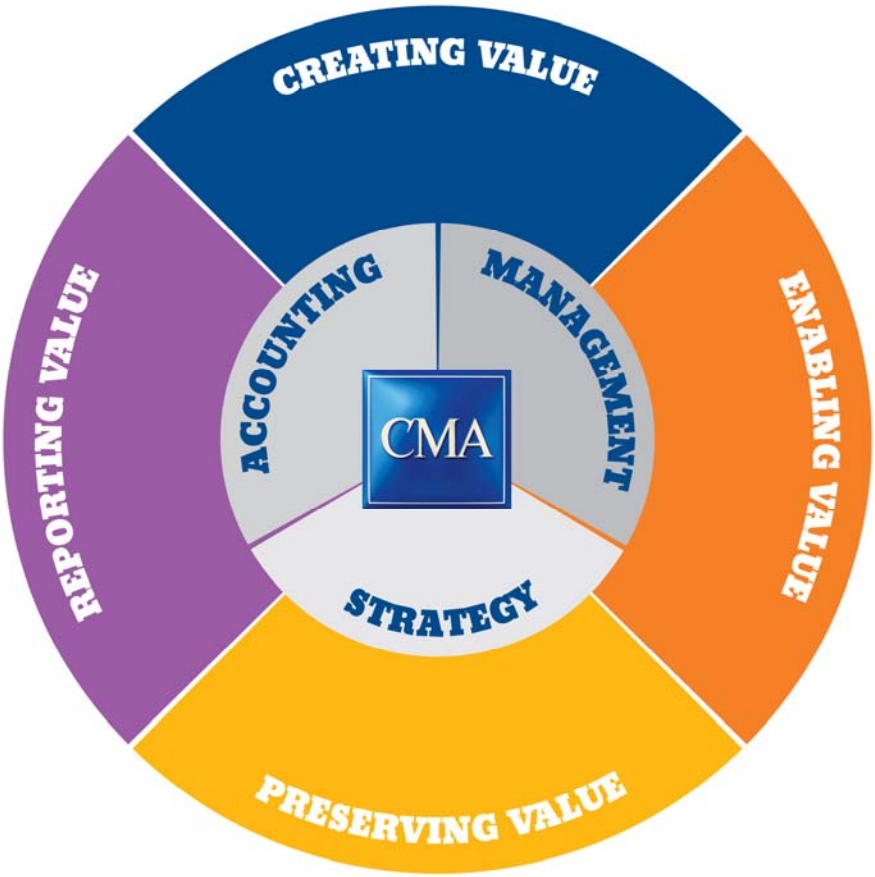
The CMA® Competency Map



Certified Management Accountants™

Table of Contents

Section 1 – Introduction 1
The CMA in a Changing World 1

Section 2 – Foundations and Roles of the CMA Professional 4
1. Accounting 5
2. Management 5
3. Strategy 6
The Differentiated Territory of the CMA and the CMA Competency Map 7

Section 3 – Development of the CMA Professional 8
Enabling Competencies 9
Foundational Competencies 10
Competencies for the Small- and Medium-Sized Organization 10
Competencies for the Government and Not-for-Profit Sectors 10

Section 4 – Guide to the CMA Competency Map 11
Three Competency Stages 11
Presentation of Competency Stages 11
Sustainable Value 11
Enabling Competencies 12
Related Documents 12

CMA Competency Map 13

Glossary of Terms 36

Bibliography 44

Section 1 – Introduction

A professional, by definition, earns special social status in exchange for valued and often unique services that support societal objectives. Individuals who hold professional designations are expected to acquire and maintain an established set of competencies, and uphold a commitment to high ideals in support of the greater public good.

Certified Management Accountants (CMAs) are professionals charged with the efficient and effective utilization of financial and non-financial resources. Each member possesses a distinguishing blend of core competencies in accounting, management, and strategy – the three pillars of the profession. Integration across these three dimensions defines the differentiated territory for CMAs as strategic management accounting® professionals.

The roles and responsibilities that define a CMA are diverse in comparison with other accounting designations, and often highly specific to the context in which the CMA practices. Additionally, CMA career paths vary – some CMAs, for example, move up the corporate ladder to become chief officers, while others become specialists.

CMAs are also broadly accountable to their organizations and to society. The accountability mandate for strategic management accounting professionals, with which the CMA designation is aligned, is defined as the set of responsibilities and activities – flowing from shareholders to the board of directors, to management – that establishes and holds individuals accountable for the achievement of organizational objectives in a changing environment.

The CMA in a Changing World

A global shift in values is profoundly impacting the agendas of organizations that employ CMAs. Degradation of the natural environment, realignment of global markets, and rapid technological change are altering the rules of engagement in many sectors, necessitating a new level of due diligence as organizations chart their futures. As well, employees and surrounding communities expect corporations to do more than balance the books – paradigms like the triple bottom line are gaining prevalence in boardrooms and raising the bar for responsible business practices.

Organizations are beginning to develop sustainable business strategies to address these issues. The role of the management accountant in this transformation is pivotal and, consequently, the mandate of the CMA and the competencies that support it are evolving.

Although sustainability is often identified with the natural environment, CMA Canada subscribes to a wider description that is emerging in the profession – one that includes not only environmental factors, but also other threats such as globalization of markets and changing technology. An appropriate global definition of sustainability would be difficult to arrive at; however, the concept of the sustainable organization is relatively straightforward, and provides a suitable context for the evolution of management accounting competencies.

Section 1 – Introduction

CMA Canada defines the sustainable organization as one that:

- creates long-term value for shareholders;
- consistently delivers products and services that people want at a price they are willing to pay;
- is able to attract, retain and motivate talented employees; and
- maintains a positive relationship with its surrounding community.

Closely related to this definition is the concept of sustainable value – value that is created in accordance with the needs of the sustainable organization and the greater community it serves.

The growing quest for sustainable value is expected to bring new competencies to the profession, such as carbon accounting and environmental reporting. New skills, however, are only part of the answer – a more important requirement is for a change in how existing skills are applied. Management accountants will continually have to ask the question "Is this sustainable?" in the same way that they have always asked the question "Is this financially sound?" The essential role is the same, but the bar has been raised.

CMA Canada believes that these concerns have already begun to transform the profession. This was a key observation of Vision 2020, a CMA task group investigating how the profession will evolve over the next decade, and one of the key criteria behind the current version of the CMA Competency Map (the Map).

The Map draws from an ongoing discussion in the global accounting community. The Professional Accountants in Business (PAIB) group within the International Federation of Accountants (IFAC) has facilitated the dialogue, and has published several papers on the subject, most recently a consultation paper titled *Competent and Versatile: How Professional Accountants in Business Drive Sustainable Organizational Success*.

A key contribution of the paper is a conceptual framework organized around the production of sustainable value. Specifically, the framework maps the roles and responsibilities of the management accountant according to his or her contribution to creating, enabling, preserving, and reporting of sustainable value. The framework is summarized on the following page.

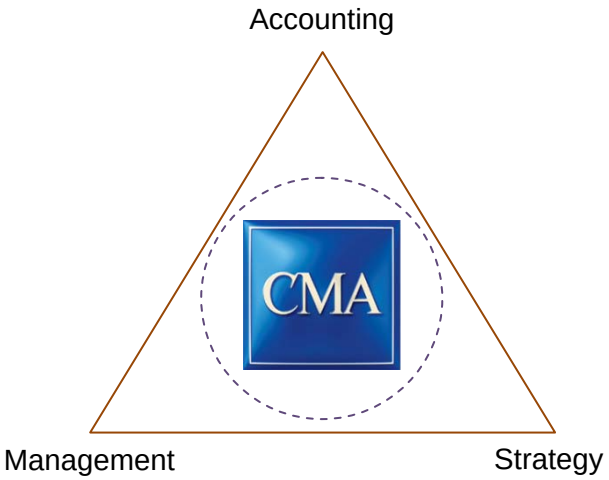
Section 1 – Introduction

Roles of the Management Accountant in Relation to Sustainable Value	
Performance Dimension	**Conformance Dimension**
Creating Value: Creation of strategies, plans, policies, mission statements, value propositions, governance structures and other entities that define a sustainable path for the organization. Use of established strategy mapping and development methods. Analysis of conditions impacting available strategy options. Application of organizational structures to the planning process. Establishment of goals and objectives.	Preserving Value: Implementation and maintenance of policies and mechanisms that protect the organization against internal and external risks and unsustainable business practices. Strict adherence to professional standards, codes of conduct, and accepted governance procedures. Identification and resolution of business problems. Management of financial resources.
Enabling Value: Use of tools and resources to implement and realize the strategic plan for sustainable value. Measurement and assessment of all relevant costs. Classification and allocation of funding. Management and optimization of sustainable revenue streams. Measurement and management of performance against specified objectives, including compensation and incentives. Development of information technology as an enabler.	Reporting Value: Formal communication to stakeholders and the general public on how the organization has delivered sustainable value. Drafting of financial reports, shareholder communications, press releases, and employee announcements. Not-for-profit and public sector reporting. Financial analysis through the application of accepted conventions, ratios and benchmarks.

The Map has been organized around this framework and will be detailed later in this document.

Section 2 – Foundations and Roles of the CMA Professional

The CMA designation rests on a foundation of three interrelated and interdependent dimensions: accounting, management, and strategy. These three pillars of the management accounting profession form the knowledge base that supports the broad mandate of the CMA, as illustrated below. The scope of the profession is represented by the differentiated territory of the CMA, as shown by the dotted circle, and is secured by the integrative and balanced application of knowledge and expertise from all three areas.



