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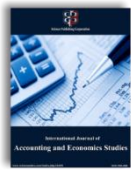

Economic Efficiency of Management Accounting Systems

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Abstract

This research aims to demonstrate and test a multifaceted method for assessing management accounting systems' efficacy. By focusing on the synergies that arise from the balanced growth of its four information dimensions, this multidimensional concept could be really important for future research and, in turn, offer fresh perspectives on management accounting. A highly prized competitive advantage for small and medium-sized businesses is the capacity to assess and control economic efficiency. Economic efficiency shows how big the indications of effective and efficient use of resources are, as well as how well the company processes, goods, and services work. The impact of the internal and external business environments must be taken into consideration while assessing and maintaining economic efficiency, as well as the variety of topic position assessments. The financial statements in financial accounting provide valuable data that helps assess how efficiently businesses are operating, which is crucial for effective management.

Keywords: *Economic Efficiency; Management; Small and Medium-Sized Businesses; Return on Equity.*

1. Introduction

The current dynamic corporate climate necessitates that managers and shareholders make decisions as quickly as possible in response to local and worldwide shifts in business, technology, politics, society, and science, as well as internal company circumstances(Parker, 2005). The importance of MA as a catalyst for organizational development and advancement was revealed by MA studies, which also confirmed the advantages of the performance measurement process for continuous performance improvement, communication, and control procedures, in addition to financial outcomes (improving financial indicators, raising market value). After that, the organization's management should have MAS that isn't overburdened or lacking the necessary tools. Level of investigation of the problem. First off, it's important to point out that most scientific research on Management Accounting (MA) tends to focus on individual MA tools(Gul & Chia, 1994). There's been surprisingly little effort to explore how different types of organizations relate to these tools. Information from management accounting systems plays a crucial role in helping managers plan, oversee operations, and tackle problems. These systems provide valuable data for evaluating performance, which includes not just financial metrics like return on investment and return on assets, but also non-financial indicators such as customer satisfaction and product quality(Ishak et al., 2018; Alsharifi, 2023).

According to we should consider several characteristics when assessing perceived utility: the scope of information (which includes external, non-financial, and future-oriented data), timeliness (how often and quickly reports are generated), level of aggregation (whether information is grouped by period or functional area, and the analytical formats used for decision-making), and level of integration (how well information on specific targets and their interconnections within different organizational units is reported, including interactions within sub-units) (Shadadiet al., 2022; Williamson et al., 2010; Zaibel et al., 2022).

When implementing and using information technology and systems effectively, organizations typically confront a number of hazards(Rotzek et al., 2018). The most challenging hazards that need to be considered have to do with the capabilities of the individuals using these systems, such as the difficulty in finding qualified candidates for jobs or the challenge of providing efficient training for these users. Therefore, it is important to prioritize user training since it improves the deployment and use of information systems. It also seeks to make it easier to comprehend the kind of data needed for activity analysis and performance evaluations. In order to help with the development and usage of information systems, user training entails offering training sessions within the workplace(Vasquez & Sorensen, 2025; Hameed, 2018).

Learning how these tools may assist users in managing their enterprises is the aim of training. It makes sense to believe that more training would improve users' comprehension of the system's architecture, operation, and use. This should increase use and produce more accurate data. Speculating that a lack of user training will result in discontent is likewise valid. Thus, increasing this training could result in users being more satisfied with how the information systems supply them with information(Nordhaus, 2010). Given the increased awareness of environmental improvement, the study's findings indicated that businesses prioritize eco-concerns and management is important for defining EPR as well as for lowering environmental uncertainties(Jabarullah et al., 2019).

2. Methodology

A thorough literature evaluation served as the basis for the research instrument employed in this study, which led us to select four informative dimensions—developed and further utilized by other authors—to gauge the efficacy of management accounting systems. We employed a construct that was designed to measure managerial performance. With this framework, managers are evaluated based on their abilities to plan, research, coordinate, assess, oversee, staff, negotiate, and represent their organizations. It also looks at their overall performance. In the initial development phase, the questionnaire was translated and tailored specifically for the business environment. A team of experts from various organizations reviewed the instrument in the second phase to ensure it was appropriate for the environment of SMEs.Throughout this stage, special focus was placed on using language that was appropriate for the survey respondents' backgrounds. Socio-demographic Characteristics of Study Participants are shown in Table 1.

