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Performance Measurement for Non-Profit Organizations

UNIVERSITY CANADA

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MANAGEMENT ACCOUNTING GUIDELINE

CASE STUDY

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Background

University Canada (UC) is a Canadian online university offering undergraduate and graduate education to public service employees. UC is a new business unit at an established Ontario university and it relies on the university's online library and back-office support. Its instructors are new and existing faculty from the established university. Integration of these resources will be a key issue for UC.

When the university decided to enter the online educational arena, the dean and principal held a strategic planning session and agreed on the following vision and mission for UC.

Vision

An educational environment that is flexible, affordable, and accessible.

Mission

To be the educator of choice for members of the public service, in both official languages.

With a clear vision and mission, UC's dean met with his management team to identify a strategic framework for the future. The team identified four keys success factors (KSF):

- KSF1 – Staff and faculty committed to online learning
- KSF2 – The right technology
- KSF3 – A high level of accountability
- KSF4 – Self-sustaining operations

UC needed to be self-sustaining and not draw resources away from other university programs, however, the university agreed to a baseline level of funding to get UC started. The dean and his management team developed a performance measurement and management system using the four-stage process found in the [Performance Measurement for Non-Profits Organizations \(PM4NPO\) Management Accounting Guideline \(MAG\)[®]](#).

Stage 1: Plan

Step 1: Review mission, vision, and strategy

Having already defined a new mission and vision, no further action was necessary.

Step 2: Identify value proposition

Using the university's market research, UC determined that the most important factor for a member of the public service pursuing higher education was cost. Members of the public service receive reimbursement for online courses, but their employers' budgets are limited and thus course cost is often the determining factor when reimbursement requests are submitted. In addition, the management team recognized that with online education, interaction between students and faculty must be easy, accessible and high-quality because most students are not located in the same geographic location as UC. With this in mind, UC identified its primary and secondary value propositions:

- Primary: Operational excellence
- Secondary: Customer intimacy

Given the requirement for self-sufficiency, UC deemed operational excellence to be the primary value discipline. UC would approach all activities from a customer perspective but when conflicts arose, operational excellence would prevail as the primary value proposition.

Step 3: Balance efficiency versus effectiveness

At the onset of planning, it became clear that efficiency measures would be relatively easy to identify while effectiveness measures would be more difficult. Efficiency measures would tend to be lag measures that focus on cost per student. Effectiveness measures, meanwhile, would be a combination of lag and lead measures looking at throughput and employer satisfaction.

Stage 2: Strategy Map

Step 1: Start with the organization's mission

UC's overriding objective is to be the educator of choice for members of the public service, in both official languages.

Step 2: Choose (or confirm) the value proposition

- Primary: Operational excellence
- Secondary: Customer intimacy

Step 3: Choose the look for the map

The management team struggled with where to place the financial perspective. With the desire for self-sufficiency it seemed appropriate to position the financial perspective at the top of the strategy map. However, since UC operated within a government financial framework, the team debated placing finance at the bottom. In the end, the team agreed the stakeholders were the highest priority in education. They also agreed that, ultimately, finance was more of an input than an output and they placed finance at the bottom of the map. As a result, the team reordered Steps 4-7 of the strategy map stage to reflect a top-to-bottom map progression.

To ensure that everyone was speaking the same language, the team created a lexicon to explain each of the strategic objectives in the strategy map. They coded each perspective as follows:

- Stakeholder: S1, S2, S3, S4
- Business process: P1, P2, P3, P4, P5, P6
- Learning and growth: L1, L2, L3, L4
- Financial: F1, F2

Step 4: Choose the key stakeholder strategies

UC recognized three types of stakeholders: students, employers, and government agencies. Each stakeholder group had different expectations, which made balancing their needs a challenge. The team identified the following strategic objectives:

TABLE 1: STAKEHOLDER STRATEGIES

STAKEHOLDER	STRATEGIC OBJECTIVE
Students	s1 – Attract students s2 – Meet student service expectations
Public service employers	s3 – Graduate critical thinkers
Government agencies	s4 – Foster support for UC programs

Step 5: Choose the key internal process strategies

Sound business processes are a key success factor for UC. The only interaction students have with UC is through its electronic systems. For these systems to work effectively, UC required well-defined business processes. Using this logic, the team identified the cause-and-effect relationships between the stakeholder and process perspectives as linkages.