An overview of the three pillars of the CMA profession is presented on the following page. It must be emphasized that, both in theory and practice, the pillars are non-hierarchical and that balanced integration is fundamental to the strategic management accounting profession. The respective functional fields are described in the sequence in which prospective CMAs typically master them.

Section 2 – Foundations and Roles of the CMA Professional

1. Accounting

The functional knowledge and expertise of CMAs are grounded in accounting, and include an understanding of the internal and external forces that affect the financial numbers of an organization. Specifically, CMAs harness accounting knowledge in support of considerations such as revenue alternatives, cost management, and ultimately, the delivery of sustainable value. Simply put, this pillar involves *getting the numbers right*.

This pillar of the CMA profession includes:

- identifying what needs to be measured;
- determining the appropriate, relevant, and reliable measures of sustainable financial and non-financial performance;
- measuring progress toward sustainable strategic objectives using appropriate methods of measurement;
- analyzing the results of the measurement process;
- presenting the measurement results objectively, concisely, and clearly, using applicable standards of disclosure and reporting; and
- anticipating and resolving ambiguities when estimates are required.

CMAs must be able to present financial information accurately and often persuasively to a variety of audiences under a wide range of circumstances. Often, the requirements for reporting are mandated by law. At other times, the numbers assist organizations in making sound management decisions. CMAs analyze all aspects of costs and revenues, and use accounting principles to help their organizations review the past, manage current activity and plan for the future.

2. Management

CMAs function as integral members of the management team in their respective organizations, and take an active role in achieving sustainable organizational goals. Consequently, they must be able to manage people effectively, and also to understand, anticipate, and react to internal and external forces. In short, this pillar involves *using the right numbers to implement strategy effectively.*

This pillar of the CMA profession includes:

- determining sustainable organizational goals that align with implied or explicit organizational strategy;
- monitoring progress toward sustainable strategic objectives and recommending or taking corrective action when needed;
- measuring and managing compliance and controlling risk;
- setting operational priorities and delegating responsibility;
- allocating resources to maximize results;
- identifying and addressing the costs and benefits of decisions;
- evaluating the organization's fiduciary performance;
- applying continuous improvement principles;
- integrating decision making across business functions (e.g. accounting, finance, marketing, human resources, information systems, logistics);
- communicating financial and non-financial performance; and
- developing the personal capacity for leadership in various areas of the organization.

3. Strategy

CMAs serve as resources in formulating and implementing a corporate mission and vision and as such, play an active part in ensuring that the organization delivers sustainable value by balancing and influencing strategic factors. In sum, this pillar involves *using both the numbers and an awareness of internal and external forces to manage existing strategies and generate new ones.*

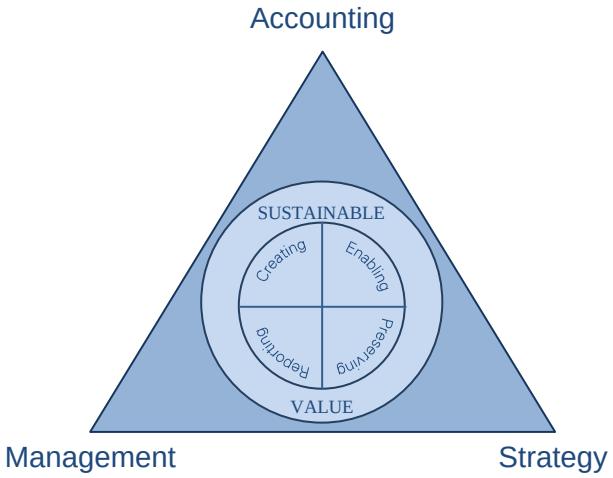
This pillar of the CMA profession includes:

- using appropriate techniques to conduct thorough situational assessments in preparing for the consideration and execution of new or revised strategies;
- articulating the organization's strategy and key competitive factors in a manner that creates a compelling understanding of these elements throughout the organization;
- measuring and managing the creation of sustainable stakeholder value;
- developing and presenting strategic information for long-term decision making;
- selecting appropriate success factors and measures for implementing a sustainable strategy;
- measuring and managing strategic and environmental risk; and
- measuring and managing the organization's core competencies in building a sustainable strategic agenda.

The Differentiated Territory of the CMA and the CMA Competency Map

A grounding in the three pillars of the profession – accounting, management and strategy – prepares the strategic management accountant for a unique set of roles and responsibilities. This differentiated territory outlines what a CMA can be expected to deliver to an organization and to the greater community.

The CMA Competency Map (the Map) serves as a guide to the roles and responsibilities of the strategic management accountant, effectively mapping the differentiated territory of the CMA. Each of the four roles pertaining to sustainable value – creating, enabling, preserving, and reporting – occupies a segment of this territory as shown below.



- Creating Value: The design and implementation of strategies, policies, plans, structures, and governance measures that set the course for delivering sustainable value.
- Enabling Value: The implementation of strategy for achieving sustainable value, and the planning, monitoring, and improvement of supporting processes.
- Preserving Value: The protection of a sustainable value strategy against strategic and operational risks.
- Reporting Value: The transparent communication of the delivery of sustainable value to stakeholders and the general public.

These roles, like the CMA pillars, are non-hierarchical and complementary, and the CMA must be prepared to assume all of them. For example, senior managers who have a primarily strategic role must also protect the organization against risks (preserving value), execute effectively (enabling value), and be transparent (reporting value).

Section 3 – Development of the CMA Professional

CMAs typically (a) begin their careers at relatively junior levels before certification, (b) progress quickly after certification to positions in middle management, and potentially (c) rise to senior-level management positions. As individual careers evolve over time, so will associated roles and responsibilities. Accordingly, the CMA Competency Map (the Map) articulates a structured approach to developing, confirming, and maintaining core competencies over a typical CMA career.

The CMA's career progression is marked by the acquisition of various skill types, including:

- prerequisite knowledge as represented by required courses;
- foundational competencies – e.g., reading and writing, basic math, fluency in either official language;
- applied knowledge – e.g., practical office tools (word processing, spreadsheet, etc.) and skills such as judgment that are acquired from practical experience;
- personal interaction skills – knowledge about how to manage people with particular competencies, and how to apply their work to achieve broader business goals.

The profession attracts and develops qualified members from a range of relevant career and academic backgrounds, and individuals pursue the CMA designation at various stages in their careers. Core competencies grow and mature as the individual progresses through the following three stages:

1. Knowledge Acquisition**:** Individuals acquire a foundational body of knowledge through structured academic studies either at a recognized post-secondary institution or in a specialized program of instruction offered by a CMA Canada affiliate at the provincial/territorial level. Also, to support personal development of identified competencies, individuals acquire relevant career experience, using information provided by a provincial/territorial affiliate of CMA Canada.

   Exit Characteristics: Individuals hold recognized university degrees (or the equivalent) and are able to demonstrate that they have acquired the necessary body of foundational knowledge and career experience by completing the CMA Entrance Examination.

2. Professional Proficiency**:** Individuals progress toward and demonstrate a basic level of proficiency in all core competency areas. In addition, individuals gain experience applying specified core competencies in a business context. Necessary competencies are developed through a structured program of competency-based training offered by a provincial/territorial affiliate of CMA Canada, either directly or in partnership with a qualified post-secondary institution. This training, based on national accreditation standards and the Map, may be offered at different instructional levels and its duration may be matched to individual capabilities.

Exit Characteristics: Individuals have achieved the CMA designation by demonstrating, through (a) competency-based evaluations in a range of settings and formats, as well as (b) verifiable practical experience, that they have met the requisite level of professional proficiency expected of a certified member.

3. Advanced Proficiency**:** Individuals deepen their proficiency in core competencies or expand their range of career-specific competencies through a structured program of self-directed continuing professional learning and development (CPLD) based on their personal career goals. Competency development also occurs through ongoing career experience, as demonstrated by progressive expansion of organizational accountabilities and scope of authority.

It should be noted that the scope of the CMA designation does not include specialized practice areas. Therefore, highly specific and advanced skills in areas such as taxation compliance, public audit, and information technology are not included in the Map. In contrast, the Map focuses on the expansion of core competencies and the broadening of the decision-making role.

Enabling Competencies

Strategic management accounting calls for highly developed personal skills that complement explicit knowledge of standardized tools, methods, and requirements. These enabling competencies help the CMA interact effectively with others, adjust to adverse situations, and maintain integrity throughout. They are essential tools for rising to senior management positions, and for taking on the challenges of achieving sustainable value.

The Map categorizes the enabling competencies as follows:

- Problem Solving and Decision Making
- Leadership and Group Dynamics
- Professionalism and Ethical Behaviour
- Communication

The personal nature of these competencies makes them difficult to codify and measure, and their importance is frequently underestimated. In a discussion paper commissioned by the PAIB group within IFAC titled *Competent and Adaptive: The Future Role of Professional Accountants in Creating Sustainable Organizations in a Changing Business Environment*, the issue was highlighted as follows:

"These enabling competencies reflect the personal aspects of an individual. Variations in the environment in which tasks are performed require the ability to adjust one's enabling competencies to perform at expected levels. While functional dependencies are task dependent, enabling competencies accommodate the context, variability and individuality associated with the demonstration of competency."

A critical aspect of enabling competencies is that they are pervasive in all aspects of the CMA's work. As strategic management accountants, CMAs must be conversant in all of them, regardless of their chosen area of practice.

The term "enabling competencies", which is traditionally used to describe these skills, should not be confused with the "enabling value" role described earlier.

Foundational Competencies

Many of the prerequisites for entrance onto the CMA path are foundational competencies that are required in many professions. Acquired through coursework, mentoring, or personal experience, these play a pervasive supporting role for CMAs throughout their careers. These include:

- mathematical skills, including strong proficiency in algebra and statistics;
- a working knowledge of IT applications commonly used in business, including spreadsheets, reporting tools, accounting packages, email, and word processing;
- an understanding of and sensitivity toward multicultural work environments; and
- basic proficiency in economics and business law.

