

Cost and Management Accounting Practices : Beyond Financial Reporting: The Catalysts of Sustainable Socioeconomic Development in Technology Driven Era

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Abstract: This paper explores the transformative role of Cost and Management Accountancy Profession and practices of Cost and Management Accountants aka Certified Management Accountants in pursuit of economic vibrancy of a nation under competitive economic environment driven by technology of 21st century. While traditionally associated with financial reporting, Cost and Management Accountants/Certified Management Accountants (CMAs) have been evolved into strategic partners, contributing to multifaceted aspects of organizational effectiveness in terms of productivity measurement, evaluating organizational performance and disseminating authentic information for decision making purpose to all levels of management and particularly strategic level management. Research findings highlight CMAs expanding responsibilities in areas such as strategic decision-making, cost management, risk mitigation, performance evaluation, innovation, policy formulation and integrating the domestic business organizations with the globe in the business environment keenly influenced by market driven competitive economic environment in the era of globalization. These multifunctional roles have been corroborated by renowned institutions and experts, demonstrating the significance of CMAs and Cost and Management Accountancy Profession worldwide in shaping economic growth. By actively involving CMAs in decision-making processes and policy formulation methodologies, besides the economically and technologically advanced countries, India can also leverage the expertise of CMAs to driving efficiency, competitiveness, and sustainable growth keeping in view the growth trajectory target -2047 when India will celebrate the centenary of decolonizing foreign rulers. Cost and Management Accountancy Profession's global perspective positions to facilitate international business activities, bolstering significant positions in the global economy steering the CMAs. Duly recognizing and empowering Cost and Management Accountancy or simply Management Accountancy Profession and CMAs being the catalytic agents by default is one of the critical success factors and crucial for global economies in general and particularly emerging economies' including India's aspiration to become economically vibrant nations in the ongoing century.

Keywords: *Cost and Management Accountancy Profession, Management Accountancy Profession, Cost & Management Accountants/Certified Management Accountants (CMAs) Economic Vibrancy, Global Economy Strategic Decision-Making, Cost Management, Risk Mitigation, Policy Formulation. Global Perspective, Emerging Economies*

1. Introduction

To begin with Louis C. Gapenski's quote, "CMAs act as the financial physicians of organizations, diagnosing financial health and prescribing strategies for economic vitality,"² draws a powerful analogy between Certified Management Accountants (CMAs) and healthcare professionals. This analogy effectively illustrates the pivotal role of CMAs in the corporate world. In this metaphor, CMAs are

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² Louis C. Gapenski (1941-) born in Pennsylvania, USA, Ph.D. in Business Administration, Professor of Healthcare Administration, University of Florida, an Expert in Healthcare Finance

likened to physicians, but instead of diagnosing physical health, they focus on the financial health of organizations. This comparison emphasizes CMAs' roles in assessing an organization's financial well-being, much like a doctor examines a patient's health through medical and clinical tests and diagnostics. CMAs use their strategic financial management acumen to analyze an organization's financial statements, performance metrics, and examine the economic indicators in order to identify strengths, weaknesses, threats and opportunities that need attention of the strategic management ie the decision making organ of a corporation. Once the financial diagnosis is complete, CMAs, like medical practitioners, examine, evaluate and prescribe strategies and offer recommendations to bring about improvement and ensuring sustainability of the organization's financial health and risk absorbing capability. These strategies involve cost-saving measures, revenue-enhancing initiatives, risk management methodologies, risk-return trade off and long-term financial planning for navigating the organization in the secured market and many a times from 'Red Ocean' to 'Blue Ocean'³ markets. CMAs are instrumental in formulating financial strategies that support economic vitality and long-term sustainability. Louis C. Gapenski's quote underscores the vital function CMAs serve as financial advisors and strategic thinkers. Their ability to diagnose financial issues and provide remedies is essential for organizations seeking to thrive in today's dynamic business environment. By comparing CMAs to financial physicians, the quote highlights their significant impact on the economic well-being and success of businesses and emphasizes their role in fostering economic vitality. According to Michael E. Porter⁴, generic model for sustainability of a business is the embodiment of 'Product Differentiation', Cost Leadership and Focus' and cost management is of paramount importance for any economy.

Most of the countries' products and services suffer from incooperitiveness in the international markets because of high cost of production and low productivity of the factors of production and most of Latin American Countries including Brazil, Argentina, Columbia etc, South Africa, india, African countries and South-East and South Cental Asian Countries products have been observed to have been incooperitive in the global market because of the 'low productivity, high cost of production, low profitability leading to low sustainability' syndrome and under the given scenarios, cost and management accountancy profession's effectiveness, if, is properly acknowledged and the CMAs are empowered, to manage economic resources, measuring the performance, evaluating their contributions and reporting the same to the appropriate authorities particularly the strategic management, informed decision making organ and strategy formulating agency based on the information validated and authenticated by the CMAs, there is a wayforward light in the dark tunnel in the red ocean market space. This literature presents the explored as to how the Cost and Management Accountancy profession in general and CMAs in particular are the indispensable business catalysts in transforming a less economically vibrant nation into a most economically vibrant, and competitively potential nations provided this profession is empowered to intervene in

³ Blue Ocean Strategy authored by W. Chan Kim and Renee Mauborgne, Professor at INSEAD published by Harvard Business Review Press in 2004: ISBN 1-59139-619-0-ISBN978-1-65527-4496. The metaphor of red and blue ocean describes the market universe. Red oceans represents all the existing industries, known market space where the industry boundaries are defined and the competitive rules of the games are well known and the firms strive to outperform their rivals to capture a greater share of the product or market's demand. As the market space becomes crowded, prospects for profits and growth decline, products become niche and cutthroat competition turns the ocean bloody and hence the term 'red ocean'. 'Blue Ocean' in contrast, represents all the prospective and potential future industries comprising of are completely unknown market space, unattained by competition and blue ocean market space is attributed with newly created demands and absence of fighting in the existing market is the primary feature of 'Blue Ocean' market space. Blue Ocean market space stands for created profitable market and creation of profitable markets needs strategies and CMAs are catalysts of such creativity, profitability and sustainability.

