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Research Article

Exploring Barriers to the Adoption of Competency Assurance Management Systems (CAMS) and Organizational Development (OD) Initiatives in Batangas-Based Industries

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ABSTRACT

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This study, titled "Exploring Barriers to the Adoption of Competency Assurance Management Systems (CAMS) and Organizational Development (OD) Initiatives in Batangas-Based Industries," examines the barriers to implementing a Competency Assurance Management System (CAMS) in Batangas-based industries, where the (CAMS) system has not yet been introduced here in the Philippines. The research aims to identify challenges and propose solutions for successful CAMS adoption, especially in light of the 2023 World Economic Forum's "Future of Jobs" report, which predicts that 80% of companies in the Philippines will face a shortage of skilled talent by 2027. This highlights the urgent need for workforce development strategies, such as upskilling and reskilling, to address the anticipated skills gap.

Key barriers include resistance to change, limited awareness, financial constraints, and cultural misalignment. By applying qualitative methods and integrating ATLAS.ti and NVivo software, the study effectively extracts themes and Organizational Development (OD) initiatives. The findings emphasize the importance of clear goal-setting, mission and vision alignment, and role definition through frameworks like the RACI matrix.

By combining Organizational Development (OD) Initiatives with well-established change management models, such as Lewin's Change Model, McKinsey's 7S Framework, ADKAR, and Kotter's 8-Step Model, the study provides a structured approach to overcoming resistance and aligning resources for successful CAMS implementation.

The findings indicate that CAMS can enhance workforce development, retention, and productivity. Organizations can leverage CAMS for sustainable growth, while senior executives and HR departments can align it with business objectives and foster a competency-driven culture. Employees stand to benefit from career growth and skills alignment with industry standards. The study advocates for government support in workforce development policies, focusing on upskilling and reskilling initiatives to address the skills shortage.

This research contributes to the ongoing discourse on workforce development in the Philippines, demonstrating how CAMS can be a key tool in addressing the skills gap and ensuring long-term organizational success and competitiveness.

Keywords: Competency Assurance Management System (CAMS), Workforce Development, Skills Gap, Organizational Development (OD), Change Management Models

INTRODUCTION

The manufacturing industry in Batangas, Philippines, is a vital driver of economic growth, contributing 3.1% to the national GDP. However, its financial performance has significantly declined, with growth rates dropping from 12.5% in 2021 to 4.9% in 2023. This decline highlights the urgent need for strategic solutions, particularly in the manufacturing sector, which recorded minimal growth of 1.2% in 2023. Globally, the World Economic Forum (WEF) projects that 44% of workers' skills will change by 2027, emphasizing the importance of upskilling and reskilling to meet the demands of evolving technologies and sustainability challenges.

The Philippine government has introduced various initiatives to address workforce challenges and improve competencies. Republic Act No. 12063, known as the Enterprise-Based Education and Training (EBET) Framework

Act, was enacted in 2024 to bridge job-skill mismatches through enterprise-based training, competency assessments, and standardized curricula. This program, managed by TESDA, aligns with the Competency Assurance Management System (CAMS) to prepare a skilled and adaptable workforce for the country's dynamic industries.

Other efforts include the DSWD's Competency-Based Learning and Development Policy, which addresses skill gaps and enhances employee effectiveness. The Civil Service Commission (CSC) promotes competency modeling to resolve organizational challenges, while the Commission on Higher Education (CHED) has shifted to competency-based learning standards through Outcomes-Based Education to prepare graduates for the changing labor market. Additionally, the ASEAN Human Resources Development Report (2021) emphasizes partnerships between schools, training centers, and businesses to ensure that workers meet industry needs.

CAMS offers a structured approach to workforce development, benefiting various stakeholders. Human resources departments gain tools to manage challenges and foster a competency-driven culture. Employees enjoy better career development and job security, while governments can introduce policies to institutionalize CAMS training. Academic institutions can also integrate CAMS findings into their curricula and research, contributing to workforce development knowledge.

Key concepts like change management, cultural resistance, and resource constraints are critical to understanding CAMS implementation. Anchoring to change management models can help organizations align employee competencies with industry standards, enhancing competitiveness and sustainability.

