

# The Impact Of Digitalization On Management Accounting Practices Among Smes In China

Yu Xiaoli<sup>1\*</sup>, Nik Herda Nik Abdullah<sup>2</sup>

<sup>1</sup>Taylor's Business School, Taylor's University, Subang Jaya, Malaysia, School of Economics and Management, Yiwu Industrial & Commercial College, Zhejiang, China

<sup>2</sup>School of Accounting and Finance, Taylor's University, Subang Jaya, Malaysia

\*Corresponding author: Yu Xiaoli

\*Email address: yuxiaoli@sd.taylors.edu.my

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## ABSTRACT

Small and Medium Enterprises (SMEs) have a significant impact on the economics of many countries, especially in emerging nations including China. The 19th National Congress of the Communist Party of China and the revised "Small and Medium Enterprises Promotion Law" in 2023 provided clear guidelines on expenditures. The China's government encouraged SMEs to adopt modern technologies for innovation in production methods, operation modes, and management practices. However, there is a limited study investigates the significance of digitalization in assisting the adoption of MAPs, specifically in China. This study aims to analyses the influence of digitalization on MAPs, with a special emphasis on the strategies used by SMEs in China. The study used AMOS Structural Equation Modelling (SEM) to examine data obtained from 599 questionnaires using purposive sampling. The research results indicated that digitalization has a substantial impact on the MAPs among SMEs in China through IT capabilities, employees' digital culture, digital technologies and digital culture. This study adds to the growing literature on the MAPs and digitalization in China SMEs. Thus, the use of MAPs in organizations can significantly improve business performance and digitalization will not only enhances the effectiveness of MAPs, but also ensures the long-term viability of the firm and encourages the adoption of MAPs in China SMEs.

**Keywords:** management accounting practices, digitalization, small and medium-sized enterprises, IT capabilities, employees' digital capabilities, digital technologies, digital culture

## INTRODUCTION

Small and medium-sized enterprises (SMEs) play a crucial role in the majority of economies, with particular significance in China (MIIT, 2020). Given the intricate and ever-changing economic circumstances both domestically and internationally, the Chinese government has decided to give more importance to SMEs. MIIT announced the "Special Action Plan for Digital Empowerment of Small and Medium Enterprises (SMEs)" in March 2020. This endeavour used digital, network, and cognitive technologies to assist small and medium-sized enterprises in resuming industrial operations. During the 2020 Symposium on Private Enterprises, Chinese President Xi Jinping acknowledged the distinctive and substantial role that SMEs play in terms of employment, economic stability, and the development of innovation. Furthermore, their significance in the overall national economy begins to escalate (Xi, 2022). Therefore, it is crucial for many SMEs to enhance their performance in order to achieve long-term success and contribute to China's economic and social progress. From an accounting perspective, SMEs could adopt management accounting practices to improve their performance; hence, it is crucial for SMEs to understand the factors that influence the adoption of MAPs.

Previous research indicates that the implementation of digitalization mostly affects the management accounting systems and controls in organizations rather than the management accounting practices (MAPs) in SMEs in China. MAPs provide essential data for company planning, analysis, control, and decision-making. MAPs have a vital role in providing essential information to support strategic decision-making and the

development of corporate strategies (Fitriasari, 2020). Information systems are critical for optimizing processing efficiency, facilitating effective change management, and improving performance in organizations. The process of digitalization may impact the capacity of management accountants to effectively compile the necessary information to assist in their decision-making (Žandaravičiūtė & Varaniūtė, 2022). Hence, digitalization has a significant impact on MAPs, which are essential management tools for enhancing an organization's operations and performances.

Several researchers have focused on the crucial role of digitalization in improving organizations' performance in dynamic marketplaces. Furthermore, research has consistently highlighted the potential of digital capabilities and technologies to enhance financial performance, efficiency, and management, hence improving overall company performance (Žandaravičiūtė & Varaniūtė, 2022). Nevertheless, there is a lack of research specifically illustrating the beneficial effects of digitalization on MAPs, particularly in the context of SMEs in China that are experiencing digital transformation. The objective of this study is to close the theoretical gap. Studies also suggest that the staff is the most essential factor in driving digital transformation, and organizations must address the connection between digitalization and MAPs. Moreover, a multitude of studies have shown the substantial impact of factors such as digital capabilities and digital technologies on firms' decision-making processes. However, there is a notable lack of contemporary researchers using digitization to study its effects on MAPs in China SMEs.

