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ERP Integration: Shifting Roles and Emerging Skills for Management Accountants within Production Companies

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Abstract

This study examines the impact of Enterprise Resource Planning (ERP) system implementation on the roles and skills of management accountants within production companies. Utilizing a dual-method approach of structured email questionnaires and telephone interviews, our findings reveal a significant shift towards more strategic roles and enhanced skill requirements post-ERP implementation. Specifically, management accountants are moving towards strategic activities such as business planning, facilitated by the comprehensive data and process integration offered by ERP systems. This research contributes a new framework to the literature, offering insights into the evolving landscape of management accounting in the context of technological advancements.

Keywords

Enterprise Resource Planning, Management Accountant, Roles, Skills, Production Companies.

Introduction

In the fiercely competitive landscape of global markets, enterprises face the imperative challenge of keeping pace with rapid advancements in technology and innovations. Integrated software solutions have transitioned from being optional to essential for organizations, underscored by the swift development of information technology (IT), notably in the domain of enterprise systems (ESs) (Kallunki et al., 2011).

A predominant type of ESs, the Enterprise Resource Planning (ERP) system, stands as a seminal innovation in the IT sphere, emerging initially in the late 1980s and early 1990s. The adoption of ERP systems by organizations is largely driven by the need to enhance and preserve their competitive edge in an increasingly complex and dynamic global marketplace. Consequently, the deployment of comprehensive software solutions has become indispensable for organizational success (Dechow and Mouritsen, 2005; Kallunki et al., 2011; Voulgaris et al., 2015; Todorović and Čupić, 2023; Alsughayer, 2024).

ERP systems are intricate and all-encompassing software packages, crafted to unify and bolster various business operations and resources. Given the current climate of intense global competition, pervasive uncertainty, rapid technological shifts, and the scarcity of resources, ERP systems have emerged as critical tools for organizations. This has led to a marked transformation in the role and required competencies of management accountants (Kallunki et al., 2011; Vakalfotis, 2016; Pervan and Dropulić, 2019). By enabling management to access pertinent, real-time operational data effortlessly and promptly, ERP systems facilitate decision-making, planning, evaluation, control, and the efficient utilization of resources. As ERP systems become more sophisticated and comprehensive, they allow for an increasing degree of analysis to be conducted without the direct involvement of accountants, thereby enhancing the quality of management control, planning, and decision-making processes [15] (Kallunki et al., 2011). Consequently, it is anticipated that the role of the management accountant will undergo significant transformation or possibly diminish, as they confront the challenge of retaining their competitive advantage in a marketplace where many of their functions and analytical tasks may be superseded by ERP systems (Caglio, 2003).

While the adoption of ERP systems is widespread, there remains a significant gap in understanding their impact in the context of developing countries,

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particularly within production companies. Existing studies primarily focus on developed nations, leaving a void in the literature regarding the experiences of organizations in developing economies (Alsughayer, 2024). This study aims to fill this gap by providing empirical evidence from Jordanian production companies, thereby contributing new insights to the global discourse on ERP systems and their implications for management accounting.

Our research provides a unique contribution by exploring not only the immediate effects of ERP implementation but also the evolving skill sets and strategic roles of management accountants in a developing country context. This study offers a fresh perspective on how ERP systems are reshaping the landscape of management accounting, moving beyond traditional transactional roles to more strategic and analytical functions.

Literature Review

Over time, Enterprise Resource Planning (ERP) systems have evolved into integrated information systems and have been universally adopted by organizations, regardless of size, to streamline data flow across the value chain and reorganize business processes (Wier et al., 2007). The integrated and complex nature of ERP systems has resulted in rapid and dramatic transformations across various organizational facets, including business processes, workflows, and organizational structures, significantly impacting the roles of professionals, including management accountants (Matende and Ogao, 2013; Todorović and Čupić, 2023).

In the accounting literature, there was a great deal of attention on management accounting research, particularly in understanding its dynamic relationship with ERP systems (Booth et al., 2000; Granlund and Malmi, 2002; Caglio, 2003; Spathis, 2006; Kallunki et al., 2011; Kamal and Mouakket, 2016; Todorović and Cupić, 2023). The majority of prior studies have been carried out in developed countries to explore the intricate relationship between ERP systems and the role of management accountants (Booth et al., 2000; Granlund and Malmi, 2002; Caglio, 2003; Doran and Walsh, 2004; Sangster et al., 2009). Few studies investigated ERP in developing countries, such as studies conducted in Egypt (Jack and Kholeif, 2008), Serbia (Todorović and Čupić, 2023), and Saudi Arabia (Alsughayer, 2024). This extent body of management accounting research demonstrates global interest in understanding the varied impact of ERP systems across diverse business environments.