The CMA also requires proficiency in one of Canada's official languages, both oral and written.

Competencies for the Small- and Medium-Sized Organization

Many certified CMA members practice in smaller organizations. Due to relatively small staffs and a less formal management structure, they wear multiple hats, and assume a broad range of responsibilities more rapidly than their peers in larger organizations. Although these practicing CMAs may not acquire the specialized knowledge gained through focus on specific functional areas, they are likely to assume a broader range of skills and hone their enabling competencies in order to adapt to a variety of non-standard conditions.

The essential grounding required for CMAs, however, is the same regardless of the organization in which they practice. There is no "small business stream" of strategic management accounting.

Competencies for the Government and Not-for-Profit Sectors

The CMA profession is not exclusively tied to the for-profit sector – many CMAs are employed by governments and not-for-profit organizations. Some of the special competencies required are included in the Map. However, although terminology and funding sources may be different, the role of the CMA in ensuring sound strategic, management, and accounting practices is essentially the same for all organizations.

Section 4 – Guide to the CMA Competency Map

The CMA Competency Map (the Map) was revised extensively in 2010 to reflect needs identified (a) in surveys, (b) in discussion papers from other professional organizations, and (c) by members of the Competency Map Task Group.

The Map is organized as a conceptual framework that presents CMA competencies within the context that they are practiced. The Map complements several other CMA documents, which are described at the end of this section.

The following features were introduced into the Map in 2010:

Three Competency Stages

The number of stages has been reduced from four to three, and they now include:

- Knowledge Acquisition, representing the competencies that are prerequisites for entrance into the CMA program.
- Professional Proficiency, representing the competencies required for certification as a CMA.
- Advanced Proficiency, representing competencies gained as a mature practicing CMA.

Presentation of Competency Stages

The Map presents competencies side by side according to their progression through the competency stages. Competencies can thus be viewed in relation to prerequisites and/or where they lead as the candidate matures. In many instances, this progression follows a pyramid structure that reflects a widening scope of responsibility, as CMAs gain experience and assume more senior positions.

Sustainable Value

The Map is divided into four sections according to the four roles of the management accountant in supporting sustainable value, as discussed in Section 1 – Introduction:

- Creating Value
- Enabling Value
- Preserving Value
- Reporting Value

As previously noted, these categories are non-hierarchical, and CMAs are expected to be competent in all four quadrants, just as they are to be conversant in the three pillars of strategic management accounting.

Enabling Competencies

The enabling competencies are now distributed into each of the four sections of the Map – creating value, enabling value, preserving value, and reporting value. This feature highlights (a) the ubiquity of these competencies in all aspects of strategic management accounting, and (b) their essential role in creating, enabling, preserving, and reporting sustainable value.

Related Documents

The Map complements the following CMA document:

CMA Entrance Exam Syllabus: A detailed and definitive listing of all competencies tested in the CMA Entrance Examination. This document is intended for educational stakeholders who create preparatory training programs, and for students who need to make specific decisions about coursework and preparation for the Examination.

CMA Competency Map

			Knowledge Acquisition	Professional Proficiency	Advanced Proficiency
1	**Creating Value:** The design and formulation of strategies, policies, plans, structures, and governance measures that set the course for the delivery of sustainable value.				
	Enabling Competencies				
	1.1.1	Problem Solving and Decision Making	Evaluates options in a methodical way. Applies integrative and creative skills to the creation of plans and other forward-looking documents.	Selects a methodical approach for uncovering new ways to create value. Uses integrative and creative skills in contributing to strategic activities.	Formulates, implements, and evaluates long-term strategic decisions. Explores options for large-scale initiatives in uncharted territory.
	1.1.2	Leadership and Group Dynamics	Participates as a team member in creative brainstorming discussions. Sets and pursues goals. Shows initiative in working with others.	Takes an active role in ensuring brainstorming discussions are productive, and remains focused on value creation. Takes initiative in planning processes.	Leads teams creating sustainable strategies, and defines team structure. Sets organizational goals. Applies vision, and relays it to teams and stakeholders. Initiates strategic processes.
	1.1.3	Professionalism and Ethical Behaviour	Applies ethical considerations in hypothetical strategic planning exercises. Is familiar with professional standards and their application to strategy.	Integrates and highlights the importance of ethical considerations in strategic planning activities.	Uncovers and highlights professional and ethical issues in strategic plans, and ensures that they are addressed.
	1.1.4	Communication	Listens actively and effectively to others, presents new ideas, and communicates new and untested ideas in a clear and logical manner, both orally and in writing.	Presents the results of major planning exercises orally and in writing, persuasively highlighting the key points.	Mentors others in effective communication of new, creative ideas. Uses persuasion skills to promote new ideas.

CMA Competency Map

				Knowledge Acquisition	Professional Proficiency	Advanced Proficiency
1	Functional Competencies					
	1.2.1	Mission Statements, Vision Statements, and Mandates – defining what the organization aspires to be, and how it will deliver sustainable value to shareholders, customers, employees, and the surrounding community				
		1.2.1.1	Mission Statements, Vision Statements, and Mandates	Summarizes the components of an organization's mission statements, vision statements, and mandates, and their relevance in the delivery of sustainable value to shareholders, customers, employees, and the surrounding community.	Interprets and applies mission and vision statements in business situations according to their impact on the organization's ability to create sustainable value for shareholders.	Critiques, improves, or creates mission and vision statements in accordance with the mandate to provide sustainable value to shareholders, customers, employees, and the surrounding community.

				Knowledge Acquisition	Professional Proficiency	Advanced Proficiency
1	**1.2.2**	Strategy Formulation – enabling the creation of sustainable value in accordance with Mission and Vision Statements				
		1.2.2.1	External Environmental Scanning – identifying external circumstances impacting the organization's ability to meet stated objectives	Performs an external environmental scan using standard models such as SWOT Analysis, Political, Economic, Socio-cultural, Technological and Ecological/Environmental (PESTE) Analysis and Porter's Five Forces Analysis.	Employs accepted methods to perform external and internal environmental scans under a particular set of business circumstances with a view to creating sustainable value. Evaluates stakeholder preferences, goals, targets, and constraints.	Selects and directs the use of accepted models and best practices in support of an organization's development of sustainable long term strategy. Displays long term vision and reinforces it through mentoring and the creation of organizational standards. Adapts standard models as appropriate
		1.2.2.2	Internal Environmental Scanning – measuring internal capabilities against those required to meet the organization's stated objectives	Performs an Internal Environmental Scan using models such as SWOT Analysis, Value Chain Analysis and Core Competence Analysis.		
		1.2.2.3	Organizational Lifecycle – analysis of an organization's stage of development according to accepted models	Classifies and describes competitive business strategies within the context of how organizations typically progress according to an accepted lifecycle model.	Uses organizational lifecycle model and accepted best practices in providing input on the formulation of long-term, sustainable strategies. Incorporates, where appropriate, corporate level, business level, and functional level strategies. Identifies and communicates relevant issues.	
		1.2.2.4	Industry Best Practices in Strategy Formulation	Is familiar with and applies best practices and current innovations in strategy formulation, and how they vary by industry.		
		1.2.2.5	Strategies for Not-for-Profits	Describes, adapts, and applies strategy formulation practices for a not-for-profit organization.		
		1.2.2.6	Corporate Level, Business Level, and Functional Level Strategies	Describes and compares the roles of corporate level, business level, and functional level strategies.		

				Knowledge Acquisition	Professional Proficiency	Advanced Proficiency
1		**1.2.2.7**	Value Proposition – Definitions	Identifies and describes the elements and business role of value propositions.	Provides a formal analysis, using accepted methods, of an organization's value proposition, and communicates the results to affected stakeholders. Evaluates the quality of information supporting the value proposition. Conducts SWOT Analysis to uncover strengths and weaknesses. Uses problem-solving skills to identify and articulate key issues.	Applies market intelligence from multiple sources, and based on multiple methods of analysis, advises on strategies affecting the enterprise value proposition. Creates standards for market analysis within the organization. Advises on strengths and weaknesses of corporate activities in relation to the value proposition. Sets scopes and guidelines for market studies, target market analysis, and enterprise-level sales and marketing plans.
		1.2.2.8	Value Proposition – supporting Information	Identifies the information that is required to support an organizational value proposition.		
		1.2.2.9	Analysis of Value Proposition – SWOT Analysis to examine the effectiveness of a value proposition	Describes the technique of performing a SWOT Analysis to uncover an organization's strengths and weaknesses with respect to the value proposition.		
		1.2.2.10	Market Analysis – demand, buying patterns, market trends	Describes the information requirements for market analysis.	Provides an analysis of customers and target markets based on accepted methods and benchmarks, and evaluates the significance of this analysis in relation to existing operations and corporate plans.	
		1.2.2.11	Product Positioning According to Value Proposition	Explains the positioning of an organization's products/services within the context of the organizational value proposition.	Reviews product strategies as they pertain to accepted product lifecycle models for the industry, and to the stated value proposition of the organization, and communicates significant issues.	Recommends, creates, and oversees comprehensive product strategies in accordance with an established value proposition. Makes final decisions impacting on product positioning. Determines Key Success Factors (KSFs) for sustainable revenue generation.
		1.2.2.12	Product Lifecycle – analysis of product stages according to accepted models	Identifies product lifecycle considerations as they pertain to competitive business strategies for the organization.		
		1.2.2.13	Revenue Goals and Targets	Explains the nature and role of Key Success Factors (KSFs) related to revenue generation.	Researches, evaluates, and communicates supporting information for the determination of Key Success Factors (KSFs) for sustainable revenue generation.	
		1.2.2.14	Information Technology as a Strategic Asset	Identifies and describes the ways in which information and information technology (IT) can become a strategic asset.	Suggests ways in which information and information technology (IT) can be used as a source of strategic advantage.	Advises on and oversees major initiatives impacting on an organization's information and information technology (IT) capabilities.

