



DIGITAL SKILLS OF ACCOUNTANTS IN THE BANKING INDUSTRY: A COMPARATIVE ANALYSIS ACROSS LEVELS OF AUTHORITY

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ABSTRACT

This study examined the utilization and perceived importance of digital skills among accountants in the banking industry of Makati City across top, middle, and lower levels of authority. Guided by Becker's Human Capital Theory, the study aimed to assess variations in digital skill utilization, differences in perceived importance, and the presence of significant differences when accountants are grouped by level of authority. Quantitative design was employed using a structured survey questionnaire administered to 189 accountants. The study focused on five digital skills: Data Management and Analytics, Accounting Software Proficiency, Advanced Excel Skills, Problem Solving and Critical Thinking, and Cybersecurity Awareness. Descriptive statistics and Analysis of Variance were used for data analysis. Results showed that all five digital skills were highly utilized and regarded as important across all authority levels. Significant differences were found based on the level of authority. The study concludes that continuous digital training is essential.

Keywords: *Digital Skills, Accountants, Banking Industry, Level of Authority, Human Capital Theory*

INTRODUCTION

In the modern digital economy, technology plays a significant role in transforming professional practices across industries. In the accounting profession, notable changes have emerged through the adoption of information technology and the integration of digital tools into accounting processes. As a result, digital skills have become an essential requirement for accountants, enabling professionals to perform their responsibilities more efficiently and support organizational decision-making (Montgomery, 2022). Accountants who lack sufficient digital competencies may experience difficulty adapting to modern financial systems and meeting the demands of the contemporary workplace.

Digital skills in accounting extend beyond the basic use of applications such as Microsoft Office. Accountants are expected to utilize accounting information systems and other digital technologies that facilitate the efficient execution of accounting tasks. In highly digitalized sectors such as banking, accountants regularly interact with information technology systems and electronic financial platforms. Within such environments, digital competencies are considered a fundamental professional requirement (Brila & Catapang, 2020; Bangko Sentral ng Pilipinas [BSP], 2024). As the banking industry continues to integrate advanced information systems, the ability of accountants to manage, analyze, and interpret financial data within digital environments has become increasingly important.

Organizations typically operate within hierarchical structures in which responsibilities and decision-making authority vary across levels. In accounting departments, authority is commonly distributed among top-level, middle-level, and lower-level accountants, each assigned different roles and responsibilities. Higher-level accountants are generally involved in planning, financial analysis, and strategic decision-making, whereas

lower-level accountants are primarily responsible for operational tasks such as recording transactions and preparing financial reports (Liu et al., 2023; Xicang, 2024). Due to these differences in roles, the types and levels of digital skills required may vary depending on the accountant's position within the organizational hierarchy.

Despite the growing body of research emphasizing the importance of digital competencies in accounting, limited studies have examined how these skills differ across hierarchical levels within organizations. Most existing research focuses on the overall importance of digital skills among accounting students or professionals without considering variations in their application and significance across levels of authority (Pargmann, Zolnowski, & Müller, 2023; Rahim et al., 2024). This limitation suggests a research gap, particularly in banking institutions where digital technologies are extensively implemented.

To address this gap, the present study aims to examine the usage and significance of selected digital skills among accountants working in commercial banking institutions and to determine how these skills vary across different levels of authority. Specifically, the study focuses on five key digital competencies: data management and analytics, accounting software proficiency, advanced Excel skills, problem-solving and critical thinking, and cybersecurity awareness. By analyzing these competencies across hierarchical levels, the study seeks to generate insights that may contribute to the development of professional training programs and the improvement of accounting education curricula for future accountants.

Theoretical Background

This study is guided by Becker's Human Capital Theory (1964), which explains that education and training are investments that help individuals gain knowledge and skills, increasing their productivity and value in the workplace. Human capital refers to the abilities and knowledge that

improve work performance and contribute to organizational success. In this study, Human Capital Theory is used solely as a conceptual framework and is not empirically tested. It serves as a guiding lens for understanding how digital skills function as human capital among accountants in the banking industry. As accounting work becomes increasingly technology-driven, digital competencies are essential for maintaining accuracy, efficiency, and reliability in financial operations.