Interestingly, prior researchers have employed diverse quantitative and qualitative theoretical frameworks and research methods to delve into the impact of ERP systems on management accounting. For instance, Caglio's (2003) case studies used Giddens's structuration theory, Hyvönen et al. (2009) deployed institutional theory. Actor-network theory was utilized by Dechow and Mouritsen (2005) to provide in-depth insights into large Danish multinational companies, while Stone's strong structuration theory guided Jack and Kholeif's (2008) research to investigate ERP and management accounting in Egypt. Another case study by Alsughayer (2024) went to explored the role of ERP systems in management accounting within small and medium-sized enterprises (SMEs) in Saudi Arabia. Other prior studies have added quantitative perspectives to the exploration, and contributed to a comprehensive understanding of the ERP-management accounting relationship such as Spathis and Constantinides (2003, 2004), Spathis (2006), and Todorović and Cupić (2023).

Pioneering studies, including Kaplan and Cooper's (1998), laid the groundwork by emphasizing the comprehensive nature of ERP systems that encompass various managerial processes. However, subsequent research has presented inconsistent findings regarding the impact of ERP on management accounting roles. While some studies, like Scapens and Jazayeri (2003), Doran and Walsh (2004), and Todorović and Cupić (2023), reported transformative effects leading to a more analytical role for management accountants, others, such as Granlund and Malmi (2002) and Hyvönen et al. (2009), indicated limited impact on roles and usage of advanced Management Accounting Practices (MAPs). Other studies conducted in Greece by Spathis and Constantinides (2003, 2004) highlight the contextual nuances, showing that ERP systems can be more effective in certain aspects, such as information generation and flexibility, while less impactful in areas like reporting and decision-making. A survey study carried out by Astuty et al. (2022) stated that ERP has the potential to promote reliability, efficiency, and flexibility in the quality of management accounting information systems among publicly-owned enterprises in Indonesia. Similarly, Jean-Baptiste (2009), Sangster et al. (2009), and Todorović and Cupić (2023) found a positive relationship between the success of ERP implementation and the active participation of management accountants.

Recently, a study from South Asia by Weerasekara and Gooneratne (2023) revealed that the successful adoption of the ERP system has allowed management accountants to move towards analytical work. Also, Alsughayer (2024) found that successful ERP implemen-



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tations support and unify core business processes and functions, thereby improving decision-making, reporting, and overall data quality. The role of management accountants has shifted from being mere information providers to becoming business advisors and analysts, thereby enhancing management accounting techniques.

These variations in findings underscore the importance of considering the unique factors influencing the success of ERP system implementation. Furthermore, Jean-Baptiste (2009), Sangster et al. (2009), and Todorović and Cupić (2023) emphasized the importance of having information system skills in place, such as proficiency in finance, knowledge sharing, report writing, and business skills, emerged as crucial factors for thriving during both the implementation and post-implementation phases of ERP systems. In this context, Mahmood et al. (2019) indicated that the successful deployment of ERP is subject to organizational external and internal factors, such as regulatory and legal requirements, employee skills, management support, and organizational culture. Other prior studies, predominantly from developed countries, underscored the influence of contextual factors such as changes in management strategy, business plans, organizational structures, and IT infrastructures on the impact of ERP systems (Ram et al., 2013).

While research has extended to some developing countries, the specific dynamics within various emerging markets remain underexplored (Todorović and Čupić, 2023). Given the varied findings and limited studies in developing countries, there is a compelling need to unravel the intricate relationship between ERP systems and management accounting roles, thus adding valuable insights to the existing body of knowledge.

From that end, this study endeavors to contribute to management accounting literature by examining the impact of ERP systems on the roles and skills of management accountants in developing countries like Jordan.

Research Methodology

This study employs a dual-methodological framework, integrating positivist and interpretivist paradigms, to investigate the effects of Enterprise Resource Planning (ERP) system implementations on the roles and skill sets of management accountants within the manufacturing sector in Jordan. It also seeks to understand the factors influencing these effects. The research is structured around four primary questions:

• What is the extent of ERP implementation's impact on the role of management accountants in manufacturing firms?

- How does ERP implementation influence the skill sets of management accountants in these firms?
- What are the pivotal factors contributing to the benefits observed in the role and skills of management accountants post-ERP implementation?
- Are the skills identified as beneficial post-ERP implementation being addressed in the academic curriculum for management accountants?