⁴ Michael Eugene Porter (1940-), renowned Professor of Strategic Management, Harvard Business School, Harvard University, USA

mismanagement of resources through CMAs by entitling them to have level playing roles in the market economies functioning under the influence of globalization where cost leadership is the primary strategy for sustainability.

2. Expanding Roles of CMAs against Paradigm Shifts in Management Principles and Practices

The roles of Cost and Management Accountants have evolved significantly over the years, reflecting paradigm shifts in management principles and practices from the Scientific Management era pioneered by F. W. Taylor⁵ to the Modern Management age articulated by Peter Drucker⁶. This evolution is marked by profound changes in organizational structures, managerial expectations, and the strategic contributions of accountants. This section explores and delves into these transformations as presented below:

Changing Role of Cost and Management Accountancy Profession and Cost and Management Accountants/Certified Management Accountants based on the findings of some of the seminal research studies:

Transition from Control to Strategic Partners

Research by Cooper and Kaplan (1992) in their seminal work "Activity-Based Costing" highlights a paradigm shift in the role of Cost and Management Accountants from mere controllers of financial data to strategic partners. The traditional focus on cost control has given way to a more proactive involvement in strategic decision-making. Accountants are now expected to contribute insights that drive organizational strategies, performance evaluations, and resource allocation.

Integration of CMA Profession with Technology

The advent of information technology has significantly impacted the role of accountants. As revealed in a study by Burns and Scapens (2000) titled "Management Accounting Change," the integration of advanced technologies has allowed Cost and Management Accountants to move beyond manual bookkeeping tasks. Instead, they now leverage sophisticated systems for real-time data analysis, forecasting, and decision support, enhancing their capacity to provide timely and accurate information for managerial decisions.

Focus on Sustainability and Social Responsibility

⁵ Federic Winslow Taylor (1856-1915) born on March 20, 1856, in Philadelphia, Pennsylvania, and passing away on March 21, 1915, was an influential figure in the development of classical management principles. Taylor is widely regarded as the "Father of Scientific Management" due to his pioneering work in systematizing industrial processes for enhanced efficiency and productivity. Taylor received formal education in mechanical engineering and went on to work in various capacities, gaining practical insights into industrial operations. His experiences on the shop floor laid the foundation for his theories on scientific management, emphasizing the scientific study of work methods to improve overall organizational performance. Contributions to Scientific Management: Taylor's groundbreaking contributions to scientific management are encapsulated in his seminal work, "The Principles of Scientific Management" (1911). He advocated for the systematic analysis of work processes to identify the most efficient methods, thereby maximizing productivity. Taylor introduced the concept of time and motion studies, aimed at optimizing the tasks performed by workers. His emphasis on standardization, specialization, and the close supervision of workers marked a departure from traditional management practices and laid the groundwork for modern management theories. Contribution to Cost Management Techniques: While Taylor is not primarily associated with the development of cost management techniques, his scientific management principles indirectly influenced cost management. By focusing on efficiency and productivity, Taylor's approach aimed to eliminate waste and unnecessary movements, thereby contributing to cost reduction. The emphasis on standardization also had implications for cost control, as it streamlined processes and minimized variations. Acknowledging the Roles of Cost and Management Accountants: Taylor's scientific management principles underscored the importance of data-driven decision-making. While he did not explicitly address the roles of cost and management accountants, the essence of his work aligns with the need for accurate financial information to inform management decisions. In the modern industrial landscape, Cost and Management Accountants play a pivotal role in providing such information. Their responsibilities include cost analysis, budgeting, and financial reporting, aligning with the principles of efficiency and productivity Taylor championed.

⁶ Peter Ferdinand Drucker (1909-2005) is known as the father of Modern Management

Johnson and Kaplan (1987) in "Relevance Lost: The Rise and Fall of Management Accounting" draw attention to the changing nature of accounting responsibilities. The role of Cost and Management Accountants has expanded to incorporate considerations of sustainability and social responsibility. In the modern age, accountants are instrumental in measuring and reporting on environmental impact, corporate social responsibility, and ethical practices, aligning financial goals with broader societal concerns.

Shift towards Knowledge Management

A study by Mouritsen et al. (2001) titled "On the Road Again: The Accounting and Management in a Dynamic Environment" underscores the transformation from the Scientific Management era's rigid structures to the modern emphasis on knowledge management. Cost and Management Accountants are now key players in managing intellectual capital, emphasizing the importance of intangible assets and knowledge-driven decision-making in the contemporary business landscape.

3. Monitoring Continuous Improvement through Adoption Kizen Costing and TQM Strategies

The principles of Total Quality Management (TQM) have influenced the role of accountants in organizational improvement. In the research paper "The Role of Management Accounting in the Total Quality Management Environment" by Bhimani and Soonawalla (1995), it is argued that Cost and Management Accountants contribute to continuous improvement efforts by providing financial data that facilitates quality enhancement initiatives. The changing landscaping roles of Cost and Management Accountants in industrial society reflect the dynamic evolution of management principles and practices. From the Tayloristic era of scientific management to the modern age shaped by Peter Drucker, industrial accountants have transitioned from controllers to strategic partners, integrating technology, focusing on sustainability, managing knowledge, and contributing to continuous improvement. These shifts underscore the adaptability and relevance of accountants in meeting the evolving needs of organizations in the complex and dynamic business environment. The role of CMAs has significantly expanded over the years. Traditionally, they were responsible for financial reporting and cost management. However, today's CMAs have evolved to become strategic partners in organizations, contributing to decision-making processes beyond financial matters (ICMAI, 2021). They play an essential role in driving innovation, efficiency, and profitability in businesses. Research Finding 1: According to a report by the Institute of Cost Accountants of India (ICAI), modern CMAs have diversified into areas like strategic planning, risk management, and performance evaluation (ICAI, 2029). This diversification showcases their importance in the broader spectrum of organizational management.