				Knowledge Acquisition	Professional Proficiency	Advanced Proficiency
1		**1.2.2.15**	Types of Business Organization – corporation, partnership, joint venture, income trust	Describes the types of business organization.	Provides input on financial matters relating to the structures and investments of an organization as they impact the delivery of sustainable value. Assesses the relative merits of investment options based on investment type. Provides research and input on alliance and reorganization activities.	Participates in major decisions involving the structures and investments of an organization. Mentors others in the research and presentation of supporting information. Applies entrepreneurship in exploring new options, and in negotiating creative agreements with other organizations.
		1.2.2.16	Types of Investment – direct investment, outsourcing, strategic alliance, merger, acquisition	Identifies and compares types of investment and their roles in corporate strategy.		
		1.2.2.17	Mergers and Acquisitions	Describes accepted principles and metrics relating to mergers and acquisitions for a given organization.	Conducts analysis of merger and acquisition opportunities using accepted principles and metrics, and communicates results.	

			Knowledge Acquisition	Professional Proficiency	Advanced Proficiency
2	**Enabling Value**: The execution of strategy for sustainable value, and the planning, implementation, monitoring, and improvement of supporting processes.				
	Enabling Competencies				
	2.1.1	Problem Solving and Decision Making	Systematically analyzes data and applies to defined problems. Generates and researches alternative solutions to problems.	Exercises discrimination and judgment in recognizing the limitations of analytic and monitoring tools, and revises approach accordingly. Uses spreadsheets and other IT tools to support effective issue identification and decision making. Performs sensitivity analysis on quantitative information.	Generates medium and long-term decisions on methods to measure, monitor, and improve the organization's ability to deliver sustainable value.
	2.1.2	Leadership and Group Dynamics	Participates in ongoing team efforts according to established goals.	Provides input as a team player to identify issues, help solve performance problems, and implement improvements. Listens to varying viewpoints.	Leads multi-functional teams in the investigation and development of recommendations for solving of operational issues and implementing solutions.
	2.1.3	Professionalism and Ethical Behaviour	Explains the need for transparency in communication of financial numbers and issues.	Exercises integrity and transparency in performing quantitative financial analysis that is free of bias and communicates results of analysis objectively and fairly. Monitors compliance with ethics policies. Identifies and reports ethical conflicts.	Takes initiative in reinforcing ethical guidelines. Acts as a role model for ethical behaviour. Verifies that checks and balances are in place to ensure that financial analysis and decision making are free of bias, and that results are presented to decision makers honestly.
	2.1.4	Communication	Describes the fundamentals of presenting financial numbers to a variety of audiences. Demonstrates communications capability using email, word processing, presentation software, and the telephone.	Asks appropriate questions to uncover performance issues. Relays financial information to a variety of audiences. Communicates effectively during strategy implementation. Follows up with ongoing communications in a timely fashion.	Communicates with stakeholders on major performance issues. Clearly communicates policies affecting day-to-day operations. Ensures that effective communication processes are in place throughout, during strategy implementation, and that change management issues are handled effectively.

CMA Competency Map

				Knowledge Acquisition	Professional Proficiency	Advanced Proficiency
2	Functional Competencies					
	2.2.1	Strategy implementation – aligning the organization's resources and success factors to build a sustainable organization				
		2.2.1.1	Organizational Structure	Classifies and compares the various types of organizational structure, including functional, matrix, and hybrid.	Investigates and communicates the effectiveness of management control systems and organizational structures in aligning resources with strategy for delivering sustainable value.	Takes overall responsibility for the alignment of organizational activities with strategy for delivering sustainable value. Recommends and implements best practices and strategy methods. Monitors and recommends changes to management control frameworks and organizational structures.
		2.2.1.2	Management Control Systems – policies, codes, and guidelines that align operations with strategic objectives and corporate values	Describes how management control frameworks align a given organization's resources and success factors with strategy.		
		2.2.1.3	Best Practices in Strategy implementation, including strategy mapping and entrepreneurial orientation	Describes best practices and current innovations in strategy implementation.	Researches best practices and current innovations in strategy implementation under a particular set of circumstances.	

				Knowledge Acquisition	Professional Proficiency	Advanced Proficiency
2		**2.2.1.4**	Data Analysis – analyzing data using spreadsheets, database tools, forecasting tools, and reporting tools	Summarizes the fundamentals of data analysis, and is familiar with widely available technology tools.	Selects and uses spreadsheets, database tools, forecasting tools, and reporting tools proactively to access and present information in support of business decisions.	Oversees policies and practices pertaining to the acquisition and use of IT tools and resources. Participates in major technology acquisitions and outsourcing decisions, and determines standards for evaluating options. Applies innovation and creativity in identifying opportunities for the strategic use of technology in keeping with the organization's strategy and value proposition. Recommends technology-supported sustainability initiatives such as reducing waste through process automation.
		2.2.1.5	File and Document Management	Describes accepted practices for file and version management, permissions, and backups.	Applies best practices in clear presentation and error prevention.	
		2.2.1.6	Managing Information Technology (IT)	Explains how IT serves various stakeholder groups within the organization, including employees, customers, and management, and how key performance indicators for IT are defined and measured.	Applies standard benchmarks and methods to provide input on the alignment of IT with organizational strategy and value proposition. Explores technology acquisitions within the context of the organization's core competencies, and makes recommendations. Calculates ROI of technology investments.	
		2.2.1.7	Technology Acquisition – options such as software licensing, equipment leasing, outsourcing, software as a service (SAAS)	Compares advantages and disadvantages of different technology acquisition options.		
		2.2.1.8	Human Resource (HR) Management	Classifies and describes key HR Management drivers as they relate to strategy implementation, including issues relating to regulatory compliance, ethics, compensation and incentives, and competitive strategies for recruitment and retention.	Reviews and improves strategy implementation initiatives in relation to key HR Management drivers in areas such as regulatory compliance, ethics, compensation and incentives, and competitive strategies for recruitment and retention.	Incorporates a comprehensive understanding of HR Management drivers in major strategy implementation initiatives.

CMA Competency Map

				Knowledge Acquisition	Professional Proficiency	Advanced Proficiency
2	**2.2.2**	Cost Management – Ensuring the effective and efficient use of organizational resources through the application of appropriate tools and systems				
		2.2.2.1	Cost Classification – fixed/variable, direct/indirect, and discretionary	Classifies and compares various types of costs and describes their behaviour within the context of their respective classifications.	Differentiates the various types of costs when researching and analyzing particular problems and issues. Organizes and communicates cost information according to standard conventions and uses judgment to determine which costs are relevant for the decision at hand.	Creates, oversees, and improves cost management processes with a view to maintaining a sustainable operation. Selects and adapts costing systems. Recommends improvements to operational processes based on operational cost considerations.
		2.2.2.2	Operational Costs – cost of goods sold, cost of capacity, and other costs related to ongoing expense	Differentiates and calculates the various types of operational costs and program costs.		
		2.2.2.3	Costing Systems – methods such as activity-based costing, process costing, joint cost allocation, departmental costing and job costing	Describes and applies costing systems for both for-profit and not-for-profit organizations, and explains how such systems are typically applied.	Analyzes cost data using established and cutting edge costing systems and methods. Selects the appropriate costing system under a particular set of circumstances. Applies strategic methods to manage costs across the organization.	
		2.2.2.4	Strategic Cost Management Techniques	Classifies and describes strategic cost management techniques such as activity-based management lifecycle costing, and program-based budgeting.		

CMA Competency Map

				Knowledge Acquisition	Professional Proficiency	Advanced Proficiency
2	**2.2.3**	Planning/Budgeting/ Forecasting				
		2.2.3.1	Operational and Program Budgets – including cash, capital, and operating	Identifies and differentiates the types of budgets and their significance in both the profit and the not-for-profit sectors.	Provides analysis of financial performance with respect to budget objectives. Evaluates supporting information from internal and external sources and identifies gaps and anomalies.	Recommends, designs, and administers budgeting and forecasting processes for profit and not-for-profit organizations. Selects and adapts cost analysis methods, and suggests alternative strategies based on an analysis of budget variances. Ensures that budgets reflect sustainable business practices. Communicates with stakeholders regarding significant budget issues.
		2.2.3.2	Budget Information Sources – including sales forecasts, interest rates, currency rates, and industry statistics	Identifies the information inputs needed to prepare the different types of budgets.		
		2.2.3.3	Cost Analysis Methods – break-even, linear programming, decision under uncertainty, sensitivity, and contribution margin	Describes and applies cost analysis methods commonly used in planning and decision making.	Employs accepted practices to analyze budget costs and variances in support of sustainable use of resources according to the organization's strategic plan. Determines which variances are relevant for a given industry and operational problem.	
		2.2.3.4	Budget Variances	Describes and calculates budget variances.		