Table 1: Socio-demographic Characteristics of Study Participants (n=409)

Variables	n (%)
Gender	
Male	256 (62.6)
Female	153 (37.4)
Age group (years)	
18 - 30	024 (05.9)
31 - 50	312 (76.3)
>50	073 (17.8)
Marital status	
Married	265 (64.8)
Unmarried	054 (13.2)
Widowed	090 (22.0)
Socio-economic status*	
Upper middle	042 (10.3)
Middle/Lower middle	203 (49.6)
Lower/Upper lower	159 (38.9)
Lower	005 (01.2)

Nineteen components that reflect the noted features of the data supplied by the management accounting systems make up the final edition of the research tool. On a scale from 1 (never) to 7 (always), participants were asked to evaluate how frequently they utilize these information features(Baggyalakshmi et al., 2023). Together with the overall performance, the study tool also has nine items that represent the various aspects of managerial performance. On a scale of 1 (inadequate) to 7 (outstanding), the respondents were asked to score how well they performed these items (refer to Appendix B) in carrying out their everyday responsibilities and activities. Additionally, if they didn't complete any of those jobs or activities, they might select "not applicable". The study tool further comprises inquiries about the attributes of the businesses, such as turnover, assets, workforce size, and sector(Ahmed et al., 2017).

3. Statistical Measures

An online survey questionnaire was used to gather data for this investigation. In our study, we reached out to Chief Financial Officers (CFOs) from small and medium-sized enterprises (SMEs) across Portugal. We got a list of 1,500 SMEs from Informa DB, which is part of the Dun & Bradstreet Worldwide Network. Our team made calls to each of these businesses to explain the study's purpose and to gather the names of their CFOs. Unfortunately, twelve of them never answered, no matter how many times we tried. Additionally, ninety-three businesses opted out of participating for various reasons, such as being out of business or not having the authority to respond to this kind of survey. After these conversations, we sent an email to 1,407 CFOs of Portuguese SMEs, detailing the study's objectives and including a link to the online survey(Salauddin, 2022; Ravichandran&Lertwongsatien, 2005; Baggyalakshmi et al., 2023; Tetiana et al., 2018). Analysis of Economic Efficiency shown in Table 2.

Table 2: Analysis of Economic Efficiency

Performance	Extremely confident	Quite confident	Somewhat confident	Slightly confident	t Statistics	p Value
How do management accounting systems impact organizational employee satisfaction and economic efficiency?	4.3400	3.8136	4.0000	3.8400	4.160*	0.000
What is the relationship between management accounting systems and organizational learning and development?	3.6400	3.8475	3.8889	3.6267	0.082	0.935
How do management accounting systems facilitate supply chain management and economic efficiency in organizations?	3.6177	3.6102	3.5848	3.7800	1.004	0.318
What are the implications of using management accounting systems for organizational reputation and stakeholder trust?	3.8200	3.6441	3.2222	3.9200	0.743	0.459
. How do management accounting systems support risk management and economic efficiency in organizations?	3.9000	4.2000	4.0000	4.0533	1.238	0.218
What is the impact of management accounting systems on organizational innovation and economic efficiency?	4.2000	3.8400	3.8889	3.8904	0.066	0.947
How do management accounting systems facilitate strategic management and economic efficiency in global organizations?	3.8400	3.7600	3.5848	3.7600	3.202*	0.002
How do different management accounting techniques, such as activity-based costing and throughput accounting, impact economic efficiency?	3.7600	3.9800	3.2222	3.5467	1.770	0.079
What are the challenges and limitations of implementing management accounting systems in small and medium-sized enterprises (SMEs)? How do management accounting systems impact organizational competitiveness and economic efficiency?	3.9800	4.0200	4.2000	3.6667	0.592	0.555
What is the relationship between management accounting systems and	4.0200	3.8475	3.8400	3.7337	1.849	0.067