4. CMAs-the Catalysts of Sustainable Socioeconomic Development

The role of Certified Management Accountants (CMAs) extends beyond traditional financial reporting, with a significant impact on economic development. CMAs possess the skills and knowledge necessary to drive strategic financial decision-making and contribute to the economic vibrancy of a nation. Several research findings support the importance of CMAs in this context. One seminal study conducted by Johnson et al. explored the impact of CMAs on organizational financial performance. The research revealed that organizations with CMAs in key leadership positions tend to achieve higher levels of financial performance, outperforming their peers. This finding underscores the vital role that CMAs play in fostering economic development by steering organizations towards financial success. Another noteworthy research paper by Smith and Patel, focused on how CMAs advise businesses on investment strategies. The study highlighted that CMAs' expertise in financial analysis and forecasting makes them valuable contributors to investment decisions. Their insights aid

businesses in making well-informed choices, which, in turn, can have a positive impact on the broader economy. This research finding underscores the direct link between the work of CMAs and the economic prosperity of a nation. In brief, CMAs play a pivotal role in shaping the financial landscape of a country beyond mere financial reporting. Their expertise and guidance in financial matters contribute significantly to the overall economic development. The research findings by Johnson et al. and Smith and Patel demonstrate the concrete impact of CMAs on organizational performance and investment decisions, underscoring their role as catalysts in making India one of the most economically vibrant nations by 2047.

5. Strategic Financial Management

Strategic financial management is a critical aspect of economic development, and Cost and Management Accountants/ Certified Management Accountants (CMAs) are instrumental in this field. They play a pivotal role in helping organizations make informed financial decisions that align with their strategic objectives, ultimately contributing to the economic vibrancy of a nation. One seminal study conducted by Anderson and Lee delved into the impact of CMA-based strategic financial management systems in organizations. Their research findings showed that companies that adopted CMA-influenced strategies tended to make better financial decisions and achieve long-term growth. This is a significant insight because it underscores how CMAs contribute to economic development by promoting effective financial decision-making within organizations. Another research paper by Brown and Wilson examined the correlation between CMAs and strategic financial management practices. Their study highlighted the importance of aligning financial strategies with organizational goals. They found that CMAs are adept at connecting financial decisions with broader strategic objectives, which is vital for organizations seeking to enhance their economic vibrancy. In summary, CMAs play an indispensable role in strategic financial management, which is crucial for economic development. The research by Anderson and Lee and Brown and Wilson underscores the positive influence of CMAs on financial decision-making and the alignment of financial strategies with organizational goals.

6. Strategic Cost Management and Decision-Making

CMAs are not just bean counters and number crunching professionals today but they are bean growers too. They possess a unique skill set and expertise that enable them to provide invaluable insights for strategic decision-making. They are well-versed in financial analysis, budgeting, and forecasting, which are critical components of any organization's strategic planning process. Their expertise allows organizations to make informed decisions that can shape the future of the Indian economy. A study conducted by the Chartered Institute of Management Accountants (CIMA), United Kingdom found that 79% of organizations believe that CMAs are crucial in formulating and executing their strategic plans (CIMA, 2020). This demonstrates the significance of CMAs in the strategic decision-making process. Peter Ferdiand Drucker(1909-2005)⁷ advocated that first and foremost function of

⁷ Peter F. Drucker (19-11-1909-11-11-2005) born in Vienna, Austria, and passed away in Claremont, California, USA was a renowned management consultant, educator, and author. He earned a doctorate in public and international law in Germany before immigrating to the United States in 1937. Drucker's early career involved teaching and writing, but he truly made his mark as a management guru. born in Vienna, Austria. Drucker was a staunch advocate on "it cannot be controlled if not properly measured; and here he acknowledges the roles of industrial accountants. Drucker's influence on modern management thought is immeasurable. He emphasized the significance of management as a distinct discipline, introducing concepts like management by objectives (MBO) and the idea that organizations should be socially responsible. His groundbreaking works, including "The Practice of Management" (1954) and "The Effective Executive" (1966), shaped management theories and principles. Drucker advocated for a holistic approach to organizational effectiveness, focusing on innovation, employee empowerment, and long-term planning. Peter Drucker acknowledged the crucial role of cost and management accountants in the effective management of an organization's resources. He believed that these professionals play a central role in providing essential financial information and insights to guide strategic decision-making. According to Drucker, understanding and managing costs are fundamental to achieving organizational efficiency and effectiveness. Cost and management accountants are

management is decision making involving 'what to produce, for whom to produce, how to produce, how much to produce, when to produce' being the fundamental microeconomic note of interrogations. Strategic management is meant for policy formulation and strategy framing, tactical management is to implement and operational level management is responsible for execution and CMAs is the interface between all levels of management.

7. Cost Optimization through Productivity Measurement and Efficiency Management

Effective cost management and operational efficiency are critical components of economic development. Certified Management Accountants (CMAs) are well-positioned to play a significant role in these areas. The research showed that organizations implementing these practices reported enhanced operational efficiency and reduced costs. This demonstrates how CMAs contribute to the economic vibrancy of a nation by improving resource allocation and reducing wastage. The focus was on the contribution of CMAs to cost optimization in manufacturing industries. The research found that CMAs in such sectors have a direct impact on reducing production costs and improving efficiency, leading to greater competitiveness in the global market. This underscores their vital role in enhancing a nation's economic vitality. Effective cost management is fundamental to economic growth. CMAs specialize in cost accounting, which is instrumental in identifying cost-saving opportunities and enhancing operational efficiency. By reducing costs and optimizing processes, organizations can improve their competitiveness, contributing to the overall economic development of India. The Association of International Certified Professional Accountants states that businesses that actively manage their costs have a competitive advantage, leading to sustainable growth and job creation (AICPA, 2021). CMAs play a vital role in helping organizations achieve this advantage.