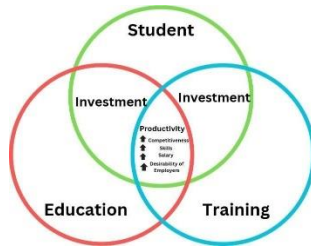


Figure 1. Becker's Human Capital Model

The digital competencies examined in this study include Data Management and Analytics, Accounting Software Proficiency, Advanced Excel Skills, Problem-Solving and Critical Thinking, and Cybersecurity Awareness. These competencies directly support productivity in accounting tasks. For instance, proficiency in accounting software improves the speed and accuracy of financial reporting, advanced Excel skills enhance data analysis and reconciliation, problem-solving skills assist in addressing complex financial issues, and cybersecurity awareness helps safeguard sensitive financial information. Although the acquisition pathways of these digital skills were not examined, Human Capital Theory provides a theoretical lens for evaluating their importance, utilization, and contribution to workplace performance. Through this framework, the study examines how digital competencies are valued and applied across different levels of authority within the banking sector, illustrating how human capital is manifested through digital proficiency in professional accounting practice.

Review of Related Literature

Digital Skills in Accounting

The accounting profession has undergone significant changes due to the rapid development of digital technologies. Traditional accounting activities have increasingly shifted toward technology-based processes, requiring accounting professionals to demonstrate competencies in areas such as data management, data analysis, and the interpretation of accounting information through digital tools (Montgomery, 2022). As financial transactions and reporting processes are increasingly managed through digital platforms, accountants are required to develop technological competencies that support the efficient and accurate processing of financial information.

Previous studies have emphasized that digital literacy and technological competence are now considered essential skills for accounting professionals. According to Pargmann, Zolnowski, and Müller (2023), digitalization has transformed accounting processes through the integration of automated systems, data analytics, and cloud-based financial management tools. Similarly, Elo (2024) noted that accountants are expected to possess both traditional accounting knowledge and technological competencies in order to operate effectively within contemporary financial environments.

Despite the increasing importance of digital competencies, several studies indicate that accounting graduates often lack sufficient technological skills when entering the workforce. Briones, Dela Cruz, and Santos (2021) found that accounting graduates experience difficulties in the use of spreadsheet applications and accounting software, which may affect their

work performance. Similarly, Rodriguez, Delos Santos, and Cruz (2024) reported that limited exposure to digital tools during academic training contributes to skill gaps among accounting graduates when they transition to professional practice. These findings suggest the need to strengthen digital competency development within accounting education and professional training programs.

ERP and Accounting Information System (AIS) Adoption

The adoption of Enterprise Resource Planning (ERP) systems and Accounting Information Systems (AIS) has contributed to the digital transformation of accounting practices. These systems allow organizations to integrate financial information, automate reporting processes, and improve the management of financial data (Brila & Catapang, 2020). As organizations increasingly rely on these systems, accountants are required to demonstrate competence in using digital accounting technologies to support financial operations.

Existing research indicates that the implementation of AIS and ERP systems can improve efficiency, transparency, and regulatory compliance in financial management processes. Cammayo and Gonzales (2020) reported that accounting information systems contribute to improved financial reporting accuracy by reducing the occurrence of manual errors. In addition, Castrol, Santos, and Reyes (2024) observed that digital accounting tools enable accountants to process large volumes of financial data more efficiently.

In the banking sector, the role of digital technologies has become more prominent due to the complexity of financial transactions and the need to comply with regulatory requirements. Reports from the Bangko Sentral ng Pilipinas (2024) indicate that financial institutions increasingly utilize digital financial platforms and electronic reporting systems to ensure compliance with financial regulations and reporting standards. Consequently, accountants working in banking institutions are expected to possess competencies in the use of digital financial systems to support regulatory compliance and financial reporting.