TABLE 2: INTERNAL PROCESS STRATEGIES

STRATEGIC OBJECTIVE	LINKAGE
P1 - Promote UC offerings	s1, s4
P2 - Maintain quality	s1, s2, s3, s4
P3 - Engage public service organizations	s4
P4 - Administer students	s2
P5 - Develop programs strategically	s1, s3
P6 - Manage university dependencies	s3

Step 6: Choose the key learning and growth strategies

The management team referred to learning and growth strategies as renewal objectives. For UC to achieve its strategic objectives, having the right people and the right technology was paramount. Faculty turnover in an online environment is quite high. Similarly, technological changes occur on a regular basis and the management team wanted to ensure UC wasn't chasing technology, but rather was using the best technology to support learning objectives. With this as the basis for strategic objective development, the team created the following learning and growth objectives:

TABLE 3: LEARNING AND GROWTH STRATEGIES

STRATEGIC OBJECTIVE	LINKAGE
L1 - Improve IM/ITcapability	P4
L2 - Prioritize innovations	P4, P5
L3 - Attract, develop, retain quality staff	P2
L4 - Attract, develop, retain quality faculty	P2
L5 - Improve knowledge management	P6

Step 7: Choose the key financial strategies

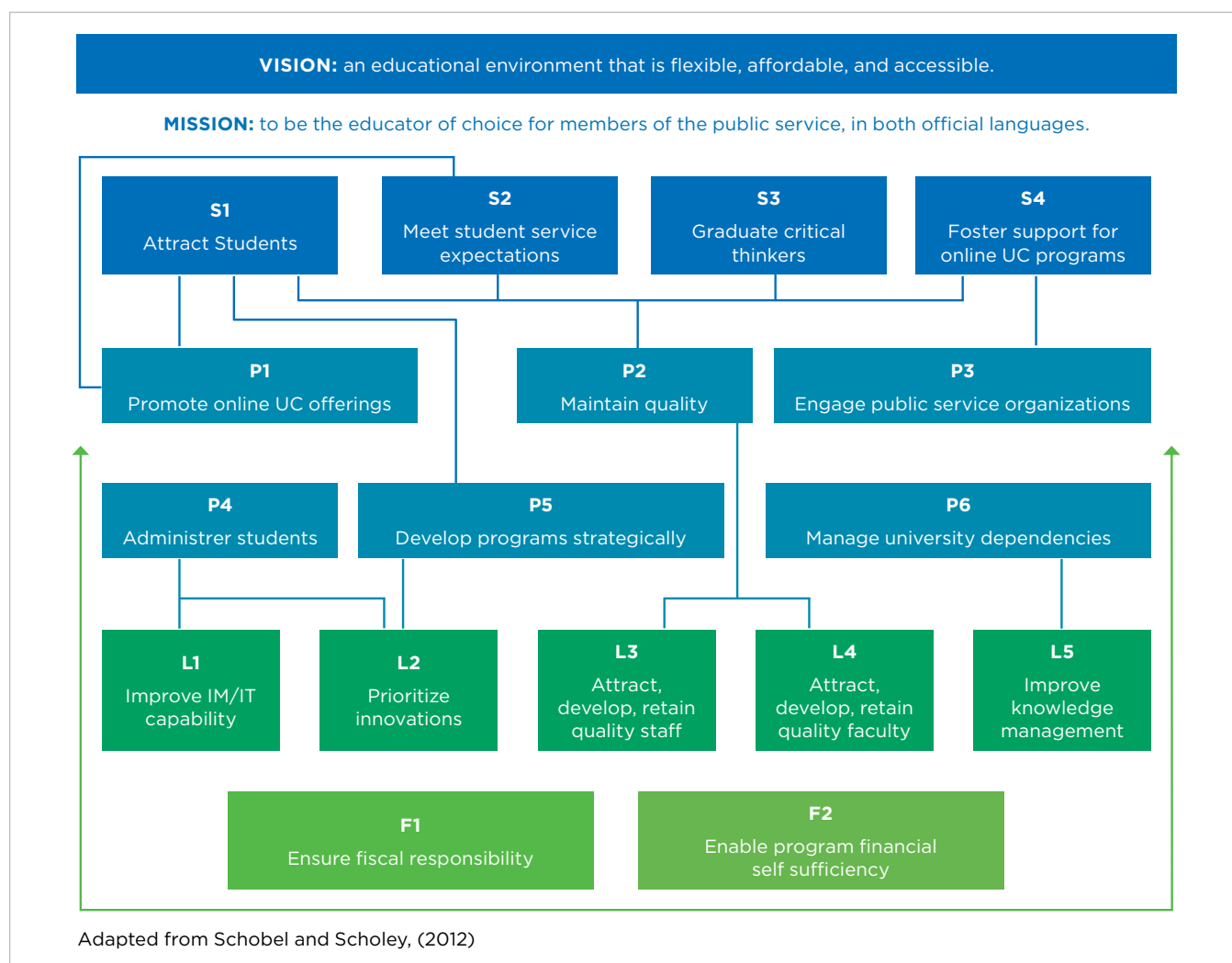
Determining the location of the financial strategic objectives had proved very challenging. The team placed it at the bottom of the map with only general upward linkages because financial resources are an input that drive all of the other perspectives. The two financial objectives reflect both efficiency and effectiveness.