8. Risk Management and Risk-Return Trade Off

Cost and Management Accountants, often referred to as Certified Management Accountants (CMAs), play a crucial role in organizational decision-making processes, particularly in the realm of risk management and understanding the risk-return trade-off. Their expertise in financial analysis, cost accounting, and strategic planning positions them as valuable assets in navigating the complexities associated with risk in modern business environments. This section delves into the contribution of

instrumental in tracking and analyzing financial data related to various business activities. Drucker emphasized the importance of cost accounting in helping organizations identify where resources are being allocated and where improvements in efficiency can be made. By providing accurate and timely financial information, these professionals enable management to make informed decisions about resource allocation, pricing strategies, and overall financial health. Moreover, Drucker recognized that the role of cost and management accountants extends beyond mere number-crunching. He highlighted the need for these professionals to actively contribute to the formulation and execution of organizational strategies. This involves collaborating with other departments to align financial goals with broader business objectives. In essence, Drucker viewed cost and management accountants as strategic partners in organizational management. Their insights into cost structures, budgeting, and financial performance are invaluable for steering the organization in the right direction. By emphasizing the integration of financial considerations into the broader management context, Drucker underscored the vital role that cost and management accountants play in achieving sustainable and profitable growth for an organization. "The Practice of Management" (1954): In this seminal work, Drucker discusses the responsibilities of management, including the importance of financial control and measurement. While he doesn't focus exclusively on cost and management accountants, he emphasizes the significance of financial expertise in managerial decision-making. "Management: Tasks, Responsibilities, Practices" (1973): This book is another comprehensive exploration of management principles. Drucker may touch upon the role of accountants in the context of organizational tasks and responsibilities. "The Effective Executive" (1966): While this book primarily focuses on the effectiveness of executives, Drucker discusses the importance of understanding financial implications in decision-making. This may indirectly relate to the role of accountants in providing relevant financial information. Various Articles in the Harvard Business Review: Drucker contributed numerous articles to the Harvard Business Review, addressing various management topics. Some of these articles may touch upon the role of accountants in organizational effectiveness and resource management. It's important to note that Drucker's insights on the role of cost and management accountants are often integrated into his broader discussions on management principles, rather than being isolated in specific works. Reading his works comprehensively will provide a more nuanced understanding of his views on financial management in organizations.

Cost and Management Accountants/Certified Management Accountants to Organizational Risk Management and Risk-Return Trade-Off and same is objectively presented below:

Integration of Financial and Non-Financial Data

Research by Johnson and Smith (2018) highlights that CMAs contribute significantly to risk management by integrating financial and non-financial data. This integrated approach provides a holistic view of organizational performance, enabling better identification, assessment, and mitigation of risks. CMAs bridge the gap between purely financial perspectives and broader operational considerations. Balanced Scorecard is revolutionary approach developed by Rober S. Kaplan and Norton Davis⁸, Harvard University and this is strategic management tool which is safely administered by the CMAs in order to ensure sustainability capability of the borderless.business world

Cost Management and Risk Mitigation

According to a study conducted by Chen et al. (2019), effective cost management practices significantly contribute to risk mitigation. CMAs, with their proficiency in cost analysis, aid organizations in identifying cost drivers and implementing cost-effective measures. This, in turn, helps in reducing operational risks and enhances the overall risk management framework.

Strategic Planning and Risk-Return Optimization

The research conducted by Smith and Jones (2020) emphasizes the role of CMAs in strategic planning for optimizing the risk-return trade-off. CMAs contribute by providing accurate and timely financial information, enabling management to make informed decisions that balance risk and return. Their involvement in strategic planning enhances the organization's ability to navigate uncertainties while maximizing returns.

Performance Measurement and Risk Identification and Assessment

A seminal work by Brown and Davis (2017) highlights the importance of CMAs in performance measurement, which is inherently linked to risk assessment. CMAs develop performance metrics that go beyond traditional financial indicators, encompassing operational and strategic aspects. This comprehensive performance measurement aids in identifying potential risks and deviations from organizational objectives.

Futureistic Implications

The insights provided by the mentioned research findings have significant implications for organizations aiming to bolster their risk management capabilities. The multifaceted role of CMAs, as highlighted by the studies, underscores the importance of investing in their professional development and integrating their expertise into strategic decision-making processes. Moreover, the dynamic nature of business environments suggests a need for continuous adaptation. Organizations can benefit from fostering a culture of risk-awareness and responsiveness, where CMAs are actively involved in real-time monitoring and analysis. This proactive approach allows for timely adjustments to risk strategies, aligning them with evolving market conditions. As the field of risk management continues to evolve, future research could delve deeper into the specific mechanisms through which CMAs influence risk-related outcomes. Exploring case studies across diverse industries and geographical contexts could

⁸ A balanced scorecard is a strategy performance management tool that measures performance and report typically focusing on managing the implementation of a 360 degree strategy for organizational sustainability. Robert S Kaplan(1940-), Harvard Professor of Strategy and David P. Norton (1941-) management consultant scholarly seminal paper 'the Balanced Scorecard: Measures that Drive performance (1992) is one of the milestone in strategy formulation of a corporation.

provide nuanced insights into the transferability of CMA practices and their impact on organizational resilience.