To address the first two questions, the study collected data through structured email questionnaires sent to 150 prominent Jordanian manufacturing companies with a minimum of five years' experience in using ERP systems. For the third question, telephone interviews were conducted with a subset of these companies to delve deeper into the qualitative aspects of ERP's impact. The fourth question was explored through telephone interviews with a select group of academic faculty from Jordanian universities, focusing on the curriculum's alignment with the identified beneficial skills post-ERP implementation.

The questionnaire comprised four sections:

- Demographic and company-related information.
- Identification of the ERP systems in use.
- Assessment of the impact of ERP implementation on the role of management accountants, asking respondents to categorize tasks as part of their role pre- and post-ERP implementation, and those supported by ERP. Based on literature review, 27 tasks were identified, distinguishing between 4 traditional and 23 advanced tasks relevant to management accountants.
- Evaluation of the impact on management accountants' skills using a five-point Likert scale to rate the importance of each skill before and after ERP implementation.

Designed for clarity and ease of understanding, the questionnaire aimed to minimize potential errors and misinterpretations. The study ensured the reliability of its measurement scales through a Cronbach's alpha test, achieving alpha values above 0.92, indicating high internal consistency.

For the qualitative component, concise telephone interviews were conducted to foster participant engagement. Twenty-five respondents from the initial questionnaire participated in follow-up interviews to elucidate factors influencing the benefits of ERP on management accountants' roles and skills. Additionally, to assess the academic preparation of management accountants in relation to the skills deemed important post-ERP implementation, interviews were held with eight accounting professors from four esteemed Jordanian universities, offering insights into the academic curriculum's responsiveness to the evolving field.



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No.	Traditional Tasks	Currently in Use	Used Before ERP	Supported After ERP
1	Information Gathering	87.5%	62.2%	75.6%
2	Closure of Month/Year-End Accounts	83.9%	51.3%	70.4%
3	Provision of Timely & Relevant Information	75.7%	50.9%	60.1%
4	Information Consolidation	72.8%	45.2%	58.4%

Table 1 ERP and Traditional Tasks

Findings from Questionnaires

General Demographic and ERP Implementation Overview

The questionnaire aimed to elicit general information about respondents and their ERP implementation practices. Analysis of the initial section revealed that all respondents held senior positions within the management and finance departments of their respective companies. Furthermore, it was observed that all respondents possessed university-level education in business-related fields, coupled with a minimum of five years' experience across various management and finance roles. Notably, all participating companies had implemented ERP simulations across diverse operational domains, including accounting, manufacturing, sales, marketing, finance, human resources, and customer service, emphasizing a comprehensive approach to information-sharing. These findings align with prior research conducted in the Jordanian context (Naash & Khamis, 2009; Al-Kasswna, 2012).

Impact of ERP on the Management Accountant's Role

The role of the management accountant was analyzed based on two task categories: traditional and advanced, reflecting the evolving nature of the role in response to user needs.

Impact of ERP on Traditional Tasks

Table 1 delineates the traditional tasks performed by management accountants within respondent companies. The table presents four traditional management accountant tasks alongside the percentages of respondent companies acknowledging the use of these tasks within their roles, both pre- and post-ERP implementation. The data depicted in Table 1 illustrates that management accountants continue to engage in traditional tasks such as information gathering, provision, and consolidation, many of which are facilitated through ERP systems. Notably, the most common traditional tasks supported by ERP are information gathering and the closure of month/year-end accounts, with adoption rates of 75.6% and 70.4%, respectively.

A comparison of the percentages of traditional tasks currently in use within the management accountant's role, pre-ERP utilization, and post-ERP implementation indicates the enduring presence of traditional tasks throughout. Notably, all tasks exhibit increased integration with the management accountant's role post-ERP implementation. For instance, the utilization of information gathering increased from 62.2% before ERP implementation to 75.6% post-implementation, showcasing a strengthened connection between ERP utilization and traditional task execution.

Impact of ERP on Advanced Tasks

Table 2 provides a comprehensive overview of advanced tasks undertaken by management accountants within respondent companies. The table presents data on 23 advanced management accountant tasks, delineating the percentage of respondent companies acknowledging the utilization of these tasks within their roles, both pre- and post-ERP implementation.

