candidates were able to correctly identify and calculate total revenue for each of the price points for each model, apply the variable costs against the revenue and recognize the step costs in the overhead component. They recommended the price and model with the highest profit and concluded appropriately. These candidates were also able to integrate the grant into their analysis, noting that the most profitable option did not meet the grant requirements.

Weak candidates did not calculate total profit and instead used a per-unit contribution margin analysis, or attempted a variety of different calculations, such as doing a profitability per price, followed by a profitability per model, and then calculating a unit contribution model. Some candidates prepared a breakeven analysis, which was not the appropriate analysis for this case. These candidates did not understand the critical component of demand as they failed to recognize that demand at each price point affects the profitability of each option. They were therefore unable to provide a reasonable basis for their recommendation.

AO#2 (Funding Sources) (Fin)

Candidates were asked for advantages and disadvantages of each funding option under consideration. Appendix III provided details of five funding options: personal savings and RRSP withdrawal; Cash Mart loan; an angel investor; a crowdfunding campaign; and a four-year grant. To demonstrate competence, candidates were required to consider most of the options and the important elements, such as funding available versus funding needed, the cost of the funding and impact on control of the company. In addition, candidates could consider the risk of not obtaining the grant, based on the number of houses.

Overall, candidates performed as expected on this AO. Most candidates listed the funding sources and identified at least some disadvantages for each, typically considering the sufficiency or immediacy of the funding. Candidates understood that there were disadvantages of withdrawing personal funds and RRSPs, recognized the high interest rate for the Cash Mart loan and discussed the loss of control with the angel investor. They understood that the grant would mean no repayment subject to the conditions being met. Most candidates did a better job of addressing the disadvantages of the funding options, often forgetting to provide advantages.

Strong candidates discussed most or all of the funding options and provided a balance of advantages and disadvantages in their overall discussion. These candidates attempted to discuss the more unusual financing sources, such as the angel investor or crowdfunding, and/or integrated more case facts into their discussions. For example, when they discussed the crowdfunding opportunity, they considered the likelihood of raising the \$600,000 required and integrated case facts such as that the typical buyer was likely to donate only \$20 to crowdfunding campaigns to encourage sustainability, or that the income levels of expected customers was \$50,000 or less.

Weak candidates provided either a one-sided analysis, focusing normally on the disadvantages without addressing any advantages, or they provided no additional analysis beyond listing the information provided in the case for each option. Weaker candidates often stated the same concept repeatedly, using it for all sources of financing, such as, for example, saying for all sources other than Cash Mart that an advantage was no interest payment.

AO#3 (Grant) (Fin Rep)

Candidates were asked to explain how to account for the funds received and potential repayments under ASPE for the grant the company could apply for. As outlined in Appendix III, the grant would provide a total of \$550,000, allocated as follows: \$350,000 for operating expenses, with at least \$60,000 to be spent in each year of the four years of the grant; and \$200,000 for capital expenditures. All funds have to be spent within the four-year grant period. The grant has a number of additional requirements that, if not met, would require the full grant to be repaid at the end of the grant period. To demonstrate competence, candidates had to describe the accounting for the funds under ASPE. They could discuss the application of the accounting standards. They could also provide correct journal entries as another way to illustrate their understanding. It was important to bring in case specifics in order to discuss the nature of each portion of the grant, operating versus capital, and how to account for the funds over the term of the agreement or the possible consequences of not meeting the terms.

Candidates struggled with this AO. Most candidates addressed the grant but did not provide reasonable analysis of the different components, that of operating and capital. These candidates recognized that the funds should be deferred initially and brought into income as spent. However, they neglected to discuss the different treatments required for the capital versus operating funding. Those who did identify that the treatment differed for the two funding types were usually able to describe the two methods for accounting for the capital portion of the grant but struggled to explain how the amount is brought into income if capitalized. Very few candidates provided a reasonable analysis of the possible repayment of the grant.

Strong candidates were able to provide a complete discussion of the grant, recognizing that it should be deferred initially and brought into income as spent. They clearly understood that there are different treatment options for the operating and capital portions, and were able to incorporate the potential repayment, should the terms not be met, into their discussion. They understood that a liability should be recorded as soon as any information emerged to suggest that the terms would not be met.

Weak candidates provided a cursory discussion of one of the components, often copying and pasting from the *Handbook* without being able to apply the technical information to the case facts. Weak candidates often addressed whether the grant was a forgivable loan or a grant, which was not part of the required, since the case was clear that it was a grant, the full amount of which was forgivable if complied with, or they analyzed whether they should use the capital or income approach, which was not relevant as the guidance suggests the income approach should be used.