TABLE 4: FINANCIAL STRATEGIES

STRATEGIC OBJECTIVE
F1 - Ensure fiscal responsibility
F2 - Enable program financial self-sufficiency

Because UC operates within a government context, KSF 3 drove the strategic objective “ensure fiscal responsibility.” [Figure 1](#) illustrates UC’s completed strategy map.

FIGURE 1: UC STRATEGY MAP



Stage 3: Balanced Scorecard

Step 1: Identify measures

With a strategy map completed, the management team held several performance measurement sessions with staff, faculty, and stakeholders to identify the most appropriate measures. Working groups were asked to brainstorm two to three potential performance indicators for each strategy map objective. The idea was to come up with a broad range of ideas and to fully involve employees in the process to ensure they recognized the need for balancing efficiency and effectiveness as well as lead measures and lag measures.

At this early stage, UC felt it could develop the Balanced Scorecard (BSC) using Microsoft Excel, given the business development manager's experience with the program and his understanding of the PM4NFP process.

Step 2: Assign weights

With measures identified, management set weights to demonstrate the importance of each perspective. Management worked with the relevant UC departments to develop the appropriate weighting for each perspective.

Step 3: Balance the measures

The business development manager of UC had an understanding of the PM4NFP process and stressed to the dean the importance of maintaining a balance between efficient and effective measures as well as lead and lag measures.

Step 4: Set specific targets

Staff developed targets, which supervisors and managers reviewed to ensure they were reasonable. UC decided to use target and stretch goals with the target representing expected results and stretch targets representing the best possible outcome.

The management team tried to limit each strategic objective to a single measure, but occasionally had to settle for having two to fully capture what was occurring.

[Table 5](#) shows UC's final measures.

TABLE 5: FINAL UC MEASURES

Objective/ Goal	Code	Weight	Measure	Efficiency/ Effectiveness	Lead/ Lag	Target	Stretch Target
Attract new students	s1		% increase in number of students by program	effectiveness	Lead	10%	15%
Meet student service expectations	s2	30%	Percentage of satisfied students	effectiveness	Lag	75%	90%
			Number of student's complaints	efficiency	Lag	100	75
Graduate critical thinkers	s3		Graduation rate	effectiveness	Lag	90%	95%
Foster support for online UC programs	s4		Number of new contacts	effectiveness	Lead	75	100
			Number of contacts per existing supporter	effectiveness	Lag	1	2