This research investigates the impact of digitalization on China SMEs' implementation of MAPs, taking into account the explanation and study gap mentioned earlier. This study examines the relationship between digitalization and its impact on SMEs' MAPs in China. The paper is organized as follows: The opening of the study article provides an explanation of the contextual framework. The next section provides a detailed explanation of each variable and formulates hypotheses by conducting a comprehensive evaluation of relevant research studies. The next section reports the technique's results. We also discuss the study's conclusion and limitations, in addition to a comprehensive analysis of the results.

## LITERATURE REVIEW & HYPOTHESES DEVELOPMENT

### Small and Medium Enterprises in China

According to Xi (2022), China's small and medium-sized enterprises (SMEs) have made significant contributions to employment, economic development, and innovation. Despite the significant economic significance of SMEs, there is a lack of knowledge regarding the factors, outcomes, and challenges associated with the process of SME digitalization (Eller *et al.*, 2020). Min and Kim (2021) state that SMEs use big data and intelligence technologies. In addition, they construct platform development plans to enhance their company's innovation processes, particularly in the context of management accounting systems. Small and medium-sized enterprises (SMEs) should identify and rectify their shortcomings and adapt their plan to include advanced techniques that align with their pace of expansion. SMEs have the potential to enhance MAP development, increase market competitiveness, and achieve better economic outcomes by engaging in this practice (Liu, 2021). Therefore, MAPs contribute to enhancing the performance and efficiency of SMEs. The research demonstrates that digitalization aids organizations in efficiently implementing MAPs.

According to the previous study report, management accounting practices (MAPs), such as costing systems, budgeting systems, performance measurement systems (PMS), decision support systems (DSS), and strategic management accounting (SMA), are critical management tools. These tools utilize digital techniques to improve an organization's overall operational activities and enhance its performance. They effectively meet management's needs in a dynamic environment, adding value to the organization. Based on prior studies conducted in other countries, the research focus on MAPs (management accounting practices) varies across different nations, and there have been few studies on the impact of digitalization on the MAPs of SMEs in China. As a result, there is a lack of research on how digitalization affects the application of MAPs. Furthermore, researchers have found that there is currently no defined comprehensive framework for digitalization aspects that may serve as a model to promote the adoption of MAPs among SMEs in China. Therefore, it is crucial to conduct further research in these underexplored areas of literature with the aim of filling these gaps.

### Digitalization

Digitalization refers to various technology-driven organizational transformation processes, as often described by Heinzlmann (2019). Digitalization presents opportunities for the creation of new business models, particularly for SMEs, as it enhances their performance (Reim *et al.*, 2022). Simultaneously, the process of digitalization is spawning innovative business models that have the potential to significantly alter the existing corporate environment (Ritter & Pedersen, 2020). Firms of all sizes may improve their process of creating value by leveraging the benefits of digitalization (Fähndrich, 2023). Moreover, Bergh *et al.* (2019) suggest using digital technology to lessen information asymmetries. Digitalization may enhance firms' ability to achieve and maintain competitive advantages by bolstering their organizational flexibility and resilience (Davidsson *et al.*, 2020) and expanding the capabilities of company-wide ERP systems (Carlsson-Wall *et al.*, 2021). In addition, digitalization has a substantial role in the relationship between information technology and SME success, but it does not play a role in the relationship between digital strategy or staff skills and performance (Eller *et al.*, 2020). Consequently, digitalization has a significant impact on firms' business models, enhancing performance

and creating value to help them gain a competitive advantage.

Many organizations are reassessing their information system architectures due to the use of digital technologies, such as information technology (IT), information and communications technology (ICT), and disruptive technologies like blockchain (Saber *et al.*, 2019). Moreover, digital technology eradicates the obstacles that prevent the flow of information between users and organizations. This enables companies to extract the worth of user demand, incorporate user demand information into their creative research and development process, and significantly improve their efficiency in innovation (Lu & Li, 2021). An important approach for fostering employment expansion among China SMEs is the implementation of digital technology innovation (Yang, Zhu, & Tan, 2019). In the current era of global digitalization, SMEs are increasingly focusing on utilizing digital technology to enhance their production processes, management strategies, and foster sustainable growth. Notably, China SMEs are at the forefront of this digital economy revolution, serving as both the main driving force and primary battleground for digital innovation (Ban *et al.*, 2022). Thus, digitalization refers to the transition to a digital business model by using digital technology to revolutionize an organization's conventional business procedures and provide fresh avenues for revenue and efficiency (Gartner, 2020).