Authority Levels and Skill Variation

Organizational hierarchy plays an important role in defining the responsibilities and functions of accounting professionals. In many organizations, accounting personnel operate within hierarchical structures that include top-level, middle-level, and lower-level accountants. Each level involves specific responsibilities that influence the manner in which digital tools and technological competencies are applied within the workplace.

Lower-level accountants typically perform operational functions such as data entry, reconciliation, and report preparation, which require technical proficiency in spreadsheet applications and accounting software (Garcia, 2024). In contrast, middle-level accountants are more frequently responsible for financial analysis, monitoring activities, and compliance-related tasks, which require the use of analytical tools and financial management systems (Liu et al., 2023). At the top level, accountants are commonly involved in strategic planning, evaluation of financial systems, and organizational decision-making, which require the interpretation of complex financial data and the assessment of organizational performance (Santos & Dela Cruz, 2023).

Access to digital tools and training opportunities may also vary according to hierarchical position within an organization. Zafar et al. (2023) reported that employees occupying higher managerial positions are more likely to receive advanced digital training and exposure to complex information systems compared to employees in operational roles. This variation in training and system access may influence the development

and application of digital competencies across different levels of authority.

Gaps in Education and Industry Alignment

Educational and organizational contexts influence the development of digital competencies among accounting professionals. Integrating information technology (IT) and accounting information systems (AIS) into accounting curricula improves students' technical proficiency and preparedness for digital accounting environments (Baylon et al., 2020; Baldris et al., 2024). However, studies report that accounting graduates often lack practical exposure to enterprise resource planning (ERP) systems and advanced accounting software, indicating a gap between academic preparation and industry requirements (Guanlao et al., 2023).

Despite the recognized importance of digital competencies, limited research has examined how these skills vary across hierarchical levels within organizations. Most existing studies assess digital competencies among accounting graduates or professionals as a general group without analyzing differences in skill utilization across authority levels. This study addresses this gap by examining the utilization and perceived importance of digital skills among accountants working at different levels of authority within commercial banking institutions.

Conceptual Framework

Figure 2 presents the conceptual framework of the study, which explains the relationship between the digital skills of accountants and their application in the banking industry. The independent variable, Digital Skills of Accountants, consists of five competencies: Data Management and Analytics, Accounting Software Proficiency, Advanced Excel Skills, Problem-Solving and Critical Thinking, and Cybersecurity Awareness. The dependent variables include the extent of utilization of digital skills, their perceived importance, and the differences in digital skills across levels of authority.

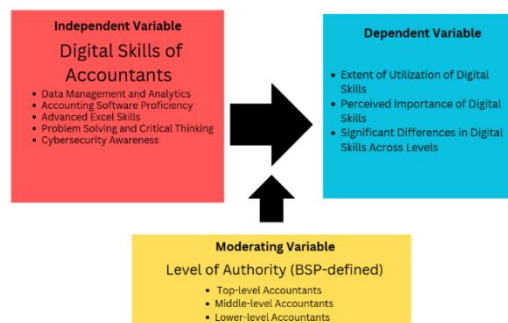


Figure 2. The Relationship Among Digital Skills of Accountants, Level of Authority, and Their Utilization and Perceived Importance in the Banking Industry

The Level of Authority, classified as Top-level, Middle-level, and Lower-level accountants based on the Bangko Sentral ng Pilipinas (BSP) structure, serves as the moderating variable that influences how these skills are applied and valued in practice. The framework is grounded in Gary Becker's Human Capital Theory (1964), which views skills as valuable resources that enhance work performance.

