



Chartered Professional Accountants Canada

Data Management Program Request for Proposal

February 26, 2020

1. Chartered Professional Accountants of Canada Overview

Chartered Professional Accountants of Canada (“CPA Canada”) is the Canadian national accounting organization.

CPA Canada provides services that meet the information, business and educational needs of Chartered Professional Accountants and others. CPA Canada undertakes research and develops new products and professional services concepts, publishes no-cost and for-fee technical and non-technical reference materials including books, newsletters, videos and podcasts, and offers a variety of conferences, courses, webinars and e-learning tools.

CPA Canada, together with the Provincial, Territorial and Bermuda CPA bodies, represents a membership of approximately 210,000 in Canada and Bermuda. Our membership is highly diverse with distinct needs and interests based primarily on where they work (industry/not-for-profit sector, government, academia or public practice;) and their role (e.g.: CEO, CFO, other finance and administration, financial and non-financial auditor, financial planner, forensic accounting, board/audit committee member, and so on).

As part of its role, CPA Canada also supports the provision of educational programs such as the Data Management Program. CPA Canada’s programs are specifically designed to educate those practicing in industry both in traditional accounting roles and in other finance professions.

2. Request for Proposal Overview

The purpose of this request for proposal (“RFP”) is to invite prospective vendors to submit a proposal to CPA Canada to be a collaborative partner in designing, developing and delivering an in-depth data program.

This program will build on CPA Canada’s existing data offerings to develop a program which enhances the skills of CPAs and non-CPA finance professionals in the areas of data management and analysis, coding, statistics, databases, visualizations, dashboarding and modeling .

The completed program will be delivered using a blended learning methodology with the latest in education delivery technology, incorporating a mix of self-study, eLearning, online discussion forums, and group sessions with context-rich case studies. The expected students will come primarily from large, medium and small organizations in industry working in a variety of accounting and finance roles from analyst to director of finance.

The RFP provides vendors with the relevant requirements of the design.

3. Inquiries during the RFP Process

Any enquiries regarding this RFP should be directed to:

Ashley Alvernaz
Principal, Performance Management
Chartered Professional Accountants of Canada
100-4200 North Fraser Way, Burnaby (BC) CANADA V5J 5K7
604 605 5044
Aalvernaz@cpacanada.ca

4. Submission of Proposal

Please submit your proposal by Friday, March 20, 2020 at 5:00 pm PST to:
Chartered Professional Accountants of Canada
100-4200 North Fraser Way, Burnaby (BC) CANADA V5J 5K7
Attention: Ashley Alvernaz, Principal, Performance Management
Aalvernaz@cpacanada.ca

Conditions:

- Late proposals will not be considered.
- CPA Canada will not be liable for any costs incurred by the bidders in the preparation of their response to this RFP.
- The rejection of any or all proposals shall not render CPA Canada liable for any costs or damages.
- CPA Canada will consider all proposals submitted in response to this RFP as confidential. The submission of a proposal will be deemed to be consent by the bidder.
- CPA Canada reserves the right to accept any proposal submitted or to reject all proposals.

CPA Canada expects to formally notify the successful bidder on April 3, 2020.

5. Termination of Contract

CPA Canada reserves the right to terminate the contract within 30 days written notice under the following circumstances:

- a. The organization fails to perform in accordance with the specified service requirements as presented in this RFP.
- b. The organization fails to provide any service as specified in the agreement without prior written notice.
- c. The organization fails to meet the provisions of the RFP in any significant degree.