According to Moller *et al.* (2020), it is possible that digitization will have an effect on management accounting and control activities, as well as the duties of the controller. In addition to having a significant influence on how controllers operate, the process of digitalization also has an effect on our day-to-day lives. Additionally, as a result of the digitization process, the finance department has introduced business intelligence and data analytics (Deloitte, 2020). According to Knudsen's research from 2020, digitalization has the potential to disrupt MAPs. Digitalization, in particular, has a tremendous influence on the way in which individuals within an organization and across the management control (MC) system collaborate with one another (Grabis, 2019). It is possible that management accountants and other people would have unfavorable feelings as a result of the elimination of information gaps and the reform of management control processes (Fahndrich, 2023). According to Ratmono, Frendy, and Zuhrohtun (2023), the use of digitalization in management accounting systems contributes to an increase in the accuracy and promptness of accounting information, which ultimately results in cost savings. As a result, the ability of SMEs in emerging countries' metropolitan regions to make decisions has improved. Finally, the use of MAPs directly influences the performance of companies when digitization is deployed.

The Chinese government continues to place a high priority on the expansion of SMEs. In March 2020, the CAICT issued the "Small and Medium-Sized Firms' Digital Empowerment and Transformation Action Plan" to assist SMEs in restarting work and production through the utilization of digital, networked, and intelligence technologies (CAICT, 2020). Furthermore, the "Implementation Plan for Cultivating New Economic Development by Going to the Cloud and Empowering Intelligence with Data" proposes to speed up the process of "Going to the Cloud and Empowering Intelligence with Data" in April of 2020, with the specific goal of fostering the digital transformation of SMEs (CAICT, 2020). As a result, it is clear that implementing digitalization would make it easier for China's SMEs to achieve high-quality development.

### **Management Accounting Practices**

MAPs, or management accounting practices, are crucial in enhancing the effectiveness and productivity of small and medium enterprises (Ahmad, 2017). The use of MAPs aims to enhance the performance of SMEs by focusing on both financial and non-financial information, hence improving their management operations (Alvarez *et al.*, 2021). Small and medium-sized enterprises (SMEs) primarily use product cost information to make product pricing decisions, calculate profitability, and evaluate new product opportunities (Zehra & Ahmed, 2019). Zehra and Ahmed (2019) said that SMEs still employ traditional cost and management accounting methods because activities such as planning and control, budgeting, and strategy planning are crucial in management accounting. Furthermore, given the growth of SMEs in China, it is critical to actively embrace the management practices used by large corporations. This involves addressing any delays in their own operations and adjusting them accordingly after implementing advanced MAPs that align with their own growth objectives. By doing so, SMEs can ensure the progress of their MAPs and enhance their market competitiveness and economic advantages (Liu, 2021). In addition, the use of these MAPs, such as costing, budgeting, decision-making information, and performance assessment, has the potential to enhance the performance and productivity of SMEs in the Gauteng Province of South Africa (AlKhajeh & Khalid, 2018). As a result, implementing MAPs has a significant impact on improving SMEs' performance and efficiency.

Several researchers have focused on the crucial significance of MAPs in enhancing organizations' performance. Furthermore, research has consistently highlighted the potential of MAPs to improve financial performance, efficiency, and management, hence improving overall company performance (Žandaravičiūtė & Varaniūtė, 2022). Nevertheless, there is a lack of research specifically illustrating the beneficial effects of digitalization on MAPs, particularly in the context of SMEs in China that are experiencing digital transformation. The objective of this study is to close the theoretical gap. Studies also suggest that the staff is the most essential factor in driving digital transformation, and organizations must address the connection between digitalization and MAPs. Moreover, a multitude of studies have shown the substantial impact of factors such as digital technologies on firms' management accounting processes. However, there is a significant lack of contemporary researchers using digitization to study its effects on MAPs in China SMEs. Therefore, this study aims to fill the gaps in our understanding of these underexplored areas of literature.

## Hypotheses Development IT Capabilities and MAPs

Abdullah *et al.* (2020) established a correlation between information technology capabilities and MAPs. The use of information technology to attract customers has a profound impact on the growth and advancement of firms (Redjeki & Affandi, 2021). Incorporating IT skills into management accounting enables rapid website changes, which may benefit customers, investors, and creditors (Hariyati, Tjahjadi, & Soewarno, 2019).