The selection of the five digital skills is supported by prior frameworks and studies discussed in the Review of Related Literature. Technical and analytical competencies—such as data management, accounting software proficiency, and advanced Excel skills—have been shown to improve efficiency, accuracy, and compliance in accounting and banking operations (Brila & Catapang, 2020; Cammayo & Gonzales, 2020). Problem-solving and critical thinking are identified as essential cognitive skills that support professional judgment and decision-making,

particularly at higher organizational levels (Santos & Dela Cruz, 2023). Cybersecurity awareness is likewise recognized as a core compliance and risk-management competency due to the banking sector's reliance on digital systems and strict data protection requirements (Bangko Sentral ng Pilipinas, 2020). Together, these skill categories reflect the core digital competencies required for effective accounting practice in the modern banking environment.

METHODOLOGY

Research Design

This study employed a quantitative descriptive-comparative research design to examine the level of utilization and perceived importance of digital skills among accountants in the banking industry according to their level of authority.

A quantitative approach was appropriate because the study involved the collection and analysis of numerical data to measure patterns of digital skill utilization and perceived importance. The descriptive component was used to determine the frequency of digital skill usage and the extent to which these skills are considered important in the performance of accounting tasks. This approach enabled the researchers to systematically describe the current digital skill practices of accountants in the banking sector.

The comparative component was applied to determine whether significant differences exist in digital skill utilization among accountants when grouped according to their level of authority. Specifically, the study compared top-level, middle-level, and lower-level accountants. This design is appropriate for examining variations across naturally occurring groups without manipulating the variables under investigation.

Subjects of the Study

The respondents of the study were accounting professionals employed in commercial banks located in Makati City, Metro Manila. The study population consisted of 595 accounting employees from 13 commercial banks.

The required sample size was determined using the Cochran formula, which produced a target sample of 234 respondents. However, a total of 189 valid responses were obtained and included in the final analysis.

Purposive sampling was used to select respondents who met specific professional qualifications relevant to the objectives of the study. This sampling method was appropriate because access to bank personnel is limited, and the research required participants who are directly involved in accounting operations and digital financial processes. The following inclusion criteria were applied:

1. The respondent must be assigned to the accounting department.
2. The respondent must hold a bachelor's degree in Accountancy or a related program.
3. The respondent must have at least three to five years of work experience in the banking industry.
4. The respondent must be employed in a commercial bank located in Makati City.
5. The respondent must occupy a recognized level of authority within the organization.

Respondents were categorized according to their level of authority based on the managerial hierarchy framework recognized in the organizational structure of the Bangko Sentral ng Pilipinas (BSP). The BSP Organization Primer classifies personnel into hierarchical tiers such as top

management, middle management, and first-line management, reflecting differences in responsibility and decision-making authority (Bangko Sentral ng Pilipinas, 2024).

Consistent with this framework and common banking industry practice, respondents were classified into three groups:

- Top-level accountants – individuals occupying managerial positions responsible for decision-making and strategic financial oversight.
- Middle-level accountants – individuals performing supervisory or senior roles involved in financial monitoring and coordination.
- Lower-level accountants – individuals performing operational accounting tasks such as transaction recording, reconciliation, and report preparation.

This classification enabled systematic comparison of digital skill utilization across different authority levels.

Study Site

The study was conducted in commercial banks located in Makati City, Metro Manila. Makati City was selected because it serves as the financial and commercial center of the Philippines, hosting the headquarters and major offices of many banking institutions.

Commercial banks were selected as the study setting because these institutions rely extensively on digital technologies to support financial operations. Accounting activities in banks commonly involve the use of digital accounting systems, enterprise resource planning (ERP) platforms, and financial management software. These systems require accountants to regularly interact with digital tools in the performance of their professional duties. The concentration of banking institutions in Makati City also provided an appropriate environment for obtaining respondents with relevant professional experience.