economic value added (EVA) in organizations?						
How do management accounting systems support performance measurement and evaluation in organizations?	3.9000	3.6102	3.7600	3.7067	2.205*	0.029
What are the implications of using management accounting systems for organizational sustainability and economic efficiency?	3.9400	3.6441	3.9800	3.6000	2.202*	0.030
How do management accounting systems facilitate cost reduction and economic efficiency in organizations?	3.9200	3.8136	4.0200	3.6933	1.862	0.065
What is the impact of management accounting systems on organizational productivity and efficiency?	3.9400	3.8475	3.8889	3.8667	0.361	0.718
How do management accounting systems support strategic decision-making and economic efficiency?	4.2800	3.6102	3.5848	4.0267	1.640	0.104
How do different management accounting techniques, such as activity-based costing and throughput accounting, impact economic efficiency?	3.7600	3.9800	3.2222	3.5467	1.770	0.079
How do management accounting systems impact organizational competitiveness and economic efficiency?	3.9800	4.0200	4.2000	3.6667	0.592	0.555
What is the relationship between management accounting systems and economic value added (EVA) in organizations?	4.0200	3.8475	3.8400	3.7337	1.849	0.067
What is the relationship between management accounting systems and organizational learning and development?	3.6400	3.8475	3.8889	3.6267	0.082	0.935

Source: Primary data

For the next five months, an email reminder was issued every two weeks. Respondents were promised an overview of the research findings as a means of encouraging their involvement.

4. Conclusion

Let's take a moment to highlight some key takeaways from the study's findings. To start, this research is the first of its kind that we know of to develop and validate a second-order construct aimed at measuring the effectiveness of management accounting systems. By introducing this second-order construct, we recognize the importance of each first-order construct—specifically, the scope, timeliness, aggregation, and integration of MAS information—while still honoring their distinct features. It views these structures as aspects of management accounting systems as a result. Future research may benefit greatly from this multifaceted architecture since it will enable the examination of novel theories and, as a result, provide fresh insights into management accounting.

References

[1] Ahmed, U., Isa, N. M., Majid, A. H. A., Zin, M. L. M., & Amin, B. M. (2017). Towards understanding work engagement: Can HR really buffer HR? Test of a moderated model. International Journal of Economic Research, 14(20), 1–18.

[2] Alsharifi, A. K. H. (2023). Total Quality Management Strategies and their Impact on Digital Transformation Processes in Educational Institutions. An Exploratory, Analytical Study of a Sample of Teachers in Iraqi Universities. International Academic Journal of Organizational Behavior and Human Resource Management, 10(1), 1–16. https://doi.org/10.9756/IAJOBHRM/V10I1/IAJOBHRM1001

[3] Nefeli, S., Athanasios, L., Panos, C., & Dimitrios, G. (2025). 3D Printing Technologies for Enhancing Sustainability in Supply Chains. Calitatea, 26(205), 23-33.

[4] Baggyalakshmi, N., MohanaDhanushiya, A. S., &Revathi, R. (2023). Streamlined yearbook automation system. International Academic Journal of Innovative Research, 10(2), 56–64. https://doi.org/10.9756/IAJIR/V10I2/IAJIR1009

[5] Baggyalakshmi, N., Muthu Lakshmi, V., &Revathi, R. (2023). Grocery store management system. International Academic Journal of Science and Engineering, 10(2), 131–139. https://doi.org/10.9756/IAJSE/V10I2/IAJSE1017

[6] Uvarajan, K. P. (2025). Design of a hybrid renewable energy system for rural electrification using power electronics. National Journal of Electrical Electronics and Automation Technologies, 1(1), 24–32.

[7] Gul, F. A., & Chia, Y. M. (1994). The effects of management accounting systems perceived environmental uncertainty and decentralization on managerial performance: A test of three-way interaction. Accounting, Organizations and Society, 19(4–5), 413–426.