In Batangas, CAMS may address workforce challenges like high turnover rates and skills gaps while preparing industries to meet global trends. By adopting competency-based approaches and leveraging government reforms, the manufacturing sector can build a resilient, skilled workforce and secure sustainable growth in today's dynamic economic environment. This study explores barriers to CAMS adoption and offers practical recommendations to support workforce development in Batangas.

OBJECTIVES

The study aims to identify barriers to implementing CAMSin selected batangas industries. It seeks to recommend solutions to overcome these challenges and create action plans to support cams adoption. This research addresses the following questions:

- 1) What organizational barriers and challenges hinder the implementation of a competency assurance management system (cams) in selected batangas-based industries?
- 2) What organizational development (od) initiatives can effectively address the barriers to adopting competency development initiatives in these industries?
- 3) What practical action plan can be formulated to implement the proposed odis and facilitate the successful adoption of cams in batangas-based industries?

LITERATURE REVIEW

This chapter discusses various theories and models that help manage organizational change and implement the Competency Assurance Management System (CAMS). These models focus on creating a clear vision, allocating resources, and ensuring a smooth transformation process. They aim to overcome barriers, address cultural issues, and close gaps in awareness, which are key to successful CAMS implementation in Batangas-based organizations.

Kurt Lewin's Three-Step Approach to Planned Change is an important model for managing transitions, involving stages of Unfreezing, Changing, and Freezing. The ADKAR model, which stands for Awareness, Desire, Knowledge, Ability, and Reinforcement, helps manage change at both individual and organizational levels. The Resource-Based Theory emphasizes using internal resources to maintain a competitive advantage. The McKinsey 7S Model highlights the need to align seven factors (strategy, structure, systems, staff, skills, style, and shared values) for organizational success. Kotter's Eight-Step Process for Change emphasizes leadership, cultural alignment, and adaptability. Locke and Latham's Goal Setting Theory shows that clear goals improve employee motivation and commitment, crucial for CAMS adoption.

Studies show that businesses recognize the value of talent development, training, and reskilling. However, many companies are still hesitant to implement CAMS due to factors like cost, lack of approval, and limited resources. Research by Gladka et al. (2021) suggests that career development and work-life balance reduce employee turnover.

Tubil et al. (2021) highlight that systematic approaches like CAMSCA and AMSCAF improve asset management, while studies by Krishnan & Islam (2019) stress the importance of talent management for profitability.

Competency Management Systems (CMS) are vital for operational excellence, as noted by TDSI (2016), and help ensure safety and performance, especially in high-risk environments (Sakhardande, 2012). However, challenges

exist in defining competencies and aligning them with developmental methods, as mentioned by Haase (2007) and Méhaut et al. (2008).

In the Philippine context, government investments in education and reforms aim to enhance workforce competencies. The Enterprise-Based Education and Training (EBET) Framework Act (RA12063), which promotes collaboration between the private sector and vocational education, aligns with CAMS by developing skilled workers for the industry. The ASEAN-Philippines Country Report (2021) emphasizes the importance of continuous skill development and collaboration between education and businesses to ensure workforce readiness. Despite the government's efforts, the challenges in implementing competency-based systems, such as resource limitations and aligning competencies with strategic goals, remain.

The synthesis of the literature shows that while competency models offer benefits, they face significant barriers, including the need for consistent training, technological evolution, and stakeholder engagement. Effective implementation of CAMS requires overcoming these obstacles to ensure alignment between individual capabilities and organizational goals.

METHODS

The research focuses on the manufacturing industry in Batangas, Philippines, which faces challenges driven by automation, digitalization, and sustainability efforts. According to the World Economic Forum (WEF), upskilling and reskilling workers are critical to addressing talent shortages and technological shifts. The Competency Assurance Management System (CAMS) is presented as a potential solution to help companies develop and retain the necessary skills in their workforce.

The Input involved gathering industry executives' insights on CAMS adoption barriers through interviews and awareness sessions. The Process used thematic and content analysis to identify challenges and develop organizational development initiatives. The Output was a practical action plan to support CAMS implementation and ensure long-term sustainability in Batangas industries.