Objective/ Goal	Code	Weight	Measure	Efficiency/ Effectiveness	Lead/ Lag	Target	Stretch Target
Promote online UC offerings	P1	25%	Attendance at promotional activities	efficiency	Lead	25	50
Maintain quality	P2		Percentage of internal reviews completed	effectiveness	Lag	20%	25%
			Percentage of external pro- gram reviews completed	effectiveness	Lag	20%	25%
Engage public service organizations	P3		Number of committees/ working groups with public service organization	effectiveness	Lag	10	20
Effectively administer students	P4		Percentage of services standards that are met	effectiveness	Lag	85%	95%
Develop programs strategically	P5		Probability of delivering pro- grams without use of internal faculty	effectiveness	Lead	75%	100%
Manage university dependencies	P6		Number of planning meetings with university staff and faculty	efficiency	Lead	10	15
			Number of critical errors in program delivery	efficiency	Lag	5	2

Objective/ Goal	Code	Weight	Measure	Efficiency/ Effectiveness	Lead/ Lag	Target	Stretch Target
Improve IM/IT capability	L1	20%	Percentage of completed programming requirements	efficiency	Lag	75%	80%
Prioritize innovations	L2		Percentage of initiatives mapped to strategy map	effectiveness	Lag	90%	100%
Attract, develop, retain quality staff	L3		Staff turnover	efficiency	Lag	15%	10%
Attract, develop, retain quality faculty	L4		Faculty retention rate	efficiency	Lag	60%	75%
			Number of new hires	efficiency	Lead	10	20
Improve knowledge management	L5	Percentage of business processes formalized as operating policies	efficiency	Lead	50%	75%	
Ensure fiscal responsibility	F1	25%	Percentage variance from business plan	efficiency	Lag	5%	2%
Enable program self-sufficiency	F2		Per course revenue less incremental costs	efficiency	Lead	\$100K	\$250K

Stage 4: Review and Assess

Step 1: Manage with the BSC

After completing the BSC, staff began collecting data on all the different measures. Simultaneously, management mapped UC's many initiatives to the strategy map. [Table 6](#) summarized the results. Examination of the results yielded several observations and questions, including:

1. Looking at the stakeholder strategic objectives (S1-S4), the large number of initiatives supporting students and other stakeholders demonstrates UC's stakeholder focus. There are more Xs supporting stakeholder objectives than any other perspective.
2. Within the internal process perspective (P1-P6), only one initiative addressed managing organizational dependencies. At the beginning of the performance management process, UC saw

organizational dependencies as critical to success. Management immediately deemed it necessary to determine whether this sole initiative was sufficient to address organizational dependencies or whether additional initiatives were necessary.

3. Attracting and developing quality staff (L3) is a strategic objective within the learning and growth perspective. For the past few years, staff turnover on campus had been quite high and UC felt that having staff appreciation activities would help build camaraderie and increase the likelihood of retaining staff. Management noted that the phrase “maintain quality” appeared in the strategic objective, which required greater attention to training. The only initiative currently in place for attracting and retaining quality staff focused on staff appreciation. Recognizing the lack of initiatives in support of L4, management decided that additional training activities were necessary.
4. Regarding the strategic objective “attract and retain quality faculty,” the dean felt that joining the Canadian Virtual University (CVU) association would increase UC’s presence and attract faculty.

TABLE 6: BSC WITH INITIATIVES

Objective/ Goal	Code	Weight	Measure	Efficiency/ Effectiveness	Lead/ Lag	Target	Stretch Target
Attract new students	s1	30%	% increase in number of students by program	effectiveness	Lead	10%	15%
Meet student service expectations	s2		Percentage of satisfied students	effectiveness	Lag	75%	90%
			Number of student’s complaints	efficiency	Lag	100	75
Graduate critical thinkers	s3		Graduation rate	effectiveness	Lag	90%	95%
Foster support for online UC programs	s4		Number of new contacts	effectiveness	Lead	75	100
			Number of contacts per existing supporter	effectiveness	Lag	1	2