CMA Competency Map

				Knowledge Acquisition	Professional Proficiency	Advanced Proficiency
2	**2.2.4**	Revenue Management – Managing the revenue stream, using internal and external sources of information, in order to achieve the organization's chosen value proposition				
		2.2.4.1	Product Mix	Identifies a profitable product mix consistent with an organization's value proposition.	Investigates and communicates the revenue implications of an organization's supply chain and product mix practices, and their compatibility with the organization's value proposition. Applies judgment in identifying areas that warrant attention.	Oversees the management of an organization's revenue stream using accepted best practices, according to an organization's chosen value proposition. Specifies and monitors the analysis and improvement of contributing factors including product mix and supply chains. Recommends, creates, and oversees pricing policies. Maintains clear communication about issues impacting the revenue stream. Designs transfer pricing and performance measurement systems to support sustainable revenue growth.
		2.2.4.2	Supply Chains	Describes the influence of supply chains and distribution on revenue and pricing.		
		2.2.4.3	Pricing Strategies – including value-based pricing, cost-plus pricing, reverse engineering	Classifies and describes widely accepted pricing strategies, and the circumstances under which they are typically applied.	Calculates and analyzes the revenue implications of domestic and international pricing, including transfer pricing, according to given price strategies and accepted best practices. Selects the appropriate transfer pricing method to support achievement of a sustainable strategy.	
		2.2.4.4	Transfer Pricing	Explains the objectives, applies the methods, and calculates transfer pricing in domestic and international settings.		
		2.2.4.5	Growth Strategies	Describes domestic and international growth strategies for a given organization.		

				Knowledge Acquisition	Professional Proficiency	Advanced Proficiency
2	**2.2.5**	Profit and Performance Management				
		2.2.5.1	Continuous Improvement Methodologies – process tools for maximizing output in relation to costs, including Total Quality Management (TQM), Business Process Management (BPM), and Lean	Applies and communicates the advantages and weaknesses of continuous improvement methodologies as they relate to profitability and performance.	Critically evaluates the effectiveness of continuous improvement methodologies in improving profitability and performance. Calculates the cost of quality initiatives.	Oversees the implementation of continuous improvement methodologies.
		2.2.5.2	Decision Making under Uncertainty – Cost-volume-profit (CVP) Analysis and Sensitivity Analysis	Calculates cost-volume-profit (CVP), undertakes a sensitivity analysis for a given organization, and understands the implications for profitability.	Performs and communicates the significance of a cost-volume-profit (CVP) and sensitivity analysis in relation to operational and strategic goals.	Incorporates cost-volume-profit (CVP) and sensitivity analysis in suggesting improvements to operational and strategic plans.

				Knowledge Acquisition	Professional Proficiency	Advanced Proficiency
2	**2.2.6**	Organizational performance measurement				
		2.2.6.1	Performance Measurement Best Practices	Describes accepted best practices for performance measurement.	Evaluates performance according to accepted performance measurement techniques, and makes recommendations. Identifies unsustainable practices, and recommends improvements. Weighs the relative advantage of various methods, and communicates significant issues. Performs break-even, linear programming, decision under uncertainty, sensitivity, and contribution margin analyses. Applies available technological tools. Designs investigative strategies to uncover root causes of performance issues.	Oversees a wide range of performance measurement activities, and ensures that the principles of sustainable performance are adhered to. Communicates significant performance-related issues to the Board of Directors. Reviews and critiques formal analyses of performance, and sets standards for performance analysis. Creates guidelines for responsibility centres. Makes recommendations for the selection of, or selects, organizational performance frameworks, and creates policies for their use. Participates in the establishment of responsibility centres, and sets appropriate guidelines. Selects or recommends IT tools for performance measurement, and sets standards for their use. Establishes non-financial performance metrics.
		2.2.6.2	Sustainable Profit Maximization and Capacity Management (tools such as linear programming, CM per constraining factor)	Calculates break-even, relevant cost, contribution margin, linear programming, sensitivity, and uncertainty analyses.		
		2.2.6.3	Performance Measurement Technology – spreadsheets, forecasting and database tools, business intelligence applications	Explains how technological tools are commonly used to measure and analyze performance.		
		2.2.6.4	Organizational Performance frameworks, including Balanced Scorecard	Describes and applies accepted frameworks and scorecards for measuring organizational performance in relation to strategic goals, target markets and customers, competitive business strategies, growth strategies, and corporate and social responsibility.	Applies accepted frameworks and scorecards to assess performance in relation to strategic goals, and communicates results. Adapts models to particular circumstances, and clearly indicates deviations. Evaluates the performance of responsibility centres from multiple perspectives. Differentiates between theoretical and realistic expectations for performance. Analyzes the possible impact of unusual circumstances.	
		2.2.6.5	Responsibility Centres – cost, revenue, profit, investment	Defines the various responsibility centres and describes the appropriateness of allocating performance responsibility to each centre.		
		2.2.6.6	Non-financial performance measurements	Describes and applies non-financial performance measures for profit and not-for-profit organizations.	Reviews the performance of an organization using non-financial measurements, and provides feedback to stakeholders in the appropriate format.	

				Knowledge Acquisition	Professional Proficiency	Advanced Proficiency
2	**2.2.7**	Individual performance measurement – using incentive and compensation systems to align individual and organizational goals				
		2.2.7.1	Management Incentives – bonuses, stock options, perquisites, and other benefits	Describes the basic principles of management incentives, and their role in encouraging behaviour that aligns with strategic goals.	Analyzes the effectiveness of management incentive schemes in relation to an organization's strategic plans.	Provides broad oversight on incentives and compensation strategies, ensuring that practices are fair and sustainable.
		2.2.7.2	Employee Compensation Methods	Differentiates and explains the respective roles of compensation strategies such as sales commissions, performance bonuses, piecework, and profit sharing in improving performance, and the tax consequences of these strategies.	Prepares supporting information for analyzing the effectiveness of employee compensation strategies in furthering the achievement of profit and revenue targets.	Sets standards for measurement and analysis. Displays a high degree of judgment and ethical maturity in highlighting and avoiding conflicts of interest, potential legal liability, and measures that are contrary to shareholder interests.

CMA Competency Map

			Knowledge Acquisition	Professional Proficiency	Advanced Proficiency
3	**Preserving Value:** The protection of a sustainable value strategy against strategic and operational risks.				
	Enabling Competencies				
	3.1.1	Problem Solving and Decision Making	Describes processes for mitigating risks and reducing the impact of damaging events.	Employs analytic problem-solving skills to solve or report a particular problem or risk to the organization. Exercises judgment in determining whether an issue requires attention.	Assesses major problems, and decides on long-term solutions and mitigation strategies. Prioritizes response activity in complex situations.
	3.1.2	Leadership and Group Dynamics	Deals effectively with adverse situations and potential conflict.	Takes initiative in groups in identifying risks and problems. Exercises discretion over sensitive issues.	Designs control and authorization policies. Uncovers and solves conflicts. Confronts individuals over compliance issues. Deals with resistance to change.
	3.1.3	Professionalism and Ethical Behaviour	Describes and observes the dangers posed by ethical and sustainability risks.	Reports ethical and sustainability threats quickly and transparently. Adheres to control policies and codes of ethics (professional and organizational). Maintains confidentiality.	Identifies and addresses conflicts of interest. Identifies unethical business practices that could harm the organization's reputation. Responds to complaints over ethical issues.
	3.1.4	Communication	Follows conventions of honest and clear communication.	Listens to the concerns of co-workers and responds with appropriate discretion and clarity. Uses methodical questioning to uncover root causes of problems. Exercises discretion on discussing sensitive issues.	Develops and clearly communicates policies for controls and compliance. Sends a clear message about the serious nature of risks.

CMA Competency Map

				Knowledge Acquisition	Professional Proficiency	Advanced Proficiency
3	Functional Competencies					
	3.2.1	Internal Control – building and maintaining process mechanisms that ensure the organization meets operational, financial and compliance objectives.				
		3.2.1.1	Process Flow – functional areas such as sales, accounts payable, accounts receivable, treasury, segregation of duties	Describes how flow diagrams are used to document organizational processes.	Analyzes process flow and approvals and authorizations for functional areas such as sales, accounts payable, accounts receivable, and treasury with respect to sustainable control practices, and identifies gaps and areas for improvement.	Sets and administers standards and policies for internal control, and monitors the key drivers. Specifies the use of tools such as flow diagrams, and monitors their use. Champions the need for adequate controls in order to maintain sustainable business practices.
		3.2.1.2	Approvals and Authorizations	Describes the role of approvals and authorizations in internal control.		
		3.2.1.3	Control Policies – their relationship to corporate philosophy, leadership styles, organization structures, and external environment	Explains the role of control policies in realizing of organizational objectives.	Evaluates internal control policies and mechanisms from the standpoint of corporate goals. Identifies and communicates control gaps that could allow unsustainable practices.	Designs, implements, monitors and recommends improvements to approvals and authorizations procedures.
		3.2.1.4	Control Mechanisms – monitoring systems, environmental assessment, authorizations, notification policies	Classifies and describes the interrelated mechanisms of internal control.		

				Knowledge Acquisition	Professional Proficiency	Advanced Proficiency
3	**3.2.2**	Enterprise Risk Management – identifying, assessing, and mitigating strategic, operational, financial and ethical risks, and threats to sustainability				
		3.2.2.1	Risk Tolerance	Identifies and describes factors that determine risk tolerance for a given organization.	Monitors external and internal circumstances that could impact an organization's tolerance for risk, and reports significant developments. Provides analysis according to accepted guidelines of risks to sustainable operation. Applies technological tools to identify and quantify risks.	Recommends, creates, and administers enterprise risk management policies. Working with the Board of Directors, provides input in determining enterprise-level risk tolerance and philosophy. Champions the need for risk mitigation within the organization. Identifies and communicates broad, long-term risks to sustainable operation. Mentors others in best practices for risk measurement and management. Ensures the maintenance of risk monitoring and response systems. Advises on major risk mitigation investments such as redundant data centres.
		3.2.2.2	Risk Assessment	Describes and compares recognized methods and tools for identifying, categorizing, and quantifying operational, financial, strategic, environmental, compliance, and other risks.		
		3.2.2.3	Risk Analysis – using spreadsheets, database tools, and forecasting tools to expose and quantify risks	Applies methods of calculating risks using widely available IT applications.		
		3.2.2.4	Technology-Related Risks – security, privacy, data quality, compatibility, business continuity	Recognizes and describes the risks inherent with the use of technology.	Identifies and communicates risks stemming from the reliance on information technology, including security, privacy, data quality, compatibility, and business continuity. Analyzes gaps in the protection and management of intellectual property.	
		3.2.2.5	Intellectual Property Risks	Describes accepted methods of securing intellectual property.		
		3.2.2.6	Risk Monitoring	Describes widely accepted mechanisms for monitoring ongoing risks.	Reviews an organization's existing strategies and methods for monitoring and responding to risks, and communicates significant issues.	
		3.2.2.7	Risk Mitigation and Response	Explains and compares risk response strategies, including procedures for managing risk.		