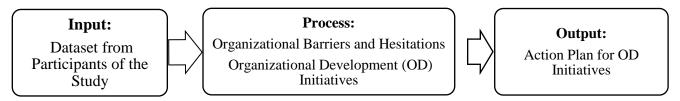


Fig.1 Research Paradigm

A qualitative approach was employed to explore the barriers to implementing CAMS in manufacturing companies in Batangas. Thematic analysis and qualitative content analysis were used, utilizing tools like ATLAS.ti and NVivo for systematic data examination. The study involved seven senior executives from manufacturing companies in Batangas, selected based on their extensive experience and roles in Human Resources, Operations, Maintenance, and Safety. These companies are medium to large-sized, each with at least 250 employees, ensuring they have the resources to adopt CAMS.

Participant's Code
Position / Industry / Years of Experience

P1 T&D Manager / Petrochemical / 28 Y

P2 HR Professional / Chemical Industry / 31 Y

P3 T & D Consultant / Petrochemical / 32 Y

Table 1. Participants of the Study

P4	Section Head, Engineering & Construction / 26 Y
P ₅	HR Manager / Manufacturing & Services / not shared
Р6	HR Manager / Power Generation / not shared
P7	Plant Manager / Chemical & Manufacturing / 31 Y

To gather data, individual interviews were conducted through various methods, including face-to-face, Zoom, phone calls, and emails (for validation only). Participants shared their experiences with competency management and discussed the challenges their organizations face regarding CAMS adoption and leadership roles in the process The data collection process began with obtaining the necessary permissions. Pre-interview sessions were held to introduce the study's objectives and CAMS. The interviews explored the participants' views on competency management, CAMS implementation, and workforce challenges, concluding with a final exchange of insights.

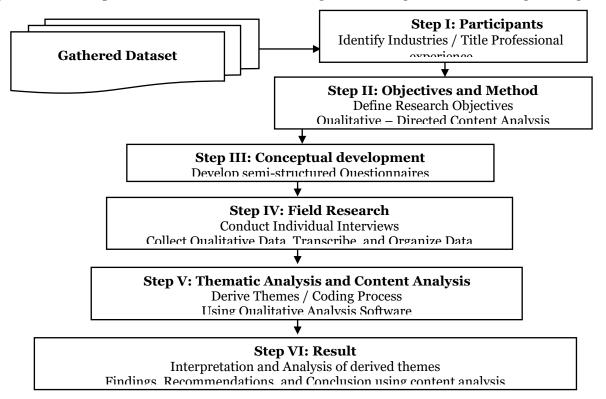


Figure 2. Research Framework

Data collected from the interviews were transcribed and analyzed using ATLAS.ti and NVivo. Key themes and patterns were identified through systematic coding to ensure the findings were accurate and consistent. The gathered dataset was processed using both ATLAS.ti and NVivo. ATLAS.ti derived 12 themes, while NVivo produced 8 themes. These themes were analyzed by comparing and contrasting. A co-occurrence analysis was also conducted. These complex processes were undertaken to increase the validity of the output. Ultimately, seven themes were derived, and the full coding process can be found in the appendices.

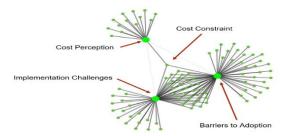


Fig. 3. Network Diagram (Atlas.ti)

Ethical considerations were prioritized throughout the study. Participants' consent was obtained, and their privacy and confidentiality were maintained. All data were anonymized, and participants were treated with respect. The research adhered to relevant data protection laws and upheld transparency.

RESULTS

This chapter presents the qualitative analysis and interpretation of data. Phase 1 focuses on thematic analysis using ATLAS.ti and NVivo software. ATLAS.ti identified 12 themes, while NVivo highlighted 8 themes. After refining the analysis, 7 key themes emerged, all revolving around the barriers and hesitations in adopting the Competency Assurance Management System (CAMS) in selected industries in Batangas. The complete coding process for both ATLAS.ti and NVivo is detailed in the appendices of this study.

Phase 2 involves content analysis to develop organizational development initiatives (ODIs) targeting the identified barriers. Phase 3 outlines the creation of a practical action plan to implement these ODIs, ensuring the successful adoption of CAMS in Batangas-based industries.