Data Measures and Instrumentation

Data were collected using a researcher-developed structured questionnaire based on a review of related literature concerning digital competencies in accounting and banking. The instrument consisted of two sections. The first section gathered demographic and professional information, including level of authority, years of work experience, and the accounting systems used by the respondents. The second section measured five dimensions of digital skills relevant to accounting practice:

- Data Management and Analytics Skills
- Accounting Software Skills
- Advanced Excel Skills
- Problem Solving and Critical Thinking Skills
- Cybersecurity Awareness Skills

A four-point Likert scale was used to measure responses. For digital skill utilization, the following scale was applied: 1 – Never Used, 2 – Rarely Used, 3 – Often Used, and 4 – Very Often Used. For perceived importance: 1 – Strongly Disagree, 2 – Disagree, 3 – Agree, and 4 – Strongly Agree.

Content validity was established through expert evaluation, in which specialists in accounting and research methodology reviewed the questionnaire to assess the relevance and clarity of the items. A pilot test was subsequently conducted to evaluate the reliability of the instrument.

Reliability analysis using Cronbach's alpha produced the following results: Data Management and Analytics ($\alpha = 0.960$, Excellent), Accounting Software Proficiency ($\alpha = 0.803$, Good), Advanced Excel Skills ($\alpha = 0.837$, Good), Problem Solving and Critical Thinking ($\alpha = 0.718$,

Acceptable), and Cybersecurity Awareness ($\alpha = 0.954$, Excellent). These results confirm that the instrument is reliable for the study. These values indicate acceptable to high internal consistency, confirming that the instrument is suitable for data collection.

Data Collection Procedure and Ethical Considerations

Data were collected through an online survey administered using Google Forms. Before completing the questionnaire, respondents were provided with a clear explanation of the purpose of the study, the procedures involved, and the estimated time required to complete the survey. Participation in the study was voluntary, and respondents were required to provide informed consent before proceeding with the questionnaire.

Ethical principles were observed throughout the research process. Respondents were assured that their participation would remain confidential and anonymous, and no personally identifiable information was included in the data analysis. The collected data were stored in password-protected digital files and were accessible only to the researchers responsible for the study.

All procedures complied with the provisions of the Data Privacy Act of 2012 (Republic Act No. 10173). The research protocol was also reviewed and approved by the Research Ethics Committee prior to data collection.

Data Analysis

After data collection, the responses were organized and analyzed using appropriate statistical techniques to determine the level of utilization and perceived importance of digital skills among accountants. Descriptive statistics, including means and standard deviations, were used to summarize the levels of digital skill utilization and perceived importance across the five competency areas.

To determine whether significant differences exist among accountants when grouped according to their level of authority, Analysis of Variance (ANOVA) was employed. This statistical test is appropriate for comparing the means of three independent groups. Prior to conducting ANOVA, the assumptions of normality and homogeneity of variance were examined to ensure the validity of the analysis. The decision to accept or reject the null hypothesis was based on the results of the ANOVA using a predetermined level of significance.

RESULTS AND FINDINGS

Profile of the Respondents

The demographic and professional profile of the respondents indicates that the workforce is largely concentrated in the early to mid-career stages. A substantial proportion of respondents fall within the 30–36 age group and report between one and eight years of professional experience. This distribution suggests that the accounting workforce in the surveyed institutions is primarily composed of individuals in the early stages of their professional careers, where technical competence and digital adaptability are required for the execution of routine accounting tasks. The predominance of respondents occupying entry-level and junior positions reflects the operational structure commonly observed in banking institutions, where a larger number of personnel is required to perform transaction processing, financial documentation, and reporting functions compared with the smaller number of personnel assigned to supervisory or managerial roles.

The distribution of authority among respondents reflects a hierarchical organizational structure characterized by a larger proportion of lower-level accountants and a smaller representation of middle- and top-level personnel. This pyramidal structure indicates that the data collected in the

study largely represents the perspectives of accountants involved in operational and data-intensive activities. In contrast, the smaller proportion of respondents in higher authority levels reflects positions that are typically associated with supervisory responsibilities, financial analysis, and decision-making functions.