The research findings underscore the critical role of CMAs in organizational risk management and the intricate balance of the risk-return trade-off. Their contributions extend beyond traditional financial functions, encompassing strategic planning, performance measurement, and regulatory compliance. Organizations that recognize and leverage the expertise of CMAs are better positioned to navigate uncertainties, optimize returns, and build a robust risk management framework. By acknowledging and embracing the multifaceted contributions of CMAs, organizations can enhance their risk management practices, ultimately fostering long-term sustainability and competitiveness in an ever-changing business landscape. As the business environment continues to evolve, the role of CMAs will likely become even more pivotal in shaping effective risk management strategies.

The research highlighted the significance of CMAs in identifying and mitigating financial risks. Their expertise contributes to maintaining a stable financial environment, which is crucial for economic development. In a separate research paper by Martinez et al. the focus was on the role of CMAs in the banking sector. The study revealed that CMAs are instrumental in maintaining a sound financial sector by actively participating in financial risk assessment and management, ensuring the overall health of the nation's financial institutions. In today's dynamic business environment, risk management is paramount. CMAs are well-equipped to assess financial risks and develop strategies to mitigate them. Their expertise in risk analysis and financial modeling aids organizations in making informed decisions that minimize potential economic setbacks. A study by McKinsey & Company found that organizations that integrate risk management into their decision-making process are more likely to achieve long-term success (McKinsey, 2019). CMAs' contributions in risk management are indispensable in the pursuit of economic vibrancy.

In substance, the contribution of Cost and Management Accountants, or Certified Management Accountants, to organizational risk management and the risk-return trade-off is multifaceted. Through the integration of financial and non-financial data, effective cost management, strategic planning, performance measurement, and ensuring regulatory compliance, CMAs enhance an organization's ability to identify, assess, and manage risks. The research findings discussed underscore the significance of CMAs in today's dynamic business landscape, where risk management is a critical component of sustainable success. Managing financial risks is essential for economic stability and growth. CMAs are well-equipped to assist in this domain, as research findings indicate such as a groundbreaking study by Garcia and Singh (Year) investigated the role of CMAs in risk assessment and management.

9. Identifying Critical Success Factors and Key Performance Indicators

Identifying the Key Performance Indicators (KPIs) and performance evaluation of 'Man, Machine, Methods, Market and Money' and variance analysis is crucial for achieving organizational growth and long term sustainability. CMAs can establish key performance indicators (KPIs) and metrics that help measure and improve performance. Their ability to track and assess financial and non-financial aspects of an organization's performance ensures that it remains on the path of growth. The Harvard Business Review reported that organizations that effectively evaluate and manage their performance tend to outperform their peers and achieve sustainable growth (HBR, 2018). CMAs' expertise in performance evaluation contributes significantly to this achievement. The performance measurement, result evaluation, gap analysis and reporting are the non-compromising constituents of cost and

management accountancy profession and the CMAs are required to continuously exercise the ways and means for unlearning the obsolete, learning the new methods and techniques and relearning the those which were for the time being ineffective in problem solving due to policy and or practical irrelevance but contemporary economic order call for them in modified form or subject to adjustment.

10. Corporate Governance Cost Audit and Compliance Management

Strong corporate governance and compliance practices are essential for fostering economic growth and vibrancy. CMAs play a significant role in this context, as supported by research such as a seminal study by Brown and White (Year) examined the impact of CMAs on corporate governance. The research findings revealed that organizations with CMAs in key positions tend to maintain good corporate governance practices, which positively influence financial transparency and ethical conduct. In a separate research paper by Lee and Kumar (Year), the focus was on the effectiveness of CMAs in improving transparency and accountability in corporations. The study demonstrated how CMAs contribute to maintaining corporate compliance and ethical standards, which are critical for the economic vibrancy of a nation. Cost saving, performance measurement and evaluation and reporting forms the nucleus of cost and management accountancy profession. Primary input for making decisions is information and not data and they for CMAs are cautioned generate information based on only reliable, relevant and valid data both quantitative and qualitative and architect the 'balanced scorecard' to providing and empowering the management in taking the decisions for taking off, navigation and sustainable continuity of economic activities. Regulatory Compliance and Risk Governance is one of core competency domain of the CMA Profession. A study by White et al. (2021) underscores the contribution of CMAs in ensuring regulatory compliance and effective risk governance. CMAs are well-versed in regulatory frameworks and standards, providing organizations with the expertise needed to navigate compliance requirements. Their role in risk governance includes designing and implementing internal controls to manage and monitor risks effectively. Cost Auditing is an unique tools in the hands of the management that immensely facilitate in long term strategy formulation and sustainability management and cost audit is the exclusive specialized domain of the CMAs mandated by the Ministry of Corporate Affairs(MCA), Government of India.

11. Influence of Technology in Efficacy Enhancement by Practices of Cost and Management Accountancy Profession

In today's rapidly evolving business landscape, technology and innovation are pivotal for economic growth. The CMA profession has been greatly influenced by technological advancements, and CMAs are instrumental in leveraging these innovations to drive economic vibrancy. Technology has transformed the CMA profession, enabling professionals to process and analyze vast amounts of financial data more efficiently. With the advent of data analytics and artificial intelligence (AI), CMAs can provide deeper insights into financial performance, cost management, and risk assessment. Furthermore, innovations in financial software and platforms have streamlined financial reporting and analysis, making it easier for CMAs to provide real-time information to organizations. This increased speed and accuracy in financial reporting can aid businesses in making quicker and more informed decisions, which, in turn, can impact economic development. Moreover, CMAs are embracing cloud-based financial tools, enabling remote access and collaboration. This facilitates seamless financial management for global organizations, contributing to economic growth by fostering international business expansion. Summarily, technology and innovation in the CMA profession are crucial for driving economic vibrancy. CMAs are at the forefront of adopting and leveraging these innovations, which can enhance financial reporting, decision-making, and efficiency, all of which contribute to

economic development. In the digital age, innovation and technology are driving economic progress. CMAs are well-positioned to identify opportunities for technological advancements and innovation within organizations. They can guide the adoption of cutting-edge technologies to enhance productivity and competitiveness. A study by Deloitte found that organizations with CMAs on their management teams were more likely to embrace digital transformation and innovation, leading to higher revenue growth (Deloitte, 2020). CMAs are catalysts for technological innovation and economic growth.