Objective/ Goal	Code	Weight	Measure	Efficiency/ Effectiveness	Lead/ Lag	Target	Stretch Target
Promote online UC offerings	P1	25%	Attendance at promotional activities	efficiency	Lead	25	50
Maintain quality	P2		Percentage of internal reviews completed	effectiveness	Lag	20%	25%
			Percentage of external program reviews completed	effectiveness	Lag	20%	25%
Engage public service organizations	P3		Number of committees/working groups with public service organization	effectiveness	Lag	10	20
Effectively administer students	P4		Percentage of services standards that are met	effectiveness	Lag	85%	95%
Develop programs strategically	P5		Probability of delivering programs without use of internal faculty	effectiveness	Lead	75%	100%
Manage university dependencies	P6		Number of planning meetings with university staff and faculty	efficiency	Lead	10	15
			Number of critical errors in program delivery	efficiency	Lag	5	2

Objective/ Goal	Code	Weight	Measure	Efficiency/ Effectiveness	Lead/ Lag	Target	Stretch Target
Improve IM/ ITcapability	L1	20%	Percentage of completed programming requirements	efficiency	Lag	75%	80%
Prioritize innovations	L2		Percentage of initiatives mapped to strategy map	effectiveness	Lag	90%	100%
Attract, develop, retain quality staff	L3		Staff turnover	efficiency	Lag	15%	10%
Attract, develop, retain quality faculty	L4		Faculty retention rate	efficiency	Lag	60%	75%
			Number of new hires	efficiency	Lead	10	20
Improve knowledge management	L5		Percentage of business pro- cesses formalized as operating policies	efficiency	Lead	50%	75%
Ensure fiscal responsibility	F1	25%	Percentage variance from business plan	efficiency	Lag	5%	2%
Enable program self-suffi- ciency	F2		Per course revenue less incre- mental costs	efficiency	Lead	\$100K	\$250K

TABLE 6: BSC WITH INITIATIVES CONT.

New marketing campaign	Attendance at education fairs	Become members of Canadian virtual university	Sponsor annual seminar on Canadian Public Administration	Student Support Writing Help Center and Tutoring	Eliminate red tape	Staff Appreciation Activities	Create quality working group	Operations working group	Comparative fees study
x	x	x		x	x				x
				x					
		x	x				x		
		x							
					x				
		x					x		x
								x	
								x	
		x				x			
					x				
									x

Step 2: Evaluate results versus targets

The management team decided to report results on a quarterly basis. Many indicators were not available during the first quarter, but by the end of the fiscal year all indicators had results. The fiscal year for UC coincided with the end of the spring semester (April 30).

UC decided to measure goal attainment using green, yellow, and red indicators (where green denoted an achieved target, red denoted unacceptable performance, and yellow denoted performance between unacceptable and target). UC employed targets and stretch targets such that the stretch target was the goal. Therefore, while achieving the target was good, it wasn't ultimately what UC wanted. Ratings were defined as follows:

- Green - 15 percent above the target or better
- Yellow - 80 percent of the target, but less than the score of the green level
- Red - less than 80 percent of the target

Thus, it was possible for UC to hit its target and receive a yellow indicator. The entire team was focused on continuous improvement and wanted to reflect that desire in their BSC.

As a new business unit, UC was concerned about how it was perceived by its stakeholders. Therefore, the first management meeting following the completion of the BSC focused on the customer perspective ([Table 7](#)).

TABLE 7: UNIVERSITY CANADA: STAKEHOLDER PERSPECTIVE

STRATEGIC OBJECTIVE	OBJECTIVE	MEASURE	TARGET	STRETCH	ACTUAL
Attract new students	s1	% increase in number of students by program	10%	15%	12%
Meet student service expectations	s2	Percentage of satisfied students	75%	90%	75%
		Number of student's complaints	100	75	150
Graduate critical thinkers	s3	Graduation rate	90%	95%	96%
Foster support for UC programs	s4	Number of new contacts	75	100	100
		Number of contacts per existing supporter	1	2	1

Steps 3 and 4: Examine results and outcomes and adjust as necessary

With the BSC on the table, the dean opened the discussion. Overall, he was happy with the results because they indicated that, in general, UC was achieving its objectives. At the onset of the performance management exercise, the management team agreed to discuss all yellow and red indicators along with any green indicators that were trending downward.