Table 2 illustrates the prevalence of advanced tasks within the role of management accountants, with a significant percentage of respondent companies incorporating these tasks into their responsibilities. Notably, the top six tasks highlighted in Table 2 demonstrate the highest utilization rates among respondent companies, indicative of the most commonly supported advanced tasks facilitated by ERP systems, namely cost/financial control, information communication to other employees, business per-

No.	Advanced Tasks	Currently in Use	Used Before ERP	Supported After ERP
1	Cost/Financial Control	79.6%	38.4%	63.3%
2	Information Communication to Other Employees	77.8%	37.3%	61.5%
3	Business Performance Evaluation	73.5%	32.6%	58.2%
4	Business Planning	68.7%	30.2%	57.8%
5	Business Problem Solving	67.4%	29.4%	54.1%
6	Internal Audit	64.8%	28.7%	53.5%
7	Business Productivity Improvement	58.2%	26.4%	47.6%
8	Information Analysis and Interpretation	51.8%	23.5%	46.3%
9	Information Assurance	46.1%	21.9%	42.2%
10	Enterprise System Design	45.7%	20.6%	41.9%
11	Enterprise System Development	45.4%	19.8%	40.7%
12	Enterprise System Management	43.8%	19.3%	40.2%
13	Management Control	42.5%	18.7%	38.8%
14	Profit Improvement	40.6%	18.5%	38.5%
15	Business Advising	40.3%	17.4%	36.7%
16	Working Capital/Short-Term Finance Management	39.8%	16.7%	35.9%
17	Business Scenario Building	38.7%	15.9%	34.4%
18	Participation in Decision Making Groups	38.2%	15.6%	33.8%
19	Customer Relationship Management	37.8%	14.3%	31.6%
20	Risk Management	35.5%	14.1%	30.8%
21	Formulating Business Policy/Strategy	33.4%	13.6%	23.4%
22	Change Management	28.2%	11.4%	19.6%
23	Business Value Creation	25.7%	9.2%	17.7%

Table 2 ERP and Advanced Tasks

formance evaluation, business planning, business problem-solving, and internal audit, with adoption rates ranging from 53.5% to 79.6%.

Comparing the percentages of advanced tasks currently in use within the management accountant's role, pre-ERP utilization, and post-ERP implementation, it is evident that many of these advanced tasks persist within the management accountant's role both before and after ERP implementation. Additionally, the integration of ERP systems appears to strengthen the association between these tasks and the management accountant's role, as evidenced by the increased utilization rates postimplementation across all tasks outlined in Table 2.

Importance of Skills Before and After ERP Utilization

Table 3 presents a comprehensive analysis of the importance of management accountant's skills before and after the implementation of ERP systems. The table illustrates that the utilization of ERP systems imposes higher demands on various types of skills. Comparing the mean scores of skills before and after ERP utilization reveals significant alterations in how management accountants perceive the importance of all types of skills pre- and post-ERP implementation, with all types of skills becoming more crucial following ERP utilization.



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No.	Skills	Mean Before ERP	Mean After ERP	Std Deviation (Average)
1	Cross-Functional Working Relationships	4.14	4.78	0.70368
2	Analytical/Interpretive Skills	3.97	4.35	0.75490
3	Consulting Skills	3.53	4.28	0.82167
4	Integrating Financial/Non- Financial Info	3.22	4.16	0.86191
5	Teamwork	3.19	3.86	0.94574
6	Importance of Reporting	3.12	3.64	0.97224
7	Broad-Based Business Knowledge	3.07	3.37	0.92358
8	Interpersonal Skills	2.98	3.27	0.94495
9	Educator Skills	2.74	3.22	0.98338
10	Project Management	2.72	3.18	0.87380
11	Patience	2.56	3.13	0.96484
12	Leadership	2.38	2.94	0.93524
13	Project Focus	2.31	2.89	0.78276
14	Time Management	2.27	2.65	0.91652
15	Accounting	2.23	2.58	0.94854
16	Work Management	2.21	2.56	0.90621
17	IT/Systems Knowledge	2.18	2.20	0.51973

Table 3 The Importance of Skills Before and After ERP Implementation

Table 3 indicates that several skills experienced a notable increase in importance following ERP implementation. The top four skills demonstrating enhanced significance post-ERP utilization include cross-functional working relationships, analytical/interpretive skills, consulting skills, and the integration of financial and non-financial information, with mean scores ranging from 4.16 to 4.78. Notably, the least significant skill post-ERP implementation was IT/systems knowledge, which aligns with expectations as ERP users typically possess familiarity with their company's systems.