This study identified key barriers to the successful implementation of CAMS, including resource constraints, bureaucratic approval challenges, cultural misalignment, resistance to change, fear and misunderstanding, and concerns about long-term commitment. To address these, a series of Organizational Development Initiatives (ODIs) were designed. These initiatives aimed to secure necessary resources, streamline approval processes, align CAMS with organizational culture, raise awareness through campaigns, manage resistance, and promote long-term commitment. Here are the uncovered barriers:

1. Organizational Barriers

- a) **Bureaucratic and Approval Hurdles -** A primary barrier to CAMS adoption was the complex bureaucratic processes involved in decision-making, especially within multinational corporations. Many local subsidiaries cannot implement CAMS independently, as they are bound by parent company policies. Senior executives pointed out that decisions made at the headquarters level often cause significant delays and fail to consider local needs. For instance, companies within the Japanese Manufacturing Industries face challenges aligning local initiatives with their parent company's rigid HR management systems. This limits the flexibility necessary to implement CAMS effectively at the local level.
- b) **Resource Constraints** Another significant barrier to CAMS adoption is the financial, human, and time resources required. Several participants highlighted the high costs associated with acquiring software, upgrading training facilities, and allocating sufficient personnel. Smaller organizations in Batangas, in particular, struggle to allocate these resources due to limited budgets and competing demands. The effort needed for change management both organizational adaptation and resource mobilization was also noted as a significant challenge, especially for companies already burdened with day-to-day operations.
- c) Concerns About Long-Term Commitment A lack of long-term commitment to workforce development is another barrier. Many organizations prioritize immediate operational needs, such as meeting production targets, over strategic initiatives like CAMS. Some executives mentioned that departments with high turnover rates view CAMS as an additional burden rather than a solution to competency gaps. The reluctance to implement CAMS stems from the belief that it could disrupt current operations and hinder short-term productivity. The focus on immediate results often overshadows the long-term benefits CAMS offers, such as workforce stability and enhanced competency.
- d) **Cultural Misalignment and Resistance -** A major contributing element to the resistance to CAMS adoption is cultural misalignment. Organizational practices and values sometimes conflict with the principles of CAMS, creating barriers to its acceptance. For instance, the hierarchical structures in multinational corporations often discourage adaptability and responsiveness to local needs. There is also resistance to exposing organizational weaknesses, as some employee view this as a threat to their reputation. Labor unions must be involved to ensure acceptance, as their support is crucial for addressing concerns about job security and fairness in the implementation of competency frameworks.
- e) **Resistance to Change -** Resistance to change emerged as one of the most prevalent barriers. Employees, HR leaders, and senior managers often view new systems like CAMS with skepticism, fearing disruptions to established workflows and processes. This resistance is particularly strong in organizations with high turnover rates, where managers are preoccupied with managing current challenges rather than adopting new systems. The

preference for familiar practices within senior management, coupled with the fear of failure, exacerbates this reluctance.

- f) **Fear of Unintended Consequences -** Concerns about the potential misuse of CAMS created resistance among executives and employees. Fears that the system could be used for purposes beyond competency development, such as favoritism, demotions, or dismissals, caused reluctance to adopt it. Employees and unions expressed apprehension about the transparency of the system and its potential negative impact on their careers. A lack of trust in the system's intended purpose, along with concerns about reputational risks, deepened resistance to its implementation.
- g) Lack of Awareness and Understanding lack of awareness and understanding about CAMS was identified as a critical barrier. Many organizations do not have sufficient knowledge of the system's benefits and implementation process. This lack of familiarity leads to misconceptions and hesitation based on uncertainty and fear of failure. The inability to fully understand how CAMS can address competency gaps and support long-term workforce development contributes to the reluctance to adopt the system.