The substantial concentration of information technology skills is expected to result in an increase in the utilization of MAPs. This is because MAPs possess the ability to process information quickly and provide reliable data analysis, thereby influencing the decisions made by management to improve companies' performance with sustainable competitive advantages (Marpaung, Aryati & Augustine, 2022). Studies about resource-based theory-based digital business strategies have focused on the IT capabilities of China SMEs. The findings of this study (Wang *et al.*, 2020) indicate that the implementation of digital business strategies has a positive and significant influence on the IT capabilities of Chinese businesses. According to the research findings (Abdullah *et al.*, 2020), the top management of government-affiliated businesses has a stronger understanding of strategic management approaches and believes that it may boost the performance of their organizations. On the other hand, previous studies have investigated the impact of different components of information technology on strategic management and business models within the framework of digitalization's implications. However, the impact of SMEs' IT capabilities on MAPs remains largely unexplored. This research intends to address this vacuum by conducting an analysis of the impact that digitalization has had on the MAPs of SMEs in China. As a result, the following assumptions are derived:

H1: The IT capabilities is positively associated with and the MAPs among SMEs in China.

## Employees' digital capabilities and MAPs

Digitalization primarily aims to improve and modernize old work practices, resulting in changes to the work environment for employees (Nasiri *et al.*, 2020). The utilization of digital technology enhances the reliability and timeliness of management accounting information. It enables the continuous, reliable, and comprehensive collection of data regarding external environmental changes. Additionally, the system has the capability to dynamically record all process information (Su *et al.*, 2020). Given the abundance of data sources and the vast quantity of information available, it is essential for workers to use data mining technologies in order to get high-quality information that is valuable for predicting managerial activities and making informed decisions (Zhang *et al.*, 2021). Employees should possess the ability to modify and coordinate data, establish video conferences, share screens, and configure access settings using remote collaboration tools, along with other digital technologies that enhance the visibility of labor processes, facilitate real-time progress monitoring, and mitigate shirking incentive schemes. These digital technologies include techniques for editing and synchronizing data, setting up video conferences, sharing screens, and configuring access settings (Bongiorno *et al.*, 2018). Teng, Wu, and Yang (2022) assert that the proficiency of workers in digital skills is a crucial determinant for the successful implementation of digitalization in China's SMEs. These SMEs heavily depend on a substantial workforce that has expertise in digital technologies to effectively understand and navigate these technologies and associated procedures.

Because of this, it is considered that the favorable impacts between the digital skills of workers and MAPs result in good outcomes. The following hypothesis, on the other hand, has been motivated mostly by a priori reasoning and the mainstream position in the ethical literature. This is due to the limited previous empirical evidence involving China SMEs and the constrained theoretical research on workers' digital abilities. Taking this into consideration, the following may be stated regarding the hypotheses of the study:

H2: The employees' digital capabilities are positively associated with the MAPs among SMEs in China.

## Digital technologies and MAPs

Sayudin, Nurjanah, and Yusup (2023), who conducted an analysis of a variety of digital technologies (DT), found that digital technologies increase the innovation and competitiveness of knowledge economy firms. Furthermore, they defined the connection between managerial roles and digital skills, asserting that essential digital talents include, among other things, artificial intelligence, blockchain, nanotechnology, robotic automation, the Internet of Things, digitalization, and mobile internet (Dash *et al.*, 2019). Additionally, digital technologies offer technological assistance for company management decision-making via functions such as accurate accounting data, data management and control, information integration, data mining, data visualization, and value discovery (Alam & Hossain, 2021; Platov, Kalemulloev, & Zikirova, 2021; AlAnsari *et al.*, 2022). Managers must use management accounting for MAPs whose outcomes must satisfy them before making or carrying out any decision (Andreassen, 2020; Moll & Yigitbasioglu, 2019). No decision may be made or carried out without management accounting. According to Arkhipova *et al.* (2024), digital technologies make it easier for management accounting procedures to evolve towards higher levels of automation, collaboration, visualization, and intelligence.