These findings align with prior research by Grabski et al. (2009a), Chen et al. (2012), Sangster et al. (2009), and Vakalfotis (2016), highlighting the consistent trend of increased importance placed on various skills post-ERP utilization, reflecting the evolving demands placed on management accountants in ERPenabled environments.

Interview Findings

Factors Influencing the Impact of ERP

To comprehend the interplay between the management accountant's role and ERP system implementation, previous studies, such as those conducted by Vakalfotis (2016) and Pervan and Dropulić (2019), have scrutinized the multifaceted factors that shape this relationship.

Following the initial questionnaire, respondents' companies were re-engaged for short telephone interviews to delve deeper into the underlying reasons behind the significant traditional role of management accountants (as depicted in Table 1) and their relatively moderate or low involvement in advanced tasks (as illustrated in Table 2). Twenty-five participants volunteered for these interviews, aiming to elucidate the primary factors influencing these outcomes.



The insights gleaned from these interviews were meticulously documented, analyzed, and synthesized, culminating in the identification of ten key factors, as outlined in Table 4. Participants unequivocally articulated their perspectives on the impact of ERP systems on the management accountant's role, emphasizing pivotal factors for enhancing the utility and efficacy of these systems. Paramount among these factors were the management accountant's involvement, training initiatives, top management support, the proficiency of management accountancy skills, top management commitment, and education and awareness of employees, particularly management accountants. Additionally, interviewees highlighted other pertinent factors such as follow-up on ERP system updates post-implementation, employee resistance, the ERP implementation process, and expectations of the ERP system.

Although categorized into three main pillars, as elucidated in Figure 1, interdependencies among these factors were discernible. This underscores the imperative of collaborative effort among the organization, management accountants, and the ERP system to maximize system achievements. In essence, successful ERP implementation necessitates cohesive teamwork and concerted efforts from all stakeholders.



Fig. 1. Theoretical Framework (Model)

Building upon the study's findings and insights gleaned from prior research, the researchers propose a comprehensive framework (model) to elucidate the intricate relationship between the three pillars crucial for achieving successful outcomes in ERP system implementation. These pillars encompass:

- Organization: Encompassing top management and all pertinent factors within the organization, as delineated in Table 4.
- ERP Systems: Encompassing the ERP system, its implementation process, and vendors, alongside associated factors highlighted in Table 4.

• Management Accountant: Encompassing management accountants, their roles, and skills, alongside pertinent factors highlighted in Table 4.

This theoretical framework offers a holistic perspective, delineating the interconnections among these three pivotal pillars and underscoring the collaborative synergy required to realize optimal outcomes in ERP system implementation.

Management Accountant's Skills and Academic Education

Following an examination of the questionnaire findings highlighted in Table 3, the research team sought to explore the types of skills offered to accounting students by Jordanian universities. To achieve this, the team reached out to accounting professors at reputable Jordanian universities, outlining the study's purpose and inviting their participation in telephone interviews. Ultimately, eight accounting professors from four esteemed universities agreed to partake in these interviews.

The primary objective of these interviews was to ascertain the extent to which accounting graduates in these universities were equipped with the skills reported in Table 3.

In synthesizing the responses of all interviewees, it is evident that Jordanian universities and their academic programs do not furnish accounting students with the skills outlined in the study (refer to Table 3). The professors unanimously acknowledged the absence of such skills in their offerings and underscored their significance, concurring that graduate students should possess these skills before entering the workforce.

Discussion and Conclusion

The findings of this study align with previous research, including studies by Grabski et al. (2009a; 2009b), Chen et al. (2012), Vakalfotis (2016), Pervan and Dropulić (2019), Todorović and Čupić (2023), and Alsughayer (2024). However, inconsistencies were observed with other studies such as Booth et al. (2000), Granlund and Malmi (2002), Jack and Kholeif (2008), and Hyvönen et al. (2009).