2. Organizational Development Initiatives

- a) **Streamline Approval Processes for Bureaucratic and Approval Hurdles -** To address bureaucratic hurdles, the first ODI focuses on securing early approval from head offices. Aligning local initiatives with global policies from the beginning can help reduce delays and confusion. Conducting localized pilot programs to test CAMS on a smaller scale can also address cultural concerns and evaluate its adaptability to local practices. This approach ensures a smoother approval process and builds support for broader implementation. Additionally, consistent communication between local and global teams can further enhance alignment and mutual understanding, ensuring long-term success.
- b) Cultural Integration Initiatives for Cultural Misalignment and Resistance -Cultural misalignment and resistance to CAMS can be addressed by adapting the system to align with local practices and values. Highlighting how CAMS supports and enhances existing organizational cultures helps position it as an improvement rather than a disruptive shift. HR leadership is vital in advocating for CAMS and ensuring employees recognize its importance in achieving the organization's long-term objectives. By embedding CAMS into the company's culture and encouraging employee buy-in, organizations can overcome cultural resistance and promote smoother implementation. Strong communication and consistent leadership support further strengthen the integration of CAMS into the organizational framework.
- c) **Invest in Resources for Resource Constraints -** To address resource constraints, organizations should prioritize allocating sufficient funding, time, and personnel to the CAMS initiative. External partnerships or government grants can provide additional financial support, helping to ease budgetary challenges. Establishing a dedicated training and development team can streamline the competency development process and ensure consistent CAMS implementation throughout the organization. By proactively addressing resource limitations, organizations can create a sustainable framework for CAMS adoption.
- d) Awareness Campaigns for Barriers of Fear and Lack of Understanding Awareness campaigns are essential for overcoming the fear of unintended consequences and the lack of understanding about CAMS. These campaigns should include localized case studies that demonstrate CAMS' successful application in similar organizations, showcasing immediate benefits such as enhanced job security and career development opportunities. Free training sessions can also be held to provide tangible evidence of the system's effectiveness. Ensuring stakeholders fully understand the potential of CAMS will reduce resistance and build broad support for its adoption. Findings from participant's data and the researcher's Middle Eastern expertise strongly advocate for awareness campaigns.
- e) Change Management Programs for Resistance to Change To address resistance to change, early engagement with employees and managers is crucial. Focus groups and feedback sessions will foster a sense of ownership and involvement in the implementation process, reducing resistance. Transparent communication between leadership and employees ensures alignment on goals and allows any misunderstandings to be addressed promptly. Framing CAMS as a solution to existing challenges, such as skill gaps and high turnover rates, will help employees see it as an opportunity rather than a disruption. Change management programs that create a collaborative environment will ease the transition and increase acceptance of CAMS.
- f) **Promote Long-Term Commitment for Concerns About Sustained Efforts T**o address concerns about long-term commitment, organizations should focus on short-term wins, such as visible improvements in

employee performance and quicker skill development. Showcasing successful CAMS implementations in similar organizations can build confidence in its long-term viability. Providing evidence-based information about CAMS' benefits will help dispel uncertainties and build trust among stakeholders. Aligning short-term successes with long-term workforce development goals will foster a sustained commitment to CAMS. This strategy is grounded in participant feedback and the researcher's experience in managing long-term CAMS initiatives.

3. Action Plan for Organizational Development Initiatives

The formulation of the ODIs was guided by several well-established models and theories. Kurt Lewin's Change Model, emphasizing the stages of unfreezing, change, and refreezing, provided a framework for addressing resistance and preparing the organization for transformation. Goal-setting theory was applied to ensure that the initiatives were specific, measurable, achievable, relevant, and time-bound (SMART). Additionally, the Resource-Based View (RBV) was used to ensure the efficient use of available resources, while Kotter's 8-Step Change Model and the 7S Framework helped ensure alignment in strategy, structure, and culture. The ADKAR Model was also incorporated to address the five key elements of successful change: awareness, desire, knowledge, ability, and reinforcement.

The resulting action plan, reinforced by these models and theories, was designed to address immediate obstacles and ensure long-term success. The use of tools like the RACI chart clarified roles and responsibilities, while regular progress reports ensured accountability and allowed for timely adjustments. By engaging all levels of the organization and focusing on both short-term achievements and long-term sustainability, this action plan aimed to facilitate the successful integration of CAMS into the selected industries in Batangas.



Fig. 4. CAMS Organizational Development Initiative Framework for Batangas-Based Industries

DISCUSSION

- 1) The findings indicate that the main barriers to CAMS adoption stem from organizational challenges such as bureaucratic delays, resource limitations, and cultural resistance. These obstacles often reflect broader systemic issues, such as a focus on immediate operational needs over long-term workforce development, and a lack of understanding of CAMS' benefits. Addressing these barriers is crucial for successful implementation, and solutions must involve strategic adjustments at both the local and global levels, such as streamlining approval processes, providing adequate resources, and fostering cultural integration. Overcoming these challenges would pave the way for more effective implementation of CAMS and improve workforce development outcomes.
- 2) The proposed ODIs offer a comprehensive approach to overcoming the barriers to CAMS adoption. By addressing specific organizational challenges such as resource constraints, cultural misalignment, and resistance to change, these initiatives aim to create a more supportive environment for CAMS. The focus on awareness, resource investment, and change management highlights the importance of both immediate and long-term strategies in ensuring successful implementation. If these initiatives are executed effectively, they can facilitate smoother CAMS adoption and ultimately enhance workforce competency in Batangas-based industries.