Student attraction and graduation rates were exceeding the target. The dean congratulated everyone on their efforts in support of these objectives, but also cautioned that they should be careful when interpreting the results because this was UC's first BSC. While UC achieved a high level of success in S3, the question was: can we do even better? The dean asked the management team to review targets and stretch targets to see if UC should expect a higher level of performance. He noted that over the course of the following year, UC would evaluate all of the indicators against the expected outcomes to test the relevance of the target and stretch targets.

The next point of discussion involved student service expectations. Even though UC achieved its target for percentage of satisfied students, the score received a yellow indicator because it was less than 85 percent and declining. The manager in charge of this objective noted that there had been a spike in complaints when the learning management software (LMS) crashed for two days near the end of the term. The dean asked the operations manager to set up a meeting with the university's chief information officer to determine the root cause and to prevent recurrence.

The conversation then turned to student complaints. With an indicator of red, it was clear UC received significantly more complaints than expected. Many of the complaints had to do with the LMS crash, but the student education counsellors also noted many student complaints had to do with the lack of a reading week during the winter term. The Deans' Council had decided to forego a reading week because the cost of keeping part-time professors on the payroll for an extra week seemed unnecessary. The dean stated that while there would be no change to the policy, UC should better communicate the rationale behind it to students.

Finally, contacts with existing supporters were on target but declining. The chief of operations noted that in the prior period they had made the requisite two contacts with UC supporters and found that, for the most part, two contacts was unnecessary and specifically planned to reduce the number to one because they did not want to become a nuisance to supporters.

Strategic Review

With year one completed, UC's dean deemed it appropriate to review the strategy map and BSC to ensure the cause-and-effect relationships remained relevant and provided meaningful feedback. Accordingly, the Dean called a strategic planning meeting with the management team. The dean reminded the management team that they would be reviewing all indicators, including those where the results surpassed expectations. Given how competitive the online education sector is, the dean emphasized that UC had to continually improve to remain self-sustaining (KSF 4).

The chief of operations began the discussion and noted that graduation rates (S3) remained consistent over the past 10 years and that changing the stretch target was not necessary. He further noted that increasing the expected graduation rate beyond traditional norms might simply result in

marking scheme changes to reflect the new target. The management team agreed that the current target was acceptable, and no change was necessary.

The manager of the education delivery cell noted a discrepancy with P1. His counsellors had only attended half the number of expected promotional events due to budgetary constraints, yet student attraction was up. Attendance at promotional events was used as a leading indicator of student interest and, with attendance down, there had to be another driver of student interest. After much discussion and investigation, the team discovered that UC's special interest article in Maclean's magazine's annual university rankings issue caused the welcome but unexpected outcome of spiking enrolment applications. To ensure this type of outcome was accounted for in the future, UC decided to include special interest stories and advertisements under the BSC definition of promotional activities and include specific admission codes to identify the success level of each activity.

UC's IT specialist noted an issue with L1 (Improve IM/IT capability). UC had surpassed the expected number of outstanding programming issues yet P4 (Effectively administer students) was in decline. The operations manager noted that both L1 and L2 (Prioritize Innovations) affected P4 and that the newly-implemented online marking module negatively impacted P4 so much that it overrode the benefits from L1. After discussion, the management team agreed that it was necessary to monitor L1 and L2 closely, but no action would be required at this time.

The Way Ahead

The dean printed revised versions of the strategy map as posters and had them displayed throughout UC. He made a copy of the map available on UC's website and he carries around a smaller version to demonstrate to university administrators and stakeholders how UC is putting their valuable resources to use. The BSC is now the basis for discussion at UC's monthly operational meetings.



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