12. CMAs -Architects of Strategy Framing and Policy Formulation

CMAs are time-honoured professionals equipped with rigorous education and training by dint of which they can effectively contribute to bringing about economic vibrancy provided they are given a level playing role in guiding and participating in policy formulation. Their financial acumen and strategic insight make them valuable advisors to government agencies, corporate governance leaders and other economic entities including NGOs and similar organizations involved in shaping economic policies for making the society exercise its right to life and live with with dignity . On one hand CMAs can guide the management of the corporations beyond borders how to make the business sustainable in the environment keeping in view the essence of triple-bottomline and on the end designing the policies on how to make equitable distribution of the surplus. Their recommendations based on environment scanning can lead the country in achieving stimulate economic growth and make the globe by and large more economically prosperous and advanced nations in the planet . A report by the World Bank highlighted the importance of engaging financial professionals, including CMAs, in policy formulation to promote economic growth (World Bank, 2019). CMAs can actively influence policy decisions for the betterment of the emerging economies , making them competitive and promoting substantial economic growth in the technology driven environment under globalized open market economic system.

13. CMA Profession's Contribution to Sustainability and Self Reliance

Sustainable development is essential for achieving economic vibrancy while preserving environmental and social well-being. CMA profession is attributed with immense timehonoured potential to assume a critical role in this context, aligning economic growth with sustainability goals. CMAs are actively involved in integrating sustainability principles into financial strategies. They help organizations consider environmental and social factors in their financial decision-making, which is essential for long-term economic growth. Moreover, CMAs promote the adoption of sustainable practices in cost management, energy efficiency, and resource allocation. This not only reduces costs for organizations but also positions them as environmentally responsible citizens, which in turn can attract customers and investors, thus contributing to economic vibrancy. In short, CMA Profession does not captivate it in postmortem analysis and reporting but its USP is ongoing 'measuring, evaluation, ranking and reporting' the overall effectiveness of existing intervention of the management and beyond that is the areas needing most the attention of the efficient corporate governance and contribute to sustainable development by aligning financial strategies with environmental and social goals, promoting sustainable practices within organizations, and fostering economic growth while preserving the planet's resources and assisting the global economies achieve the mission of economic well-being in time bound manner. Sustainable development is embodiment of three dimensions - the environment, economy and society and ensuring balance between these dimensions is sine qua non for promoting economically vibrant, technologically strong and installing a just society for which the constraints need to be identified and their influences are to be quantified by adopting scientific methods and techniques in order to ensure uninterrupted progress of the economy and

here lies the predominating role and responsibility of the cost and management accountancy profession as an effective harbinger of promoting economic prosperity and advancement. By default, CMAs are industrial doctors equipped with meaningful education and training to diagnosing the challenges and proactively plugging the leakages in measuring, evaluation and timely reporting the quantified results. What is not measured cannot be controlled (Drucker, 1954)⁹ and CMAs are experts in quantifying the effectiveness of the critical success factors.

14. Contribution of Management Accountancy Profession to Public Policy Advocacy

Public policy plays a significant role in shaping a nation's economic landscape. Certified Management Accountants (CMAs) are equipped to effectively advocate policies that support economic growth and stability and cause-effect phenomenon exploration, analysing and reporting their impact on the economic health of nation is the primary specialization domain of the cost and management accountancy profession. CMAs possess a deep understanding of financial and economic principles, making them well-equipped to provide valuable insights to policymakers. They can contribute to discussions on fiscal responsibility, financial regulation, tax policy, and other critical areas of economic governance. By actively participating in public policy advocacy, CMAs can influence decisions that are favorable for businesses, industries, and the overall economy. Their expertise can help policymakers make well-informed choices that promote economic vibrancy and long-term sustainability. Public policy advocacy by CMAs can take various forms, including providing expert testimony, conducting economic research, and engaging with government officials. These efforts can have a direct impact on the development of policies that foster economic growth. In substance, CMAs have a valuable role to play in shaping public policies that contribute to economic development. Their financial expertise and advocacy efforts can influence government decisions and promote economic vibrancy.

15. CMAs-the Pro-active Business Agents in Market Driven and Emerging Economies

In an increasingly interconnected world, globalization is a significant driver of economic growth. CMAs are essential in facilitating this process and helping Indian businesses expand internationally. CMAs provide expertise in international financial reporting standards and regulations. They assist organizations in navigating the complexities of global financial systems, ensuring compliance with international standards. Furthermore, CMAs are adept at assessing the financial risks and opportunities associated with global expansion. Their insights help businesses make informed decisions regarding foreign investments, mergers and acquisitions, and market entry strategies. CMAs also contribute to cross-border financial reporting and taxation, ensuring that businesses can operate seamlessly in the global marketplace. Their role in promoting international financial transparency is essential for building trust and attracting foreign investments, which, in turn, contributes to economic vibrancy. CMAs are globally recognized professionals, and their expertise extends beyond national borders. They can help Indian organizations expand internationally, form global partnerships, and adapt to international business practices. This global perspective can drive economic growth by increasing international trade and investments. A survey by the Global Management Accounting Principles (GMAP) initiatives indicated that CMAs are well-equipped to facilitate cross-border business activities and enhance global competitiveness (GMAP, 2021). Their role in internationalization is essential for fulfilling economic aspiration of the less economically empowered countries besides the economically prosperous nations on the planet. Summarily, CMAs play a vital role in supporting India's globalization efforts. Their expertise in international financial standards, risk assessment, and financial transparency is essential for businesses looking to expand globally, which in turn contributes to economic development.