AO#4 (Procedures on Grant) (Assu)

Candidates were asked to provide procedures that would be performed for the audit required by the grant agreement. The details of the grant agreement were provided in Appendix III, which states that an audit report will be required confirming that the grantee complies with the grant requirements, and lists five specific requirements. To demonstrate competence, candidates had to provide valid procedures that covered a range of the specific requirements.

A significant number of candidates (13%) chose not to address this AO. Candidates who did address this required generally performed well. Most candidates were able to provide some valid procedures that would be used in an audit to determine compliance with the grant conditions. These candidates provided a few procedures that addressed more than one of the grant criteria, often addressing two or three of the requirements: houses must not exceed 400 square feet; WTHO certification; maximum sales price of \$100,000; maximum shareholder compensation of \$75,000 annually; and minimum sales of 10 houses per year.

Strong candidates were able to provide many valid procedures, addressing most or all of the grant requirements. These candidates were able to provide procedures that were reasonable and relevant, could be re-performed, identified what documents or actions would be needed and explained how the procedure would be performed, clearly distinguishing when it was important to use procedures such as inspection and observation (e.g., for the size of the house).

Weak candidates did not provide many procedures, and they were often not valid. Their procedures tended to be generic or in line with providing a review engagement rather than an audit, for instance, addressing inquiry only or summing values in the general ledger. Some weak candidates provided procedures to ensure that the accounting for the grant was accurate, rather than providing procedures to ensure that the actual grant requirements were met.

AO#5 (SWOT) (Strat & Gov)

Candidates were requested to prepare an assessment of TinyCo's strengths, weaknesses, opportunities and threats as part of the grant application. Information to be used in this analysis was provided in the body of the case and in Appendices I and II. To demonstrate competence, candidates were required to consider all four elements of a SWOT analysis, use specific information provided in the case and go beyond sorting case facts into the categories. In order to provide sufficient depth, candidates were expected to explain the items they identified as a strength, weakness, opportunity, or threat; for example, the price volatility of material would be a threat as it could reduce profitability and add risk to the pricing decision.

Candidates performed well on this AO. They completed an analysis that was well organized and touched on most of the categories of "strengths, weaknesses, opportunities and threats" and provided a number of relevant points that went beyond case facts under each area.

Strong candidates addressed all of the areas within their SWOT analysis. They incorporated the case facts and clearly explained why each point was applicable to that category.

Weak candidates treated the analysis as an exercise in organizing case facts into the SWOT categories without providing value-added discussions. Their analysis was brief and they listed case facts without any added explanation; their responses were typically bulleted lists rather than completed thoughts. These candidates often could not apply the case fact to the appropriate category of a SWOT, for instance, addressing a point as an opportunity when it was a strength.

AO#6 (Moving Expenses) (Tax)

Candidates were asked to review moving expenses and determine whether they are deductible, and to provide information on the eligibility of the move. Candidates were told the move took place in 2018 and was from Nova Scotia to British Columbia for the purpose of starting a job in British Columbia. Appendix IV provided details of the expenses incurred and the income at the old and new locations. To demonstrate competence, candidates were expected to address both the eligibility of the move and the deductibility of the expenses. Candidates had to recognize that some of the expenses provided in Appendix IV were deductible while others were not. As it was not in the list of expenses provided, one additional deductible expense, meals, could have been identified by candidates.

Candidate performance was below expectation on this AO, which was considered difficult. Some of the details on deductibility of moving expenses are not found in the *Income Tax Act*; they are in folios, which candidates were not expected to access. Instead, candidates were expected to apply a “reasonableness” approach to assessing the deductibility, which is why this AO was rated as more difficult. Most candidates discussed the eligibility of the move, recognizing that the distance travelled qualified as an eligible move, and were able to identify a few of the expenses that were deductible, such as shipping, storage and the moving truck. However, most candidates did not correctly analyze the old house costs, the house rental and the new house costs, which were the more difficult parts of the AO and which had more specific rules.

Strong candidates were able to address additional components of the eligibility of the move, recognizing that the \$5,000 allowance received would be taxable and that the total amount deductible would be limited by the amount of salary earned in the new location. These candidates were better able to distinguish the expenses that were not deductible and address the limits on some expenses.

Weak candidates typically focused on the given costs that were deductible without addressing the criteria, often assuming that they were 100% deductible and attempting to rationalize why. Weak candidates were often technically deficient, for example, stating that the full cost of the new house purchased was deductible.