Table 1. Summary of the Respondents' Demographic Profile

Profile		Frequency	Percentage
Gender	Male	106	56%
	Female	83	44%
Age	23 - 29	49	26%
	30 - 36	89	46%
	37 - 43	22	12%
	44 - 50	18	10%
	51 - 57	11	6%
Years of Experience	1 - 8	124	66%
	9 - 16	28	15%
	17 - 24	25	12%
	25 - 32	9	5%
	33 - 40	3	2%
ERP/Systems	SAP	26	14%
	Oracle	55	29%
	NetSuite	27	14%
	Finacle	38	20%
	IBPS	20	11%
Level of Authority	Temenos	23	12%
	Top-level accountants	13	7%
	Middle-level accountants	52	27%
	Lower-level accountants	124	66%
TOTAL		189	100%

In addition, the reported use of multiple accounting systems, including Oracle, Finacle, SAP, and NetSuite, indicates that the participating institutions operate within a heterogeneous technological environment. The presence of several financial management platforms suggests that accounting personnel are required to work with different digital systems depending on departmental functions and operational requirements. This multi-system environment implies that accountants in the banking sector must demonstrate familiarity with various financial software platforms rather than relying on a single standardized system across the organization.

Extent of Utilization of Digital Skills by Level of Authority

Data Management and Analytics

Table 2 responses indicate that accountants across different authority levels engage in data management and analytical processes in the performance of accounting tasks, including handling financial data, organizing accounting information, and interpreting outputs generated by digital systems. Variations in responses across authority levels indicate differences in the extent to which these skills are applied within specific roles. These differences may reflect variations in job responsibilities, where certain positions require greater engagement with data evaluation and analytical interpretation.

Table 2. Mean and Standard Deviation: Data and Management Analytics

Data Management and Analytics	Mean	SD	Interpretation
Top-level accountants	3.67	0.48	Strongly Agree
Middle-level accountants	3.53	0.51	Strongly Agree
Lower-level accountants	3.33	0.52	Strongly Agree

Accounting Software Proficiency

Table 3 responses indicate that the use of accounting software forms part of routine accounting activities within banking institutions. These systems support financial transaction recording, monitoring of financial data, and preparation of accounting reports. Differences in responses among the authority levels suggest variation in how accounting systems are used within different roles. Some positions may involve direct interaction with system inputs and transaction processing, while others may focus more on reviewing outputs or monitoring system-generated reports.

Table 3. Mean and Standard Deviation: Accounting Software Proficiency

Accounting Software Proficiency	Mean	SD	Interpretation
Top-level accountants	3.58	0.48	Strongly Agree
Middle-level accountants	3.48	0.50	Strongly Agree
Lower-level accountants	3.40	0.52	Strongly Agree

Advanced Excel Skills

Table 4 responses indicate that accounting software is used in routine accounting activities, including transaction recording, financial data monitoring, and report preparation within banking institutions. Variations across authority levels suggest differences in system interaction, where some roles involve direct engagement with transaction processing while others focus on reviewing outputs and monitoring system-generated reports.

Table 4. Mean and Standard Deviation: Accounting Software Proficiency

Advanced Excel Skills	Mean	SD	Interpretation
Top-level accountants	3.70	0.45	Strongly Agree
Middle-level accountants	3.62	0.53	Strongly Agree
Lower-level accountants	3.56	0.54	Strongly Agree

Problem Solving and Critical Thinking

Table 5 responses indicate that analytical reasoning and evaluation processes are applied in accounting tasks, including examining financial records, identifying issues in accounting data, and assessing financial information during reporting or review activities. Variations across authority levels suggest differences in the nature and scope of analytical responsibilities. Some roles require greater involvement in evaluating financial information and addressing accounting-related issues, reflecting the distribution of tasks according to hierarchical position.