[8] Hameed, A. A. (2018). Environmental accounting in India: A conceptual study. NOLEGEIN–Journal of Financial Planning and Management, 1, 32–38.

[9] Rahim, R. (2025). Lightweight speaker identification framework using deep embeddings for real-time voice biometrics. National Journal of Speech and Audio Processing, 1(1), 15–21.

[10] Ishak, F., Johari, M., &Dolah, R. (2018). A case study of LEAN application for shortest lead time in composite repair shop. International Journal of Engineering and Technology, 7(4.13), 112–119.

[11] Jabarullah, N. H., Aziz, P. D. A., & Shah, S. A. (2019). Maximum power point tracking in PV device: Material efficiency and models to supply non-linear DC power supply. Journal of Advanced Research in Fluid Mechanics and Thermal Sciences, 53(2), 157–164.

[12] Velliangiri, A. (2025). An edge-aware signal processing framework for structural health monitoring in IoT sensor networks. National Journal of Signal and Image Processing, 1(1), 18–25.

[13] Nordhaus, W. D. (2010). Carbon taxes to move toward fiscal sustainability. The Economists' Voice, 7(3), 1–5.

[14] Parker, L. D. (2005). Social and environmental accountability research: A view from the commentary box. Accounting, Auditing & Accountability Journal, 18(6), 842–860.

[15] Ravichandran, T., &Lertwongsatien, C. (2005). Effect of information systems resources and capabilities on firm performance: A resource-based perspective. Journal of Management Information Systems, 21(4), 237–276.

[16] Rotzek, J. N., Scope, C., &Günther, E. (2018). What energy management practice can learn from research on energy culture? Sustainability Accounting, Management and Policy Journal, 9, 515–551.

[17] Rahim, R. (2024). Energy-efficient modulation schemes for low-latency wireless sensor networks in industrial environments. National Journal of RF Circuits and Wireless Systems, 1(1), 21–27.

[18] Salauddin, N. (2022). Accessibility of information resources and services in the library for the users with disabilities: A study. Indian Journal of Information Sources and Services, 12(1), 47–51. https://doi.org/10.51983/ijiss-2022.12.1.3158

[19] Shadadi, E., Ahamed, S., Alamer, L., &Khubrani, M. (2022). Deep Anomaly Net: Detecting moving object abnormal activity using TensorFlow. Journal of Internet Services and Information Security, 12(4), 116–125. https://doi.org/10.58346/JISIS.2022.I4.008

[20] Tetiana, H., Karpenko, L. M., Olesia, F. V., Yu, S. I., & Svetlana, D. (2018). Innovative methods of performance evaluation of energy efficiency projects. Academy of Strategic Management Journal, 17, 1–11.

[21] Lucena, K., Luedeke, H. J., & Wirth, T. (2025). The evolution of embedded systems in smart wearable devices: Design and implementation. SCCTS Journal of Embedded Systems Design and Applications, 2(1), 23–35.

[22] Vasquez, A., & Sorensen, I. (2025). The effects of education on social mobility: A study of intergenerational mobility. Progression Journal of Human Demography and Anthropology, 2(1), 21–26.
[23] Williamson, I. O., King, J. E. Jr., Lepak, D., &Sarma, A. (2010). Firm reputation, recruitment websites, and attracting applicants. Human Resource Management, 49(4), 669–687.
[24] Uvarajan, K. P. (2024). Integration of artificial intelligence in electronics: Enhancing smart devices and systems. Progress in Electronics and Communication Engineering, 1(1), 7–12. https://doi.org/10.31838/PECE/01.01.02
[25] Zaibel, H. H., Dahi, K. J., &Maktouf, N. A. (2022). The Impact of Knowledge Management in Developing Administrative Creativity through the Role of Mediator for Information Technology: An Exploratory Study of the Opinions of a Sample of Administrative Leaders and Teachers of the Oil Training Institute / Bas. International Academic Journal of Social Sciences, 9(2), 183–193. https://doi.org/10.9756/IAJSS/V9I2/IAJSS0927