Research on the use of digital technology in management accounting by German SMEs has been undertaken (Pfister & Lehmann, 2022; Monteiro, 2023). Bhimani (2020) asserts that digital technologies have the capacity to enhance the efficiency and effectiveness of management accounting. Prior studies have examined several facets of digital technology in management and accounting systems, including ERP systems, management

control systems, and corporate performance. Nevertheless, there is a lack of comprehensive studies on the impact of digital technology on the market access strategies of SMEs in China. As a result, there is a scarcity of contemporary research that evaluates the potential benefits of using different digital technologies to enhance MAPs. Moreover, there is a scarcity of empirical research focusing on the correlation between digital technologies and MAPs in China's SMEs. This research seeks to address this deficiency by examining the impact of digital technologies on the MAPs of SMEs in Chinese sectors. Thus, the assumptions in this investigation might be stated as follows:

H3: The digital technologies are positively associated with the MAPs among SMEs in China.

**Digital culture and MAPs**

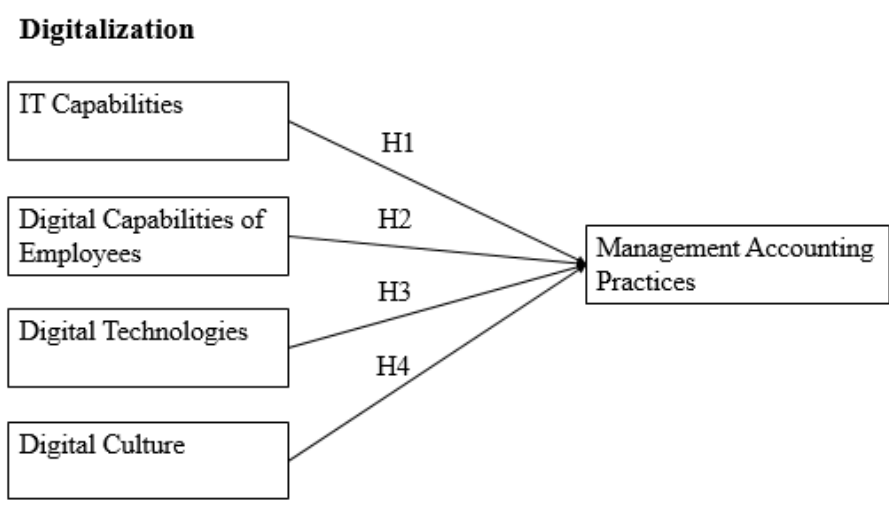
There is a scarcity of research examining the correlation between digital culture and MAPs. The company's efforts to cultivate a digital culture that stimulates creativity and innovation, resulting in the creation of digital value activities via the application of activities, rules, and procedures, serve as a means to start preparing for digital strategies in a swiftly changing environment (Pesce, Neirotti, & Paolucci, 2019; Müller *et al.*, 2019; Proksch *et al.*, 2024) Meanwhile, digital culture encompasses the cultural changes that have arisen from digitalization and impact people's attitudes, habits, and behaviors towards digital tools. It also enhances the effectiveness of a digital strategy by fostering innovative decision-making and creating new opportunities. Research conducted by Maduka, Mustapha, and Ajunwa (2022), examines the correlation between digital culture and management accounting procedures. As a result, the study found that the accounting culture encourages the use of innovative accounting techniques. Therefore, Al-Hattami (2022) anticipate that digital culture will impact MAPs, leading to enhanced decision-making and improved firm management.

Digital technologies play a crucial role in the process of digitalization. This topic has the potential to facilitate substantial progress when put into action. Digital technology has been the subject of numerous studies. Prior studies have examined several facets of digital technology. Nevertheless, there has been little study on the impact of digital technology on the market access strategies of SMEs in China. This research seeks to address this deficiency by examining the impact of digital culture on the market access barriers faced by SMEs in China. The favorable impacts of digital culture and MAPs are well acknowledged. Consequently, the ethical literature's widely accepted opinions and logical reasoning have largely shaped the study's recommendations, given the dearth of prior empirical data on digital culture and the lack of actual investigations into the relationship between digital culture and MAPs. The study's hypotheses suggest the following statements:

H4: The digital culture is positively associated with the MAPs among SMEs in China.

**Research Framework**

The research framework explains the independent-dependent relationship. This study's dependent variable is the Management Accounting Practices (MAPs). The independent variables of this study are derived from Digitalization: IT Capabilities (ITC), Digital Capabilities of Employees (DEC) and Digital Technologies (DT) and Digital Culture (DC). The study framework in Figure 1 exhibits the relationship between ITC, EDC, DT and DC on MAPs.