Table 5. Mean and Standard Deviation: Problem Solving and Critical Thinking

Problem Solving and Critical Thinking	Mean	SD	Interpretation
Top-level accountants	3.92	0.28	Strongly Agree
Middle-level accountants	3.37	0.48	Strongly Agree
Lower-level accountants	3.36	0.51	Strongly Agree

Cybersecurity Awareness

Table 6 responses indicate that accountants demonstrate awareness of practices for protecting financial information within digital accounting systems, including responsible data handling and adherence to security procedures. Variations across authority levels suggest that this awareness is linked to interaction with digital financial systems. Accountants at all levels recognize the importance of safeguarding financial records processed through technology-based platforms.

Table 6. Mean and Standard Deviation: Cybersecurity Awareness

Cybersecurity Awareness	Mean	SD	Interpretation
Top-level accountants	3.62	0.50	Strongly Agree
Middle-level accountants	3.54	0.52	Strongly Agree
Lower-level accountants	3.50	0.54	Strongly Agree

Perceived Most Essential Digital Skills by Level of Authority

Top-Level Accountants

Table 7 responses indicate that accountants recognize digital competencies related to information evaluation and analytical interpretation, which support reviewing financial information and assessing accounting data. Variations in responses suggest that these skills are particularly relevant in roles involving managerial oversight and financial evaluation. This pattern reflects the association between analytical digital competencies and responsibilities that require higher-level decision-making.

Table 7. Mean and Standard Deviation: Perceived Most Essential Digital Skills by Top-level Accountants

Top-Level Accountants	Mean	SD	Interpretation
Data Management and Analytics	3.67	0.48	Strongly Agree
Accounting Software Proficiency	3.58	0.48	Strongly Agree
Advanced Excel Skills	3.70	0.45	Strongly Agree
Problem Solving and Critical Thinking	3.92	0.28	Strongly Agree
Cybersecurity Awareness	3.62	0.50	Strongly Agree

Middle-Level Accountants

Table 8 responses indicate that accountants recognize digital competencies that support the management of accounting data and the preparation of financial reports. These skills are associated with tasks involving the coordination of accounting processes and supervision of financial information. The pattern of responses suggests that digital tools facilitating both analytical and operational activities are particularly relevant to middle-level accounting responsibilities.

Table 8. Mean and Standard Deviation: Perceived Most Essential Digital Skills by Middle-level Accountants

Middle-Level Accountants	Mean	SD	Interpretation
Data Management and Analytics	3.53	0.51	Strongly Agree
Accounting Software Proficiency	3.48	0.50	Strongly Agree
Advanced Excel Skills	3.62	0.53	Strongly Agree
Problem Solving and Critical Thinking	3.37	0.48	Strongly Agree
Cybersecurity Awareness	3.54	0.52	Strongly Agree

Lower-Level Accountants

Table 9. Mean and Standard Deviation: Perceived Most Essential Digital Skills by Lower-level Accountants

Lower-Level Accountants	Mean	SD	Interpretation
Data Management and Analytics	3.33	0.52	Strongly Agree
Accounting Software Proficiency	3.40	0.52	Strongly Agree
Advanced Excel Skills	3.56	0.54	Strongly Agree
Problem Solving and Critical Thinking	3.36	0.51	Strongly Agree
Cybersecurity Awareness	3.50	0.54	Strongly Agree

Table 9 responses highlight competencies associated with operational accounting tasks that require direct interaction with digital tools. Skills in accounting software, spreadsheet applications, and financial data

handling are particularly relevant to these roles. The pattern of responses reflects the focus of lower-level accounting positions on system-based processes and routine management of financial information.