				Knowledge Acquisition	Professional Proficiency	Advanced Proficiency
3	**3.2.3**	Governance – broad oversight of the organization's operations and strategic plans with regard to compliance, ethics, risk, and sustainability				
		3.2.3.1	Governance Roles and Procedures	Describes accepted roles and procedures and emerging trends relating to governance, including the responsibilities of the Board of Directors.	Follows governance procedures where defined, and exercises judgment in uncertain areas. Works with reporting structures within the context of compliance, risk, and ethical issues.	Creates and enforces governance policies within the organization with a view toward transparency, fairness, and sustainability. Designs and maintains codes of conduct, ethical guidelines, and reporting structures. Works with the Board of Directors and outside regulators on compliance issues. Provides leadership on ethical issues. Creates protective policies for employees who uncover and report wrongdoing.
		3.2.3.2	Reporting Structures	Describes reporting structures and how they function in a given organization.		
		3.2.3.3	Compliance and Ethics	Explains the meaning and implications of ethical guidelines, codes of conduct, and regulatory requirements.	Reviews strategic plans and operations, and identifies and communicates, ethical and compliance risks. Provides an analysis of compensation and management incentive policies with regard to fairness, shareholder interests, and potential conflict of interest, and communicates results.	
		3.2.3.4	Compensation Issues	Describes the governance issues relating to compensation and incentives, including advantages and ethical risks.		
		3.2.3.5	Not-for-Profit Governance	Describes the role of governance for government organizations, charities, NGOs, and other not-for-profit organizations.	Analyzes activities of a not-for-profit organization according to governance best practices.	
		3.2.3.5	Social Responsibility Strategy	Describes the role and function of an organization's social responsibility strategy.	Participates in the development of an organization's social responsibility strategy.	

				Knowledge Acquisition	Professional Proficiency	Advanced Proficiency
3	**3.2.4**	Financial resource management – setting financial objectives and managing financial resources				
		3.2.4.1	Capital Structure – financing of assets	Explains the principles that define the appropriate capital structure of an organization and performs quantitative capital structure analysis.	Provides supporting information for decisions regarding corporate investments, and actions impacting capital structure. Investigates and compares financing options. Analyzes and communicates the tax consequences of investments.	Participates in major decisions involving the use of financial resources. Sets standards for valuation of assets and capital projects. Creates and maintains policies and benchmarks for capital investments. Makes final decisions on financing options. Designs and oversees tax strategies. Promotes sustainable use of capital in the organization.
		3.2.4.2	Sources of Financing – public, private, debt, equity	Describes and calculates common sources of financing and their implications.		
		3.2.4.3	Capital Structure – tax considerations	Describes and calculates the tax implications of various financing options.		
		3.2.4.4	Valuation of Assets – time value of money, cost of capital, and other methods	Describes and applies accepted rules and benchmarks for valuing assets.	Participates in the valuation of assets and capital projects using accepted rules and benchmarks. Critiques capital project plans based on accepted financial practices.	
		3.2.4.5	Capital Project Valuation – application of capital budgeting, NPV, IRR, buy versus lease	Classifies and applies various methods of evaluating capital projects.		
		3.2.4.6	Intangible Assets	Describes and applies methods for evaluating and managing intangible assets.		
		3.2.4.7	Business Valuation	Identifies and explains accepted business valuation criteria and applies business valuation techniques.		

				Knowledge Acquisition	Professional Proficiency	Advanced Proficiency
3	**3.2.5**	Financial risk management				
		3.2.5.1	Distribution of Profits – dividends, stock repurchase	Outlines accepted processes for determining and distributing profits.	Analyzes the manner in which an organization distributes profits to shareholders following accepted best practices.	Recommends policy to the Board of Directors regarding distribution of profits.
		3.2.5.2	Investment Portfolios and Financial Instruments	Describes appropriate methods of managing investment portfolios and financial instruments for a given organization, including the evaluation of portfolio risk.	Using accepted methods and benchmarks, determines the strengths and weaknesses of an organization's financial investments, including portfolios and financial instruments, and communicates significant issues and risks.	Applies investment portfolio analysis in directing or recommending changes in investment strategy. Oversees guidelines for investments. Advises on investment risks.
		3.2.5.3	Working Capital Management	Performs calculations for working capital management, financial forecasting and planning, and foreign exchange.	Analyzes the impact of working capital management, financial forecasting and planning, and foreign exchange under a particular set of circumstances.	Develops strategies to manage the impact of working capital management, financial forecasting and planning, and foreign exchange.
	3.2.6	Professionalism and Ethical Behaviour				
		3.2.6.1	CMA Code of Conduct and Ethical Behaviour	Describes the CMA Code of Conduct and explains its significance.	Demonstrates professional and ethical judgment in acting according to the Code, and identifies contravention both in hypothetical and workplace settings.	Oversees compliance with relevant professional codes and standards. Identifies professional and ethical conflicts, and recommends changes to policies and organizational codes of conduct.
		3.2.6.2	Professionalism	Recognizes and develops the personal and ethical attributes required of a management accounting professional.	Consistently demonstrates the personal and ethical attributes required of a management accounting professional.	Exemplifies and develops in others the personal attributes required of a management accounting professional.

			Knowledge Acquisition	Professional Proficiency	Advanced Proficiency
4	**Reporting Value**: The transparent communication of the delivery of sustainable value to stakeholders and the general public.				
4	Enabling Competencies				
	4.1.1	Problem Solving and Decision Making	Describes the role of financial reporting in promoting sound business decisions.	Identifies problems based on historical data. Provides input for decisions related to presentation of information in financial statements.	Sets and oversees policies for financial reporting in the organization.
	4.1.2	Leadership and Group Dynamics	Listens carefully and critically to detailed presentations and develops an understanding of the needs of users of the financial statements.	Works with teams to research and prepare financial statements and other reporting documents.	Mentors others on proper financial reporting procedures.
	4.1.3	Professionalism and Ethical Behaviour	Explains the meaning and describes the substance of professional and ethical standards for financial reporting.	Creates financial statements and supporting documents in strict adherence to professional and ethical standards.	Promotes professional and ethical standards throughout the organization for reporting financial information.
	4.1.4	Communication	Communicates effectively, both orally and in writing, in one of Canada's official languages.	Writes clear and readable documents reporting on financial matters. Presents numbers in clear, easy-to-read format.	Sets communication policies on financial issues. Communicates with auditors and regulators. Presents financial results to boards of directors, at shareholder meetings, and to the media. Participates in conferences and associations.

CMA Competency Map

				Knowledge Acquisition	Professional Proficiency	Advanced Proficiency
4	Functional Competencies					
	4.2.1	Financial accounting and statement preparation				
		4.2.1.1	Accounting Cycle	Describes the details and the significance of the accounting cycle.	Prepares complete financial statements according to accepted financial standards. Researches and applies applicable trends and regulations in financial reporting, including international reporting standards and new guidelines for accounting for investments.	Oversees the creation and review of, and authorizes, an organization's financial statements. Reviews the content of financial statements with the Audit Committee. Advises Board of Directors on reporting issues. Sets guidelines for the content of Notes and Management Reports. If applicable, follows regulations and accepted practices for public sector and not-for-profit financial reporting.
		4.2.1.2	Balance Sheet	Prepares balance sheet according to applicable financial standards.		
		4.2.1.3	Income Statement	Prepares income statement according to applicable financial standards.		
		4.2.1.4	Retained Earnings Statement	Prepares retained earnings statement according to applicable financial standards.		
		4.2.1.5	Cash Flow Statement	Prepares cash flow statement according to applicable financial standards.		
		4.2.1.6	Treatment of specific accounting items and transactions	Explains and applies appropriate accounting standards to specific items for private, public, or not-for-profit organizations.		
		4.2.1.7	Current Trends and Emerging Issues in Financial Reporting	Identifies and describes current trends and emerging issues in financial reporting including the latest accounting standards, and accepted rules for government and not-for-profits.		
		4.2.1.8	Notes to the Financial Statements	Prepares the Notes to the Financial Statements.	Prepares Notes to the Financial Statements, together with supporting schedules, and Management Reports, according to accepted rules and practices. Clearly and succinctly communicates key issues.	
		4.2.1.9	Management Discussion and Analysis (MD&A) – describing current assets, leases, benefits, facilities, R&D, and other areas	Explains the accounting treatment for the various operational areas in a given organization.		
		4.2.1.10	Not-for-Profit and Public Sector Financial Reporting	Prepares financial statements for a government or not-for-profit organization.	Analyzes the financial statements for a government or not-for-profit organization.	
		4.2.1.11	Role of the External Auditor	Explains the role of the external auditor in the financial reporting process.	Researches questions from external auditor regarding financial statements, and suggests responses.	