3) The action plan outlines a structured and methodical approach to implementing the ODIs and ensuring the successful adoption of CAMS. By establishing clear goals, roles, and a well-defined action plan, organizations can address the barriers identified in the research. Utilizing established change management models will provide a framework for handling challenges and ensuring that CAMS implementation is both effective and sustainable. Ultimately, the action plan aims to create a solid foundation for workforce development, balancing immediate improvements with long-term goals for enhanced organizational competency.

RECOMMENDATION

Based on the findings, the study recommends several strategies to support the successful adoption of CAMS:

1. Comprehensive Change Management Programs

Organizations should implement comprehensive change management programs to actively engage employees from the beginning. This includes conducting focus groups, feedback loops, and workshops to address concerns, with involvement from senior managers and department heads to foster ownership and reduce skepticism.

2. Cultural Integration of CAMS

To minimize resistance, organizations should integrate CAMS into their existing cultural framework. This involves highlighting its flexibility and relevance to local needs, providing tailored training, and leveraging strong HR leadership to ensure CAMS is seen as an enhancement aligned with organizational values.

3. Awareness Campaigns

Strategic awareness campaigns should be implemented to build confidence in CAMS. These campaigns should focus on communicating the system's purpose, benefits, and success stories from similar organizations. Providing free introductory training sessions and localized case studies can help stakeholders overcome fears and misconceptions.

4. Early Executive Buy-In and Pilot Programs

To secure leadership support, organizations should clearly communicate the benefits of CAMS using data and case studies. Conducting pilot programs will allow organizations to evaluate CAMS' adaptability and build leadership confidence before full-scale adoption. This approach facilitates smoother approval processes and ensures the alignment of local initiatives with global policies.

5. Short-Term Successes for Long-Term Commitment

Organizations should focus on achieving and celebrating short-term wins, such as improvements in performance, efficiency, and skill development. These quick successes will help build momentum and link short-term results with the long-term strategic goals of workforce development, ultimately fostering sustained commitment to CAMS.

6. Sufficient Resource Allocation

To ensure successful implementation, organizations must prioritize allocating sufficient budget, time, and human resources. In cases of resource constraints, exploring external partnerships, government grants, or industry-specific funding will help secure necessary resources. Establishing a dedicated training and development section can streamline the competency development process and ensure consistent implementation.

7. Robust Progress Reporting Systems

Organizations should establish a robust progress reporting system to track key performance indicators (KPIs) and identify any delays or issues. This will allow the team to take proactive action, ensuring that the project stays on track and aligns with organizational objectives. Regular updates and transparent communication are also essential to promote accountability and problem-solving.

8. Use of RACI Charts

A RACI (Responsible, Accountable, Consulted, Informed) chart should be implemented to clarify roles and responsibilities, minimizing overlaps and potential conflicts that could hinder progress. Clear role definitions prevent misunderstandings and ensure accountability in achieving tasks related to CAMS implementation.

9. Regular Updates and Transparent Communication

Frequent updates and transparent communication are crucial for accountability and proactive problem-solving. These will ensure that the project remains on track, and stakeholders are continuously aligned with the long-term goals of the organization. Open communication helps address misunderstandings promptly and fosters a sense of ownership.

10. Dedicated CAMS Project Team

It is highly recommended to establish a dedicated CAMS Project Team with clearly defined goals, responsibilities, and a mission statement. This focused team will ensure alignment throughout the project lifecycle and allow for continuous monitoring and adjustment to overcome challenges effectively.

11. Application of Frameworks and Models

Organizations should integrate established frameworks and models, such as ADKAR, Resource-Based View, 7-S Framework, and Kotter's 8-Step Change Model, to gain insights into the complexities of CAMS adoption. These models will provide actionable strategies for overcoming barriers, particularly in terms of resistance to change and resource constraints.