6. Bidder Qualifications

The minimum requirements for initial consideration as a candidate under this RFP include:

- a. Content authors must have a Bachelor's degree or higher in one or more of the following areas; statistics, computer science or data science with at least 2 years relevant experience and be at an advanced level working with data science and data analytics tools such as Tableau, Power BI, Alteryx, Python and SQL . Experience working in or with accounting, financial planning and operations management roles is highly preferred. Significant experience/expertise may be considered in other areas with approval of the author's from CPA Canada upon reviewing their background and experience.
- b. Demonstrating knowledge specifically in the content areas outlined in the provided program information in section 7 below.
- c. Experience in program and curriculum development and delivery
- d. Ability to author and develop a program based on the qualifications set forth in this RFP
- e. Proof of available resources to complete the project within the timeline required

7. Program Information

The skill requirements for accountants are changing. Expectations for mid-level staff now include advanced model creation and analytical skills to help create relevant and clear data for decision makers. CPAs and non-CPA finance professionals are increasingly being required to understand how to utilize software and systems in a more advanced manner.

The purpose of the program is to develop a curriculum that becomes the standard for CPAs and non-CPA finance professionals looking to expand knowledge beyond a traditional accounting and finance roles by giving them skills needed now and into the future. The learning objectives are outlined below, however, CPA Canada will collaborate with the chosen partner to finalize the objectives after the completion of a needs analysis.

- Advanced analytical decision-making skills using state-of-the-art software and methods
- Application of problem solving in the strategic business context
- Fundamentals in utilizing analytical and numerical models using real problems
- Provisioning large data sets for analysis
- Gaining technical literacy to work effectively with cross functional teams in the organization on data strategy, systems and analytics
- Application of business ethics and risk assessment using real situations
- Effectively communicate data analytical results and techniques to both technical and non-technical audiences

This program would give participants the foundation required to effectively collaborate with IT teams and utilize tools for better analytical decision making through the use of skills like: data management and analysis, coding, statistics, databases, visualizations, dashboarding and modeling. Participants would be able to create advanced dashboards, forecasts and models in latest technology which may include but is not limited to: Excel, Power BI, Tableau, Alteryx, SQL and other tools to provide insights for effective decision making.

CPA Canada currently has a Data Management Certificate. We have identified with a “*” courses where we see some potential to use the concepts as a prerequisite or foundational concept for more advanced learning should the vendor want to leverage for the program described in this RFP. The existing certificate includes:

Data Cleansing, Modelling and Dashboards*

- fundamentals of data acquisition and preparation
- data cleansing and transformation techniques
- data modelling techniques
- data aggregations and DAX
- how to create effective dashboards
- Power Pivot data models
- writing formulas to aggregate KPI values

Introduction to Power BI*

- dashboarding techniques
- introduction to Power BI
- how to access and transform data into model-ready formats
- Power Pivot data modelling
- formulas to aggregate KPI values from data models

Tableau*

- dashboarding techniques
- introduction to Tableau
- how to access and transform data into model-ready formats

Navigating Data Analytics*

- big data
- the four “v”s of data
- data mining
- data analytics
- data visualization

Decision Making and Critical Thinking in a Data Driven World

- bias and other psychological barriers to effective decision making
- evidenced-based decisions versus decision-based evidence making
- how to apply critical thinking to business problems
- how to explain the “what”, “how” and “why” of decision making to stakeholders
- probability in decision-making, including counterfactuals, emotion and reason
- best practices to improve data-driven decision making

Data Landscape for the Future Accountant

- big data
- artificial intelligence
- blockchain
- the privacy, ethical and legal considerations of tech
- impact of tech on value levers in business
- future of the profession
- other changes and key trends in technology

Target Audience

- CPAs working in analyst, senior analyst, finance manager, controller or director of finance roles reviewing large amounts of transactional data for accuracy and analysis, fraud prevention, budgeting and forecasting for operational needs, scenario analysis, etc, looking to build their knowledge in data analytics, systems, coding, modeling and dashboarding
- CPA and non-CPA professionals working in accounting, financial planning & analysis, treasury, corporate development or other finance functions wanting to better collaborate with other cross functional teams such as IT, data scientists and data engineers
- CPAs and non-CPA finance professionals looking to capitalize on real time data to provide greater contributions to reporting and business strategy.
- CPAs and non-CPA finance professionals wanting to stay current in their skillset in the ever changing technological and business landscape

The program will be specifically designed for accountants who do not have a computer science background. The focus will be on key elements different roles are responsible for as part of their regular duties, such as cash flow management and optimization, inventory management, budgeting and forecasting, costing etc. Examples in the courses will be tailored to the role of a CPAs working in finance and accounting. CPA Canada is available to work with the selected partner to tailor the content appropriately.