CMA Competency Map

				Knowledge Acquisition	Professional Proficiency	Advanced Proficiency
4	**4.2.2**	Financial analysis – evaluating performance and risk by using benchmarks, ratios, and trend and comparative analysis				
		4.2.2.1	Conceptual Framework	Explains the conceptual framework that forms the theoretical basis for financial accounting.	Provides thorough and detailed financial analysis using accepted models, guidelines, and tools, and according to corporate policies. Uses formal methods to calculate financial ratios, benchmarks, and trends. Investigates anomalies and determines root causes through methodical analysis. Clearly delineates and communicates aberrations, deviations, and risks. Employs judgment in selecting alternative analytic methods. Uses software tools efficiently, and follows best practices around presentation and error prevention. Reviews profitability reports.	Sets corporate standards for financial analysis, specifying models, guidelines and tools. Reviews and critiques financial analyses, and mentors others in best practices. Using a financial analysis as supporting information, identifies major financial trends and issues and reports to stakeholders. Recommends policy adjustments in revenue recognition and other areas where suggested by an analysis. Mentors others in optimizing decisions according to tax consequences.
		4.2.2.2	Revenue and Grant Recognition	Describes the role of revenue recognition and grant recognition in the measurement of income.		
		4.2.2.3	Ratio Analysis and Industry Benchmarking	Identifies and applies the fundamentals of ratio analysis and industry benchmarking, and their relevance to management decision making.		
		4.2.2.4	Horizontal/ Vertical Analysis and Industry Benchmarking	Identifies and applies the fundamentals of horizontal/vertical analysis and industry benchmarking, and their relevance to management decision making.		
		4.2.2.5	Accounting Software – standard applications	Applies the basics of accounting software packages and explains their role in financial reporting.		
		4.2.2.6	Profitability Reporting	Prepares profitability reports by product, division, geographic location, etc.		
	4.2.3	Corporate Tax		Describes the tax consequences of finance and investment decisions for a given organization. Applies the appropriate methods to measure and report income taxes.	Using appropriate methods, analyzes the tax consequences of finance and investment decisions and suggests alternatives where indicated.	

Accounting cycle: The accounting processes used by enterprises to record transactions and prepare financial statements.

Activity-based costing (ABC): A focus on activities required to produce each product or provide each service based on each product's or service's consumption of the activities. The basic distinction between traditional cost accounting and ABC is that traditional cost-accounting techniques allocate costs to products based on the attributes of a single unit. Typical attributes include the number of direct labour hours required to manufacture a unit, the purchase cost of merchandise resold, or the number of days to complete a cycle of work. Allocations, therefore, vary directly with the volume of units produced, cost of merchandise sold, or days occupied by the process or customer.

Activity-based management: A cost-leadership strategy designed to eliminate non-value-added activities, which are those activities failing to add value for which customers will pay.

Balance sheet: Shows the enterprise's financial condition at the end of a period.

Balanced scorecard: A document that translates an organization's mission and strategy into a comprehensive set of performance measures that provide the framework for implementing the strategy.

Break-even analysis: A costing technique used to determine the point at which cost or expenses and revenue are equal.

Budget: A quantitative expression for a set time period of a proposed (future) plan of action by management.

Business level strategy: Business level strategy identifies the organization's target customers or clients. Customers alone, and not the organization, dictate the elements that are important to them. By identifying target customers, the organization can discover the way in which it must compete to keep them.

Business process management (BPM): A management approach focused on aligning all aspects of an organization with the wants and needs of clients.

Business valuation: An estimation of the market value of a firm or entity.

Capacity management: Adjustment of the capacity of a resource (equipment, machine, or system) to meet a planned demand or load. In general, manufacturing capacity may be adjusted by working overtime or by redeploying the manpower.

Capital budget: A budget for major capital or investment expenditures (i.e., equipment, machinery, etc.).

Capital structure: A framework of different types of financing employed by a firm to acquire resources necessary for its operations and growth. Commonly, it comprises stockholders' investments (equity capital) and long-term loans (loan capital), but, unlike financial structure, it does not include short-term loans (such as overdraft) and liabilities (such as trade credit).

Cash budget: A detailed plan that shows all expected sources and uses of cash. The cash budget has the following six main sections:

1. **Beginning cash balance** – contains the last period's closing cash balance.
2. **Cash collections** – includes all expected cash receipts (all sources of cash for the period considered, mainly sales).
3. **Cash disbursements** – lists all planned cash outflows for the period, excluding interest payments on short-term loans, which appear in the financing section. All expenses that do not affect cash flow are excluded from this list (e.g., depreciation, amortization).
4. **Cash excess or deficiency** – a function of the cash needs and cash available. Cash needs are the total cash disbursements plus the minimum cash balance required by company policy. If total cash available is less than cash needs, a deficiency exists.
5. **Financing** – discloses the planned borrowings and repayments, including interest.
6. **Ending cash balance** – simply reveals the planned ending cash balance.

Cash flow statement: Reports the cash provided and used by operating, investing, and financing activities during the period.

Code of conduct: A set of conventional principles and expectations that are considered binding on any person who is a member of a particular group.

Compliance: The act of adhering to, and demonstrating adherence to, a standard, regulation, or code.

Conceptual framework: A set of coherent ideas or concepts organized in a manner that makes them easier to explain to others.

Contribution margin: Revenue minus all costs of the output (a product or service) that vary with respect to the number of output units.

Control: Coordinated action that companies take to implement their planning decisions, evaluate actual against expected performance, and provide timely feedback on current results.

Core competencies: A cluster of extraordinary abilities or related "excellences" that a firm acquires from its founders, after consistent striving over the years, and which cannot be easily imitated. Core competencies give a firm one or more competitive advantages in creating and delivering value to its customers in its chosen field. They are also called core capabilities or distinctive competencies.

Core competency analysis: A process that analyzes the competencies of a given company to identify something the company does more effectively than most (effectiveness), and also more efficiently than most (efficiency).

Corporate level strategy: Identifies the organization's business. Defining corporate strategy focuses the organization's resources on a particular line of business. This is important because the organization cannot do everything well. Instead, the organization must develop a distinctive strategy to exploit its strengths in order to create and sustain a competitive advantage.

Corporate sustainability: A business approach that creates long-term shareholder value by embracing opportunities and managing risks arising from economic, environmental, and social developments.

Cost of capital: The expected rate of return that the market requires in order to attract funds to a particular investment.

Cost-plus pricing: A pricing method that first calculates the cost of the product, and then includes an additional amount to represent profit.

Cost-volume-profit (CVP) analysis: Examines the behaviour of total revenues, total costs, and operating income as changes occur in the output level, selling price, variable cost per unit, or fixed costs; a single revenue driver and single cost driver are used in this analysis.

Debt financing: A method of financing in which a company receives a loan and gives its promise to repay the loan.

Decision under uncertainty: Refers to the use of a probability approach when it is not possible to predict with certainty the outcome of a particular decision.

Enabling competency: Reflects personal attributes and distinguishes CMAs from other professionals working in the area of strategic management accounting. Variations in the environment in which the functional competencies are applied require individuals to adjust the requisite enabling competencies in order to perform at expected levels.

Equity financing: A method of financing in which a company issues shares of its stock and receives money in return.

External environmental scanning: The acquisition and use of information about events, trends, and relationships in an organization's external environment, the knowledge of which would assist management in planning the organization's future course of action.

Functional competency: The six functional competencies represent the core value proposition for the CMA profession. As such, they are the skills that need to be understood and developed in order to meet performance expectations and organizational goals within a constantly changing environment. In essence, functional competencies are the goal-driven methodologies by which CMAs shape the performance of their organizations.

Functional level strategy: Identifies the specific learning tools, processes, or systems that the organization uses to achieve its business level strategy. It includes marketing strategies, new product development strategies, human resource strategies, financial strategies, legal strategies, supply-chain strategies, and information technology management strategies. The emphasis is on short and medium term plans and is limited to the domain of each department's functional responsibility.

Governance: A minimum of compliance with laws, regulations, standards, conventions, codes, traditions, and norms to avoid doing harm in pursuit of profit.

Grant recognition: The process of recording grants in the accounting period under one of the various acceptable methods in the accounting period.

Horizontal analysis: Comparative study of a balance sheet or income statement for two or more accounting periods, to compute both total and relative variances for each line item.

Income statement: Measures the results of operations during the period.

Income trust: An investment that may hold equities, debt instruments, royalty interests or real property. The trust can receive interest, royalty or lease payments from an operating entity carrying on a business, as well as dividends and a return of capital. The main attraction of income trusts (in addition to certain tax preferences for some investors) is their stated goal of paying out consistent cash flows for investors, which is especially attractive when cash yields on bonds are low.

Industry benchmarking: Standard, or a set of standards, used as a point of reference for evaluating performance or level of quality. Benchmarks may be drawn from a firm's own experience, from the experience of other firms in the industry, or from legal requirements such as environmental regulations.

Intangible assets: Identifiable non-monetary assets that lack physical substance.

Intellectual property: Documented or undocumented knowledge, creative ideas, or expressions of human mind that have commercial (monetary) value and are protectable under copyright, patent, servicemark, trademark, or trade secret laws from imitation, infringement, and dilution. Intellectual property includes brand names, discoveries, formulas, inventions, know-how, registered designs, software, and works of artistic, literary, or musical nature. It is one of the most readily tradable properties in the internet (digital) marketplace.

Internal environmental scanning: Looking at the present capabilities of the organization (infrastructure, hardware, personnel, abilities, structure, etc.) and comparing that information can be compared to what the organization will need in the future to achieve its strategic goals.

Internal rate of return (IRR): The discount rate at which the present value of expected cash inflows from a project equals the expected cash outflows from a project.