Impact of ERP on Management Accountant's Role and Skills

The results from Tables 2 and 3 highlight the significant influence of ERP systems on the management accountant's role and skills. Management accountants have shifted their focus towards more



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Rank	Reasons (Factors)	No. of interviewes	Prior studies	Category
1	Management accountant's involvement in ERP system implementation.	22	Grabski et al. (2009a); Grabski et al. (2009b); Chen et al. (2012); Vakalfotis (2016)	Management accountant and organization
2	Training	22	Grabski et al. (2009b); Vakalfotis (2016)	Management accountant and organization
3	Top management support	21	Grabski et al. (2009b); Vakalfotis (2016)	Organization
4	Management accountancy skills	20	Grabski et al. (2009a); Grabski et al. (2009b); Sangster et al. (2009); Vakalfotis (2016); Pervan and Dropulić (2019)	Management accountant
5	Top management commitment	19	Grabski et al. (2009b); Vakalfotis (2016)	Organization
6	Education / awareness	17	Vakalfotis (2016); Pervan and Dropulić (2019).	Management accountant and organization
7	Follow-up / updates on ERP system after implementation	15	Vakalfotis (2016)	Management accountant and organization
8	Employee resistance	14	Vakalfotis (2016); Scapens and Jazayeri (2003)	Management accountant and organization
9	ERP implementation process	12	Sangster et al. (2009); Grabski et al. (2009b)	ERP systems and organization
10	Expectations of ERP	11	Vakalfotis (2016); Grabski et al. (2009b)	Management accountant and organization

Table 4 Factors that Influence the Impact of ERP

advanced tasks post-ERP implementation, including business planning, performance evaluation, information communication, and problem-solving. However, tasks like risk management, strategy formulation, change management, and value creation remain secondary, potentially linked to the level of ERP implementation success. The persistence of traditional tasks underscores the incomplete integration of ERP into management accounting functions, suggesting a need for more successful ERP implementations or further time for their impact to fully manifest.

Importance of Successful ERP Implementation

The success of ERP implementation is crucial for enhancing the management accountant's role. Studies by Grabski et al. (2009a; 2009b) emphasize that successful ERP implementation empowers management accountants to become strategic business consultants, thereby amplifying their contributions. This underscores the need for effective ERP systems that facilitate value-adding tasks and allow management accountants to allocate more time to strategic endeavors.

Continuous Development of Management Accountant's Role

ERP implementation does not diminish the management accountant's role but rather necessitates ongoing development. The evolving nature of management accounting demands continuous engagement with ERP systems to monitor, analyze, and improve their functionality. Therefore, management accountants must



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Table 5			
Types of Skills	Offered by	Jordanian	Universities

Professor Name	Comments and Statements	
Professor 1	"Our curriculum is replete with diverse courses, particularly in accounting, but I cannot recall us teaching such skills."	
Professor 2	"Our university's accounting program is robust, offering excellent courses. However, while we impart some skills, they do not align with those mentioned."	
Professor 3	"We focus on imparting communication, computer, and English skills, but not the ones you've mentioned."	
Professor 4	"Our students have access to numerous courses, including financial reporting and analysis, but not the skills outlined here."	
Professor 5	"Regrettably, we adhere to outdated teaching philosophies and do not cover these skills at all."	
Professor 6	"Our accounting program mirrors those of other universities worldwide. These skills are novel to us and are not part of our curriculum."	
Professor 7 "Students have the option to pursue courses post-graduation. We priori teaching accounting and busines fundamentals."		
Professor 8	"We do not incorporate these skills into our curriculum, although they are crucial for students to possess upon graduation."	

possess the requisite knowledge and skills to leverage ERP systems effectively, as these systems complement rather than replace human intellect and expertise.

In conclusion, this study underscores the dynamic interplay between ERP systems and the management accountant's role, emphasizing the need for collaborative efforts to optimize ERP implementation outcomes and enhance the management accountant's contributions to organizational success.

Theoretical and Practical Implications

The study's model (Figure 1) offers valuable insights and recommendations for organizations, academic institutions, and ERP system developers:

• For Organizations: Sustained top management support and commitment are imperative for ERP success. Comprehensive training and awareness programs should precede and follow ERP implementation to ensure employee readiness and alignment with organizational objectives.

- For Management Accountants: Proficiency in the skills outlined in this study is essential for management accountants pre- and post-ERP implementation. Active involvement in the implementation process, coupled with ongoing training and support, is crucial to address evolving challenges effectively.
- For ERP Systems: System vendors must tailor ERP solutions to meet clients' specific needs, considering their business environment, existing systems, and decision-making processes. Involving professional management accountants in system development can mitigate shortcomings and enhance system effectiveness.

Future Directions

Further research is warranted to delve deeper into several areas:

- Assessing the success of ERP implementation and its implications for the management accountant's role and skills.
- Exploring the level of collaboration among organizations, academic institutions, and professional bodies to meet evolving market demands.
- Investigating the adequacy of accounting graduates' skills for contemporary market requirements and identifying barriers to skill acquisition.

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Competing Interests

The authors of this publication declare there are no competing interests.

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