**Figure 1: Research Framework**

## METHODOLOGY

### Research Design

For the purpose of examining the correlations between variables and putting research hypotheses to the test, this study uses research measured hypotheses as well as proper technique and instrumentation. Furthermore, to achieve the study's objectives, we will employ a cross-sectional technique in conjunction with the questionnaire as the data collection tool. When designing a survey, it is common practice to select appropriate measures for variables based on the current body of research. The individuals who participated in this survey demonstrated extensive correlations with research models. The suggested study employs a questionnaire-based strategy to elicit answers from individuals eager to contribute to the investigation's research inquiries, with the aim of collecting empirical evidence to achieve its goal of gathering empirical data. The purpose of this study, within the context of China's SMEs, is to investigate the influence that digitalization has had on MAPs. Consequently, this study employs a quantitative research methodology, using a survey instrument to gather and assess quantitative data on each variable. Additionally, the study investigates the association between digitalization and MAPs in China's SMEs.

### Data Collection

The Ministry of Industry and Information Technology of the People's Republic of China's (MIITPRC) Bureau of SMEs (2021) reports that China has more than 400,000 SMEs. Based on the determination of the sample size table from Sekaran and Bougie (2016), the study estimates the sample size for this particular population to be approximately 400. This study obtained samples from SMEs in Henan, Guangdong, Zhejiang, Shanghai, Gansu, and Liaoning Provinces in China based on Peking University's Centre for Enterprise Research's Enterprise Study for Innovation and Entrepreneurship in China (Zhang, 2022). This study employs stratified sampling in these six provinces. Consequently, the distribution of questionnaires is determined by the relative number of SMEs in each area. This study managed to obtain 599 return-usable questionnaires from SMEs that are valid and completed.

Respondents were asked to fill out surveys that they were responsible for administering to themselves. For the purpose of analyzing the respondents' perspectives, the surveys used a Likert scale with seven points, ranging from 1 (strongly disagree) to 7 (strongly agree). The first step is to input the questionnaire data into Microsoft Excel. Subsequently, the mean outcomes were further analyzed using SPSS software and the SEM AMOS program. AMOS Structural Equation Modeling (AMOS-SEM) was the method that was used in the research project for the purpose of doing the analysis of the data. According to Sinha et al. (2018), the use of AMOS-SEM is acceptable in research settings to estimate the correlations between the variables that were explored by path analysis. Therefore, the goals of the research may be completed by using the AMOS-SEM approach inside the AMOS program, which is then followed by the assessment of the model that was suggested.

### Measurement of Variables

**Table 1: Measurement of Variables**

Construct	Type of Variables	Authors
IT capabilities	Independent variables	(Proksch et al., 2024)
Digital capabilities of employees		(Wang et al., 2020)
Digital culture	Dependent variables	(Teng, Wu & Yang, 2022)
Digital technologies		(Wang et al., 2020)
Management accounting practices		(Proksch et al., 2024)
		(Teng, Wu & Yang, 2022)
		AlKhajeh and Khalid (2018)

In accordance with the findings of previous studies, digitalization is evaluated by using information technology capabilities, digital capabilities of employees, digital technologies, and digital culture. Proksch et al. (2024) and Wang et al. (2020) were the research sources that provided the metrics that were used to evaluate IT capabilities. The measurements of employees' digital capabilities are combined by Teng, Wu, and Yang (2022) and Wang *et al.* (2020). The measurements of digital culture are from Proksch *et al.* (2024) and the measurements of management accounting practices are from AlKhajeh and Khalid (2018). Eight questions are used to evaluate the capabilities of information technology; ten questions are used to evaluate the digital capabilities of people; eight questions are used to evaluate digital technologies; and five questions are used to evaluate digital culture.

This research used the measures of MAPs that were provided by AlKhajeh and Khalid (2018). These measurements were based on the five dimensions that are used to assess MAPs. These dimensions are as follows: Performance Management System (PMS), Decision Support Systems (DSS), Strategic Management Accounting (SMA), Costing System (CS), and Budgeting System (BS).

### Respondents Demographic

SME owners and managers, including owners, financial officers, and chief and executive officers, who have an impact on MAP practices, are the people who participated in the study. The respondents were given a questionnaire in order to collect demographic information from them. Table 1 illustrates the demographic characteristics, which include gender, age, work position, location, and length of service at the current company. Henan, Guangdong, and Shanghai City each have 15.36%, 14.52%, and 15.01% of the total respondents, respectively, according to the data table. Zhejiang Province has the highest percentage of respondents, which is 25.71%. Low numbers are seen in Gansu and Liaoning, with 14.02 and 15.36 percent respectively.