Joint venture: A strategic alliance where two or more people or companies agree to contribute goods, services, and/or capital to a common commercial enterprise. The main difference between a joint venture and a partnership is that the members of a joint venture have teamed together for a particular purpose or project, while the members of a partnership have joined together to run "a business in common."

Key performance indicators (KPIs): Quantifiable measurements that reflect the critical success factors of an organization. Based on measures agreed on beforehand, they reveal a high-level snapshot of the organization. They vary depending on the kind of organization they characterize. For example, a business may have as a KPI the annual sales volume, while KPIs of a social service organization may relate more to the number of people helped. Moreover, colleges may have number of students graduating per year as one of their KPIs.

Key success factors (KSFs): Particular strategy elements, product attributes, competitive capabilities, and business outcomes that spell the difference between profit and loss and, ultimately, between competitive success or failure.

Lifecycle costing: Tracks and accumulates the actual costs attributable to each product from start to finish.

Linear programming: An optimization technique used to maximize total contribution margin (the objective function), given multiple constraints. Linear programming models typically assume that all costs can be classified as either variable or fixed with respect to a single driver (units of output). These models also require holding certain other linear assumptions. When these assumptions fail, other decision models should be considered.

Mission statement: The mission statement of an organization provides the starting point by defining why a company exists or how a business unit fits within a broader corporate architecture. Such a statement (a) fixes boundaries to guide strategy formulation, (b) establishes measures for organizational performance in multiple dimensions, and (c) suggests standards for individual ethical behaviour. As a concise, internally focused statement of the reason for the firm's existence, that is, the basic purpose toward which its activities are directed, and the ***values*** that guide employees' activities, the mission statement should also describe the way in which the organization expects to compete and deliver value to its customers. The mission and the accompanying core values should remain fairly stable over time.

Net present value (NPV): A method that calculates the expected net monetary gain or loss from a project by discounting all expected future cash inflows and outflows to the present , using the required rate of return.

Operating budget: When the income statement refers to the future and not the past, it is an operating budget, also referred to as a *pro forma* net income statement. The operating budget presents the results of operations in many value-chain business functions before financing and taxes.

Organizational lifecycle: The life cycle of an organization from birth level to its termination. Generally, there are five level/stages in any organization: birth, growth, maturity, decline, death, and/or reinvention.

Partnership: Generally, when we talk about partnerships, we are talking about general partnerships. A general partnership is defined as a business arrangement between two or more individuals who share the profits and liabilities of the business. There are also limited partnerships and limited liability partnerships. A limited partnership is a partnership consisting of one or more general partners, who have unlimited liability, and one or more limited partners, who have limited liability depending upon their contribution to the partnership. Often the limited partner contributes financially but is not otherwise involved in the business. In Canada, a limited liability partnership is often only available to groups of professionals, such as lawyers, accountants and doctors. These partnership agreements are governed by specific provincial legislation.

PESTEL analysis: Another form of analysis that places the organization in its political, economic, social, technological, environmental, and legal environment. Many factors in the macro-environment can affect the decisions of the managers of any organization. For example, tax changes, new laws, trade barriers, demographic change and government policy changes are all examples of macro change.

Product lifecycle: Consists of managing a product or service through its startup, growth, maturity, and decline stages.

Product mix: The total composite of products offered by a particular organization, consisting of both product lines and individual products.

Product positioning: The way the product is defined by consumers with respect to its important attributes – the place the product occupies in consumers' minds relative to competing markets.

Profitability reporting: Reports that analyze profitability over a period of time.

Program-based budgeting: The budgeting system that, contrary to conventional budgeting, describes and gives the detailed costs of every activity or programme that is to be carried out in a budgetary period.

Public financing: The money raised by means of taxation and borrowing, and spent by governments, or the process of raising and spending this money.

Ratio analysis: Technique of financial analysis in which quantities are converted into ratios for meaningful comparisons with past ratios and ratios of other firms in the same or different industries. Ratio analysis determines trends and exposes strengths or weaknesses of a firm.

Responsibility centre: A part, segment, or sub-unit of an organization whose manager is accountable for a specified set of activities.

Retained earnings statement: Explains the change in the retained earnings account and in dividends over a period of time.

Revenue recognition: The process of recording revenue, under one of the various acceptable methods, in the accounting period.

Reverse engineering: The process of discovering the technological principles of a human-made device, object, or system through analysis of its structure, function, and operation. It often involves taking apart something (e.g., a mechanical device, electronic component, or software program) and analyzing its workings in detail, (a) to be used in maintenance, or (b) to try to make a new device or program that does the same thing without using or simply duplicating (without understanding) any part of the original item.

Risk analysis: A technique to identify and assess factors that may jeopardize the success of a project or achieving a goal. This technique also helps to define preventive measures to (a) reduce the probability of these factors occurring, and (b) identify countermeasures to successfully deal with these constraints when they develop to avoid possible negative effects on the competitiveness of the company.

Risk assessment: A step in a risk management procedure. Risk assessment is the determination of the quantitative or qualitative value of a risk related to a concrete situation and a recognized threat.

Risk tolerance: Capacity to accept or absorb risk.

Rolling budget: A budget or plan that is always available for a specified future period by adding a month, quarter, or year in the future as the current month, quarter or year is completed.

Segregation of duties: One of the key concepts of internal control, the most difficult and sometimes the most costly one to achieve. It is the concept of having no one person be given responsibility for more than one related function or activity.

Sensitivity analysis: Uses percentage changes to understand what changes cause the largest effect on profit.

Software as a service (SAAS): Sometimes referred to as "software on demand," is software that is delivered over the internet and/or is deployed to run behind a firewall on a local area network or personal computer. With SAAS, a provider licenses an application to customers either as a service on demand, through a subscription, in a "pay-as-you-go" model, or (increasingly) at no charge. This approach to application delivery is part of a utility computing model where all of the technology is in the "cloud" that is accessed over the Internet as a service.

Strategy formulation: Strategy formulation is directed toward achieving the firm's objectives, which are different for each company. For most profit-seeking organizations, the objective is to generate a return on investment that is at least equal to the amount that shareholders can earn by investing in other opportunities with comparable risk. The objective in not-for-profit organizations is to achieve the goals set for the organization by its principal members. For example, the objective for a famine relief organization might be to save as many lives as possible, given the organization's limited funds, and the objective for a government might be to stay in power.

Strategy map: Strategy map is a diagram that is used to document the primary strategic goals being pursued by an organization or management team. The strategy map helps describe the company's strategy so that objectives and measures can be established and managed. In this way, the strategy map provides the missing link between strategy formulation and strategy execution.

Strategy mapping: A process of creating a strategy map. It assists organizations in providing a visual representation of the cause-and-effect relationships of the components of an organization's strategy.

Strengths, weaknesses, opportunities, threats (SWOT) analysis: This process provides information that is helpful in matching the firm's resources and capabilities to the competitive environment in which it operates. As such, it is instrumental in strategy formulation and selection. Environmental factors internal to the firm usually can be classified as strengths or weaknesses. Those external to the firm can be classified as opportunities or threats.

Supply chain: An integrated system of suppliers, subcontractors, manufacturers, distributors, and retailers collaborating with the purpose of adding value to the output for the customer.

Time value of money: Refers to the idea that the value of a sum depends on its place in time, with a sum today worth as much as a larger sum in the future, given appropriate interest compounding.

Total quality management (TQM): A philosophy of managing a set of business practices that emphasizes continuous improvement in all phases of operations, 100% accuracy in performing activities, involvement, and empowerment of employees at all levels, team-based work design, benchmarking, and full satisfaction of customer expectations.

Transfer pricing: The price one sub-unit of an organization charges for a product (tangible or intangible) or service supplied to another sub-unit of the same organization.

Valuation of assets: Determination of the value of capital assets or fixed assets, the value at which they should be shown in their owner's balance sheet.

Value chain analysis: Understanding the *how* and *why* of the simultaneous sequence of events in a chain of activities within several departments is the essence of value chain analysis. By examining and understanding how revenue is generated among the overlapping processes, organizations are in a better position to determine any problem areas, such as redundancy, lack of cross-functional communication, operational inefficiencies, scarce resources, costly non-value-added activities that could be eliminated, and mismanagement between the departments.

Value chain: The sequence of activities required to make a product or provide a service. For example, an organization could have one or more of the following value chain processes within their organization: market-to-sell; order-to-payment; packing-to-delivery; and buy-to-sell. Some value chain processes specific to government and not-for-profits are public tendering-to-contract management and administration, and funding-to-execution of services.

Value proposition: Provides paths for the delivery of superior value to customers, for example, operational excellence, product leadership, and customer intimacy.

Value-based pricing: A pricing method that sets selling prices on the perceived value to the customer, rather than on the actual cost of the product, the market price, a competitor's prices, or the historical price.

Vertical analysis: Technique for identifying relationships between items in the same financial statement by expressing all amounts as the percentage of the total amount, taken as 100. In a balance sheet for example, cash and other assets are shown as a percentage of the total assets and, in an income statement, each expense is shown as a percentage of the sales revenue. Financial statements using this technique are called common-size financial statements.

Vision statement: Paints a picture of the future that clarifies the firm's direction and helps individuals understand why and how they should support the organization. A concise, externally focused, and market-oriented statement that defines the mid- to long-term (three- to ten-year) goals of the company, the vision should be inspirational, expressing – often in colourful language – the way in which the organization wants to be perceived by the world. The vision which describes the firm's aspirations for the future without specifying the means to achieve those ends, should be reflected in the mission statement and communicated by means of persuasive leadership. From the foundation of the mission statement and the core values, the vision sets the organization in motion toward the dynamics of strategy, which is the next step.

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