Content outline

Data Governance and Data Operations

- Data Governance defined
- Data operations
- Data policies
- Data Sourcing
- Data quality
- Data security and privacy

Databases

- Introduction to relational databases
- Database structures
- How to use ERD (entity relationship diagrams) to display data within relational databases
- Querying in SQL

Statistics

- Probabilities
- Confidence intervals
- Normal distribution
- Correlation
- Hypothesis testing

Programming language and data science Introduction

- What is data science
- What is a programming language?
- What is R and Python
- Basics of programming languages
- Tools used in data science

Analytics

- Understanding the business requirements and translating those needs into effective models
- More in-depth examples of the start-to-finish of developing the model concept:
 - Data exploration
 - Hypothesis formation
 - Testing of hypothesis
 - Modelling & model evaluation
- Predictive Analytics: Advanced budgeting and forecasting

Advanced modelling to optimize operations

- Advanced models to improve supply chain, cash flow etc.

As this section would involve more advanced computer programming and data science (AI, Machine learning), the intent is to stick with mainly use cases and examples of advanced modelling.

Data Visualization and Dashboards

- Visualizations
 - Connecting to data
 - Visual analytics
- Dashboards
 - Building dashboards in various software as applicable

8. Proposal Contents and Format of the Response

Please include the following in your submission to the RFP:

- a. An introduction of your organization which includes the benefits CPA Canada will derive by selecting your organization as a collaborative partner in design, development and delivery of the Data Management Program.
- b. Departmental overview, and experience with collaborative programs which includes a one-page narrative outlining the organization's strengths and distinguishing skills or capabilities as they might relate to the proposed CPA program.
- c. Names and credentials of creative team (CVs) and number of full-time employees in that department
- d. A description of the qualifications of the service and development team that will be directly responsible for developing and delivering the program
- e. A representative selection of similar work: courses, e-learning samples, curriculum maps, instructor led training, etc
- f. Provide a list of any gaps seen in the outline or any areas you would eliminate.
- g. Description of the overall program development approach including whether development is conducted in house or through use of subcontractors
- h. Ability to structure program with a formal accreditation earned upon successful completion, or ability to structure program so that completed program contributes towards a formal accreditation if additional education is completed.
- i. Provide an overview of how course program exemptions requests are evaluated
- j. Indicate which portions of the program proposed in the RFP are of interest, or if the whole program is of interest.
- k. Estimated project timeline for program development
- l. Itemized budget projection for development costs including variants for:
 - i. licensing of the material
 - ii. ownership of copyright of the material

- m. Three references, preferably from within the customized continuing education segment, including name and contact information for whom the organization has provided program development services in the past five years

9. Basis of Awarding the Contract

CPA Canada will award the contract and sign an engagement letter with the vendor who, based on an evaluation of all responses and applying all criteria, is determined by the CPA Canada program evaluating committee to be the best qualified to perform the services and at the best value. This includes but is not limited to:

- Majority of team members on the project have been operating continuously over 24 months in data management education, and possess qualifications to develop blended learning
- Compliance to accessibility legislation
- Competitive cost to services
- Content hosted on CPA Canada's platform needs to adhere to the following technology requirements:
 - Ensure content is universally compatible with mainstream LMS systems, particularly SCORM 1.2, and the Articulate family of applications, particularly SL360.

CPA Canada reserves the right to:

- reject any or all proposals, to take any or all proposals under advisement
- to request further information and clarification from any bidder
- to accept any proposal as may be considered to be in CPA Canada's best interest in meeting the standards of quality, experience, price and overall value.