12. Legislative Action for CAMS

Organizations should lobby for legislation that expands RA 12063 or create a new bill to institutionalize CAMS training, implementation, assessment, and verification at the Batangas State University - CABEIHM Graduate School. This initiative will facilitate the widespread adoption of CAMS in Batangas, enhancing workforce competency and meeting the evolving needs of industries in the region.

13. Future Quantitative Research

The study recommends conducting future quantitative research to validate the findings and organizational development initiatives (ODIs). This research will provide empirical evidence, further assessing the effectiveness of the ODIs and offering actionable insights that can be applied across a wide range of industries to enhance the adoption and success of CAMS.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

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APPENDICES

Appendix A - LIST OF ABBREVIATIONS

- a) 7-S Framework McKinsey 7-S Framework A management model developed by McKinsey & Company that focuses on seven interdependent elements: Strategy, Structure, Systems, Shared Values, Skills, Style, and Staff. It is used to assess and improve organizational effectiveness.
- b) ADKAR Awareness, Desire, Knowledge, Ability, Reinforcement A change management model developed by Prosci, designed to guide individuals and organizations through successful change by focusing on five key elements: Awareness of the need for change, Desire to participate, Knowledge of how to change, Ability to implement changes, and Reinforcement to sustain progress.
- c) AMSCAF (Assurance Management System for Critical Asset Framework) is a structured framework designed to enhance the management of critical assets by emphasizing cost-effectiveness, productivity, system reliability, and operational safety. It provides a comprehensive approach to assessing and improving asset management policies through systematic assurance processes.

- **d) ASEAN Association of Southeast Asian Nations** A regional intergovernmental organization comprising 10 Southeast Asian countries that promotes political, economic, and social cooperation.
- **e) ATLAS.ti** A software application used for qualitative research, enabling the coding, analysis, and visualization of large amounts of text, audio, video, and other data.
- **f) CAMS Competency Assurance Management System -** A structured framework used by organizations to ensure that employees meet required competency levels through assessments, training, and monitoring.
- g) CAMSCA (Cyclical Assurance Management System of Critical Assets) is a structured, iterative methodology for managing critical assets, focusing on continuous performance assessment and improvement. It ensures reliability, compliance, and operational efficiency by integrating cyclical evaluation processes into asset management strategies.
- **h) CHED Commission on Higher Education -** The governing body in the Philippines responsible for regulating and overseeing higher education institutions and policies.
- i) CMS Competency Management System A system used to track, assess, and develop employee competencies to ensure alignment with organizational goals.
- **j) CSC Civil Service Commission** A government agency responsible for overseeing the civil service workforce, ensuring efficiency, integrity, and merit-based hiring in public service.
- **k) DSWD Department of Social Welfare and Development -** A government agency in the Philippines responsible for social protection programs, poverty reduction, and welfare services.
- **I) EBET Enterprise-Based Education and Training -** A training approach where educational programs are conducted within enterprises to enhance workforce skills and align them with industry needs.
- m) GDP Gross Domestic Product The total monetary value of all goods and services produced within a country's borders over a specified period, used to measure economic performance.
- **n) HR Human Resources** The department within an organization responsible for managing employee relations, recruitment, training, compensation, and overall workforce development.
- **o) KPI Key Performance Indicator -** A measurable value that indicates how effectively an individual, team, or organization is achieving key business objectives.
- **p) NVivo Qualitative Data Analysis Software -** A software tool used for qualitative research, enabling researchers to organize, analyze, and visualize non-numerical data.
- **q) OD Organizational Development** A field focused on improving organizational effectiveness and employee well-being through planned change strategies, interventions, and development programs.
- **r) ODI Organizational Development Initiative** A specific program or project aimed at driving positive organizational change and improving overall performance.
- **s) RA Republic Act** A law enacted by the legislative branch of the Philippines, serving as a legal framework for various government policies and programs.
- t) RACI Responsible, Accountable, Consulted, Informed A matrix used in project management to define roles and responsibilities, ensuring clear task ownership and accountability.
- u) TESDA Technical Education and Skills Development Authority A government agency in the Philippines responsible for overseeing and regulating technical and vocational education and training (TVET) programs.
- v) WEF World Economic Forum An international non-governmental organization that engages business, political, and academic leaders in discussions on global economic and social issues.