**Table 2: Demographic characteristics (n=599)**

Items	Category	Frequency	Percent
Gender	Male	323	53.92%
	Female	276	46.08%
Age	Below 30	134	22.37%
	31 to 40	260	43.41%
	41 to 50	162	27.05%
	51 and above	43	7.18%
Job position	Owner	103	17.20%
	CEO	24	4.01%
	Financial Officer	453	75.62%
	Others	19	3.17%
Corporate core business	Agriculture	47	7.85%
	Manufacturing	41	6.84%
	Wholesale	209	34.9%
	Food and beverages	97	16.19%
	Transportation	27	4.51%
	Accommodation	48	8.01%
	Service	120	20.03%
Other	10	1.67%	
Location	Henan Provinces	92	15.36%
	Guangdong Provinces	87	14.52%
	Zhejiang Provinces	154	25.71%
	Gansu Provinces	84	14.02%
	Liaoning Provinces	92	15.36%

## RESULTS AND DISCUSSION

### Reliability and Validity

Table 3 shows that all constructs' Cronbach's alpha, composite reliability (CR), and average variance extracted (AVE) are above the required thresholds of 0.7, 0.7, and 0.5 (Hair *et al.*, 2019). The construct's dependability and consistency were proven. The discriminant validity of all constructs was also examined. As demonstrated in Table 4, the square roots of the AVE values were greater than all construct correlations, indicating adequate discriminant validity for all constructs (Hair *et al.*, 2019). Thus, these results indicate that the measurement model exhibits mutual validity and reliability.

**Table 3: Reliability Test**

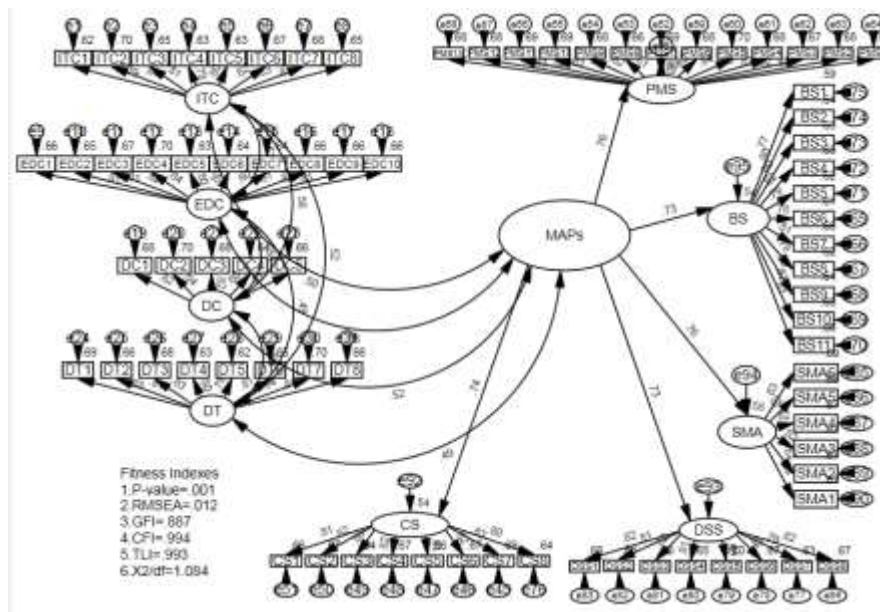
Construct	Cronbach's Alpha	Composite Reliability (CR)	AVE
IT capabilities	0.938	0.94	0.66
Digital capabilities of employees	0.95	0.95	0.66
Digital culture	0.91	0.91	0.67
Digital technologies	0.94	0.94	0.66
Management accounting practices	0.97	0.86	0.55