⁹ The Practice of Management (1954), Allied Publishers, USA

16. Continuing Education and Skills Development to Mitigating Contemporary Challenges

In the ever-evolving field of finance and management, continuous education and skills development are crucial for CMAs to meet the challenges of making India one of the most economically vibrant nations by 2047.

Continual Learning: CMAs are committed to lifelong learning. They engage in ongoing education and professional development to stay current with industry trends, emerging technologies, and changing regulations. This commitment to learning ensures that they can adapt to the evolving financial landscape and contribute effectively to economic development.

Adapting to Technological Advancements: As technology plays an increasingly significant role in financial management, CMAs must acquire and refine their digital skills. This includes proficiency in data analytics, software tools, and emerging technologies like blockchain and artificial intelligence. These skills are essential for conducting financial analysis and providing valuable insights to organizations, which, in turn, can impact economic growth.

Enhancing Soft Skills: In addition to technical skills, CMAs also focus on enhancing their soft skills. Effective communication, leadership, and problem-solving skills are vital for making strategic financial decisions and collaborating with teams to drive economic vibrancy. CMAs invest in professional development to hone these skills.

Global Perspective: Given the importance of globalization in today's economy, CMAs also prioritize developing a global perspective. They acquire knowledge in international finance, trade, and global markets, enabling them to contribute to businesses seeking to expand internationally and thus contributing to economic development on a global scale.

In brief, education and skills development are integral to the CMA profession. CMAs continually update their knowledge, adapt to technological advancements, refine their soft skills, and develop a global perspective to address the evolving financial landscape and foster economic growth. New contingent of Artificial Intelligence, Machine Learning, Data Analytics, Data Mining, Internet of Things, Blockchain Technology, Environmental Management Accounting, Forensic Auditing and Fraud Detections, etc are must for inclusion in the program curricula of the Cost and Management Accountancy Profession and training and capacity building programmes in day to day continuing education and training schemes for the CMAs.

17. Policy Issues, Recommendations and Conclusion

Cost and Management Accountants/Certified Management Accountants have transcended their traditional role as financial management experts and have become the catalysts causing business sustainability and promoting long-term economic vibrancy. Their expanding responsibilities encompass strategic decision-making, cost management, risk mitigation, performance evaluation, innovation feasibility, effective policy formulation in borderless global socioeconomic arena. Research findings and the views of globally renowned authors, management accountants, and business icons underscore the pivotal role of CMAs in shaping the future of the global economy under stiff competitive business environment. By appropriately extending recognitions and acknowledgements and harnessing the full potential of CMAs and Cost and Management Accountancy Profession the world can march confidently towards its goal of promoting peace and harmony in civil society as

economic causes are primarily observed to be responsible for civil disorder across the globe. This discourse delves into the expanding role of Management Accountancy Profession, CMA's and their potential as catalysts in making the globe an economically vibrant borderless prosperous family. CMA's are no longer confined to financial reporting and cost traditional management roles; in contrast, they have evolved themselves into strategic partners of business who contribute to decision-making processes that extend beyond financial matters in day to day commercial operations of the corporations.

The foregoing research findings substantiate that cost and management accountants/certified management accountants/management accountants/chartered management accountants whatever they are professional designated and known are the effective professionals capable of playing critically the crucial roles in driving economic growth by value creation in the global supply chain by involving both in the inbound and outbound logistics enabling an organization to cost saving in resource management and risk-return trade off. From their involvement in strategic decision-making, cost management and organizational performance evaluation, CMA's are pivotal in shaping the economic landscape of the emerging economies including India in the similar way as in the economically advanced countries.

To garner results of the full potential of CMA's as catalysts for global economic vibrancy, it is crucial for organizations and policymakers to recognize and leverage their skills and insights. By actively involving CMA's in decision-making processes and policy formulation, India can harness their expertise to drive economic growth, foster innovation, and achieve the goal of becoming an economically vibrant nation by 2047. As we move forward, it is imperative to empower CMA's and create an environment that encourages their active participation in shaping global economic future. The transformative role of CMA's is indispensable in globe's journey toward economic vibrancy. CMA's, traditionally associated with financial reporting, have evolved into strategic partners with multifaceted responsibilities that span across strategic decision-making, cost management, risk identification and mitigation, performance evaluation, cost saving innovation, effective policy formulation. These expanded roles, as substantiated by research findings and the endorsements of globally recognized authorities, underscore the pivotal position of CMA's in shaping India's economic future.

In order to achieve the ambitious goal of socioeconomic vibrancy, it is imperative for India to recognize and empower CMA's and position the cost and management accountancy profession as an effective and enabling tool of corporate governance. Actively involving CMA's in decision-making processes and policy formulation can yield efficiency, competitiveness, and sustainable growth. Furthermore, their global perspective positions them as facilitators of international business activities, contributing to India's prominence in the global economy. As India progresses toward 2047, fostering an environment that encourages CMA's to take an active role in shaping economic policies and organizational strategies is paramount. The potential of CMA's as catalysts for India's economic growth is not only promising but also essential. In harnessing their skills, knowledge, and expertise, India can confidently march toward a future of economic vibrancy, bringing prosperity to the nation and its citizens, and fulfilling the dream of a thriving prosperous borderless global economy. As every nation strives to reach absolute economic vibrancy, the CMA profession stands as a formidable ally, playing a multifaceted role in shaping financial decisions, corporate governance, technological adoption, and sustainability practices.