APPENDIX G

CPA COMMON FINAL EXAMINATION REFERENCE SCHEDULE

CPA COMMON FINAL EXAMINATION REFERENCE SCHEDULE

1. PRESENT VALUE OF TAX SHIELD FOR AMORTIZABLE ASSETS

Present value of total tax shield from CCA for a new asset acquired before November 21, 2018

$$= \frac{CTd}{(d+k)} \left(\frac{2+k}{2(1+k)} \right) = \frac{CdT}{(d+k)} \left(\frac{1+0.5k}{1+k} \right)$$

Present value of total tax shield from CCA for a new asset acquired after November 20, 2018

$$= \frac{CdT}{(d+k)} \left(\frac{1+1.5k}{1+k} \right)$$

Notation for above formula:

C = net initial investment

T = corporate tax rate

k = discount rate or time value of money

d = maximum rate of capital cost allowance

2. SELECTED PRESCRIBED AUTOMOBILE AMOUNTS

	2018	2019
Maximum depreciable cost — Class 10.1	\$30,000 + sales tax	\$30,000 + sales tax
Maximum monthly deductible lease cost	\$800 + sales tax	\$800 + sales tax
Maximum monthly deductible interest cost	\$300	\$300
Operating cost benefit — employee	26¢ per km of personal use	28¢ per km of personal use
Non-taxable automobile allowance rates		
— first 5,000 kilometres	55¢ per km	58¢ per km
— balance	49¢ per km	52¢ per km

3. INDIVIDUAL FEDERAL INCOME TAX RATES**For 2018**

<u>If taxable income is between</u>			<u>Tax on base amount</u>	<u>Tax on excess</u>
\$0	and	\$46,605	\$0	15%
\$46,606	and	\$93,208	\$6,991	20.5%
\$93,209	and	\$144,489	\$16,544	26%
\$144,490	and	\$205,842	\$29,877	29%
\$205,843	and	any amount	\$47,670	33%

For 2019

<u>If taxable income is between</u>			<u>Tax on base amount</u>	<u>Tax on excess</u>
\$0	and	\$47,630	\$0	15%
\$47,631	and	\$95,259	\$7,145	20.5%
\$95,260	and	\$147,667	\$16,908	26%
\$147,668	and	\$210,371	\$30,534	29%
\$210,372	and	any amount	\$48,718	33%

4. SELECTED INDEXED AMOUNTS FOR PURPOSES OF COMPUTING INCOME TAX

Personal tax credits are a maximum of 15% of the following amounts:

	2018	2019
Basic personal amount	\$11,809	\$12,069
Spouse, common-law partner, or eligible dependant amount	11,809	12,069
Age amount if 65 or over in the year	7,333	7,494
Net income threshold for age amount	36,976	37,790
Canada employment amount	1,195	1,222
Disability amount	8,235	8,416
Canada caregiver amount for children under age 18	2,182	2,230
Canada caregiver amount for other infirm dependants age 18 or older (maximum amount)	6,986	7,140
Net income threshold for Canada caregiver amount	16,405	16,766
Adoption expense credit limit	15,905	16,255

Other indexed amounts are as follows:

	2018	2019
Medical expense tax credit — 3% of net income ceiling	\$2,302	\$2,352
Annual TFSA dollar limit	5,500	6,000
RRSP dollar limit	26,230	26,500
Lifetime capital gains exemption on qualified small business corporation shares	848,252	866,912

5. PRESCRIBED INTEREST RATES (base rates)

<u>Year</u>	<u>Jan. 1 – Mar. 31</u>	<u>Apr. 1 – June 30</u>	<u>July 1 – Sep. 30</u>	<u>Oct. 1 – Dec. 31</u>
2019	2	2	2	
2018	1	2	2	2
2017	1	1	1	1

This is the rate used for taxable benefits for employees and shareholders, low-interest loans, and other related-party transactions. The rate is 4 percentage points higher for late or deficient income tax payments and unremitted withholdings. The rate is 2 percentage points higher for tax refunds to taxpayers, with the exception of corporations, for which the base rate is used.

6. MAXIMUM CAPITAL COST ALLOWANCE RATES FOR SELECTED CLASSES

Class 1.....	4% for all buildings except those below
Class 1.....	6% for buildings acquired for first use after March 18, 2007 and \geq 90% of the square footage is used for non-residential activities
Class 1.....	10% for buildings acquired for first use after March 18, 2007 and \geq 90% of the square footage is used for manufacturing and processing activities
Class 8.....	20%
Class 10.....	30%
Class 10.1.....	30%
Class 12.....	100%
Class 13.....	Original lease period plus one renewal period (minimum 5 years and maximum 40 years)
Class 14.....	Length of life of property
Class 14.1.....	5% For property acquired after December 31, 2016
Class 17.....	8%
Class 29.....	50% Straight-line
Class 43.....	30%
Class 44.....	25%
Class 45.....	45%
Class 50.....	55%
Class 53.....	50%

The CPA certification program prepares future CPAs to meet the challenges that await them. For more information on the qualification process, the common final examination (CFE), and the specific education requirements for your jurisdiction, contact your provincial/regional CPA body.

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