Differences in Digital Skills When Grouped According to Level of Authority

Table 10. Differences in Digital Skills when Grouped According to Level of Authority

Digital Skills	F	p-value	Decision	Conclusion
Data Management and Analytics	16.68	<.001	Reject Ho	Significant
Accounting Software Proficiency	3.74	0.034	Reject Ho	Significant
Advanced Excel Skills	1.01	0.375	Do not reject Ho	Not significant
Problem Solving and Critical Thinking	43.92	<.001	Reject Ho	Significant
Cybersecurity Awareness	0.51	0.604	Do not reject Ho	Not significant

The analysis compares the responses of top-level, middle-level, and lower-level accountants to assess potential variations in the utilization of the digital skills measured in the study. The statistical procedure evaluates whether differences exist among the groups across the identified competencies. The results provide an overview of how digital skill utilization is distributed across authority levels within the accounting profession in the banking sector

DISCUSSION

This study found that accountants in commercial banks utilize digital skills extensively, with variations in application according to level of authority. The five key competencies, Data Management and Analytics, Accounting Software Proficiency, Advanced Excel Skills, Problem-Solving and Critical Thinking, and Cybersecurity Awareness, were consistently recognized as essential, reflecting the banking sector's reliance on digital systems to support operational and regulatory requirements (Montgomery, 2022; Brila & Catapang, 2020; Bangko Sentral ng Pilipinas, 2024). The pervasive use of these competencies indicates that digital tools are embedded across accounting tasks, from routine data processing to strategic decision-making.

The results indicate that top-level accountants demonstrate greater utilization of data management, problem-solving, and analytical skills, consistent with their responsibilities in strategic planning, performance evaluation, and decision-making. In contrast, middle- and lower-level accountants focus more on technical competencies, including Excel, accounting software, and cybersecurity, reflecting their engagement with operational accounting processes that require accuracy and adherence to system protocols (Santos & Dela Cruz, 2023; Liu et al., 2023; Garcia, 2024; Al-Htaybat & von Alberti-Alhtaybat, 2023). These patterns suggest that the nature of work at different hierarchical levels influences the specific digital skills applied.

ANOVA results confirmed significant differences in certain digital skills across authority levels, particularly in data management, accounting software proficiency, and problem-solving and critical thinking. These differences may be attributed to greater access to advanced systems and targeted training for higher-level roles, enabling engagement in more complex analytical and evaluative tasks (Koh, Hsiao, & Lee, 2024; Zafar et al., 2023). The absence of significant differences in Excel and cybersecurity skills indicates that these competencies are standardized

across roles, likely due to organizational policies and industry-wide operational and security protocols.

These findings align with Becker's Human Capital Theory, demonstrating that the application and value of digital skills are shaped by job responsibilities and organizational role. Practically, the results suggest that banks could implement role-specific digital training programs, enhancing strategic and analytical capabilities for senior accountants while reinforcing technical and cybersecurity competencies among junior staff. Empirically, the study provides evidence that authority level is a critical factor influencing digital skill utilization in technology-driven financial environments, contributing to the alignment of accounting education, professional training, and industry practice.

CONCLUSION

This study examined the utilization of digital competencies among accountants in commercial banks and assessed variations according to authority level. The results indicate that digital skills are extensively applied and considered essential for accounting operations, with competencies in data management, accounting software proficiency, Excel, problem-solving, and cybersecurity supporting accurate and efficient financial processes in technology-driven environments.

The findings further suggest that authority level influences the application of specific digital competencies. Senior accountants engage more frequently in analytical and strategic tasks, utilizing digital tools for decision-making and financial evaluation, whereas middle- and lower-level accountants predominantly apply operational skills for routine accounting functions. Competencies such as Excel and cybersecurity awareness are consistently required across all levels, reflecting standardized operational procedures and security requirements within banking institutions.

These results have implications for both professional practice and accounting education. Banks may enhance workforce capability by implementing role-specific digital training programs that develop analytical and strategic competencies for senior staff while reinforcing technical and cybersecurity skills for junior employees. Accounting curricula should incorporate practical training in digital tools, data analytics, and cybersecurity to better prepare graduates for the evolving demands of the banking sector. Future research could examine the development and application of digital competencies in other financial institutions or organizational contexts, as well as the impact of emerging technologies on accounting practices.

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