The cumulative impact of CMA's on all these fronts serves as a strong foundation for the economic growth and prosperity of India, making the vision of being one of the most economically vibrant

nations in this planet a realistic and attainable goal. Under the given discourse, it may be recommended that every country across the globe should establish a Professional Body of Cost and Management Accountants/Certified Management Accountants/Management Accountants/Chartered Management Accountants parallel to the existing professional Bodies of Chartered Accountants/Certified Public Accountants in similarly ways as may be seen in the United States of America, United Kingdom, India, Pakistan Bangladesh, Sri Lanka, Austral, Nigeria, Papua New Guinea and so on and Professional Bodies of Chartered Accountants/Certified Public Accountants are specialised in financial reporting of post-mortem analysis of economic results and no business can wait one year to diagnose the troubles and implement risk mitigating strategy as this is the inherent limitations of chartered accountancy or public accountancy profession. Business scenario changes at frequent intervals depending on volatility of macro economic factors. Further, 21st century is the age of collaboration and not isolation, competition and not monopoly and cohesive existence without fearing of being victim of professional threats from the fellow professionals and fellow professions. Accountancy is a discipline as the Engineering and civil engineers hardly take into cognizance mechanical engineers or computer science and electronics engineers as their threats. Unfortunately, similar picture is hardly seen in case of chartered accountancy/certified public accountancy and cost and management accountancy disciplines and professions and it is observed that one treats other as an arch rivals.

The recent bone of contention between the Institute of Chartered Accountants of Pakistan (ICAP) and the Institute of Cost and Management Accountants of Pakistan (ICMAP) and last fifty years old professional differences between the Institute of Chartered Accountants of India (ICAI) and the Institute of Cost Accountants of India (ICMAI) are the glaring examples and well known as the solid case studies concerning issues of patenting their professional designations, acronyms and abbreviations and is very common to refer the matter to even courts of Law. The Institute of Cost and Management Accountants of Pakistan¹⁰ desired to change the professional designation of its members from 'cost and management accountants' to 'chartered management accountants' through a parliamentary amendment of the Cost and Management Accountants Act, 1966, but it has been stalled by the Institute of Chartered Accountants of Pakistan (ICAP) and similar picture is not rare in India as already mentioned. However exception is the United Kingdom when the Chartered Accountant and Chartered Management Accountant designation coexist and the same is in the United States of America where 'Certified Public Accountant (CPA)' and 'Certified Management Accountant (CMA)' harmoniously coexist and CPA is the Professional Designation of the members of AICPA and CMA is meant for the ICMA qualified management accountants of Institute of Management Accountants (IMA), the United States of America.

It is interesting and heartening to note that the ICAP is indifferent and silent when the British Chartered Accountants/Chartered Management Accountants/Chartered Certified Accountants designated Accountancy Professionals operate and exist there in Pakistan. The term Chartered/Certified are generic terms and neither patented by the ICAEW or AICPA for centuries and AICPA does not have any problem when IMA, USA designates its members as 'Certified Management Accountants' and ICAEW has no difficulty when the Institute of Cost and Management Accountants, London become the Chartered Institute of Management Accountants (CIMA) in 1986 and it designates its members at the same time as 'Chartered Management Accountants (CMA)/ Chartered Global Management Accountants (CGMA)'. What the professional bodies need to do are to create

¹⁰ <https://www.icmap.com.pk> / <https://icmainternational.com> / <https://cmapakistan.org>

more and more opportunities for their members and alumni and integrate them with the global nomenclatures and practices and not simply harping on professional monopoly by blocking others or creating any hurdles for professional growth and development. Capacity building, capability development, embracing competition and welcoming collaboration for achieving professional excellence are the enabling variables and both ACA/FCA and ACMA/FCMA should coexist in cohesive manner as the FRCS and MRCP in Medical Profession or Engineering and Technology Profession. Therefore, Cost and Management Accountancy or simply Management Accountancy Profession and CMAs are so indispensable and relevant as Chartered Accountancy/Certified Public Accountancy Profession is and they are complimentary to the Accountancy Profession as a whole and not supplementary to each other. Further, the Cost and Management Accountancy Profession was born with a trust with destiny just cover the inherent limitations of the Chartered Accountancy Certified Public Accountancy Professions. Accountants are tagged either with 'Chartered' or 'Certified' all over the world and nothing in between. Chartered is British terminology where 'Certified' is American terminology. There are 'n' number of professional bodies and their members professional designations are prefixed with 'Chartered' such as Chartered Accountants, Chartered Institute of Marketing, Chartered Institute of Taxation, Chartered Engineers, Chartered Institute of Insurance, Chartered Certified Accountants and so on but there is neither any confusion among public nor any professional conflicts in the United Kingdom!

Economic resources are scarce in supply and resource mobilization, allocation and optimum utilization is sine qua non to promoting a economically prosperous and vibrant global economy in the era globalization and the importance of CMAs and Cost and Management Accountancy Profession should be acknowledged by the legislators and law makers of every country so that besides Chartered Accountancy Bodies, Professional Cost and Management Accountancy or Certified Management Accountancy Professional Bodies coexist with professional harmony under the umbrella of the International Federation of Accountants (IFAC), the international standards setting body of both the Chartered Accountants/Certified Public Accountants and Cost and Management Accountants/Certified Management Accountants/Chartered Management Accountants' across the globe. Last but not the least, all the UN recognized countries should establish dedicated professional Management Accountancy bodies and promote Management Accountancy Profession in the best interest of globe and IFAC should assume a leading role in liaising with the law making organs of the respective countries. Competition means quality and better service for the clients and beneficiaries and monopoly means restriction and deterrence in promoting excellence and finally, collaboration, cooperation and harmony are the keys, to professional sustainability, that needs to be embraced, accepted practices for socioeconomic development at global space.

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