**Table 4: Discriminant Validity for CFA Latent**

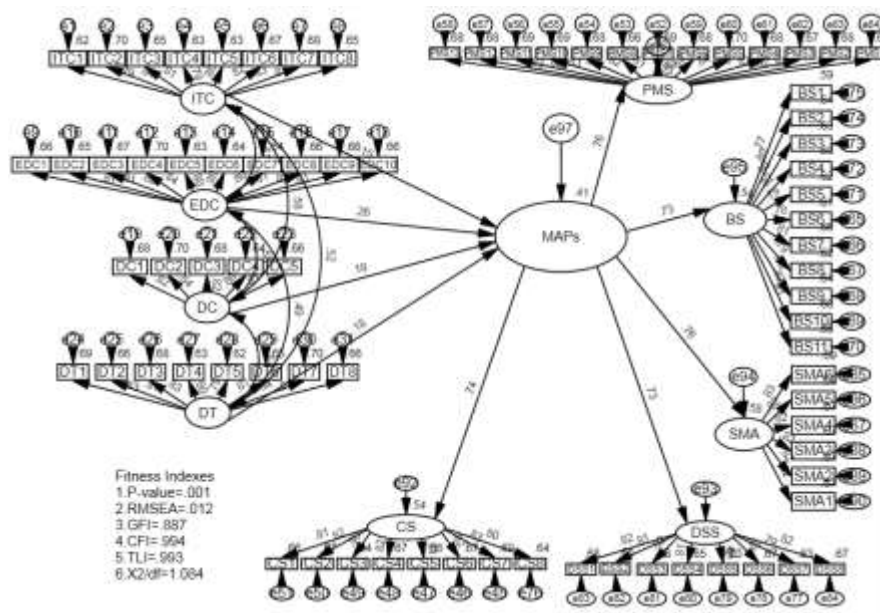
Construct	ITC	EDC	DC	DT	MAPs
IT capabilities	0.809				
Digital capabilities of employees	0.569	0.811			
Digital culture	0.583	0.584	0.819		
Digital technologies	0.524	0.490	0.542	0.813	
Management accounting practices	0.504	0.546	0.525	0.489	0.744

**Hypothesis Testing  
Model Fit Tests**

Model fit refers to the degree of agreement between the theoretical model and the observable model. This research used several fit indicators to evaluate the measurement model's quality. The conventional  $\chi^2$  statistic is used to assess the overall adequacy of the model. Therefore, it is recommended to use many additional fit indices, such as the GFI, CFI, TLI, and  $\chi^2$ , to evaluate the overall goodness of fit of the Confirmatory Factor Analysis (CFA) solution. The first two indices have high values, about 0.95, indicating a strong match for the model (Yaşlıoğlu & Yaşlıoğlu, 2020). This is visually shown in Figure 1. On the other hand, an RMSEA value below 0.08 indicates an excellent match, while a number approaching 0.012 indicates an adequate fit. The choice of these fit indicators in this research is based on their excellent performance in simulated experiments. Table 4 demonstrates a significant correlation between the structural model and the data. The study of the structural equation model (SEM) in Figure 2 was conducted using maximum likelihood estimation. The fit indices for both the data and the model are as follows:  $p(0.001) < 0.001$ , RMSEA = 0.012, GFI = 0.887, CFI = 0.994, TLI = 0.993, and CMIN/DF = 1.084. All significant fit indices have values that are either above or in close proximity to 0.9. The findings demonstrate that the suggested model for the link between attitude and behavior is strong in both its theoretical foundation and empirical evidence. By comparing the fit indices in Figure 1 and Figure 2, it can be shown that this research does not exhibit common method bias.



**Figure 1: The Pooled-CFA for all constructs in the model**



**Figure 2: Structural Equation Modelling**



## Path Hypothesis

The standardized path coefficients from Table 5 indicate a statistically significant link between IT skills and MAPs ( $\beta = 0.137, p = 0.004 < 0.05$ ). This suggests a corroboration of Hypothesis H1. The use of EDC has a notable and beneficial effect on MAPs, with a coefficient of 0.210 and a p-value of less than 0.001. DT has a substantial impact on MAPs, with a beta coefficient of 0.131 and a p-value less than 0.001. Similarly, DC also has a considerable effect on MAPs, with a beta coefficient of 0.135 and a p-value less than 0.001. Thus, empirical evidence supports hypotheses H1, H2, H3, and H4.

**Table 5: Path coefficients and hypothesis testing**

Path	Beta	S. E	T-Value	P- Value	Results
ITC-> MAPs	0.137	0.048	2.862	.004	Supported
EDC ->MAPs	0.210	0.043	4.923	***	Supported
DT -> MAPs	0.131	0.040	3.297	***	Supported
DC-> MAPs	0.135	0.037	3.601	***	Supported

This research investigates whether or not digitalization has an effect on MAPs in China SMEs. According to the hypothesis testing, the implementation of digitalization by SMEs results in an increase in their respective organizations' MAPs. It is possible to assert that digitalization helps to increase MAPs in China's SMEs. By combining ITC, EDC, DT, and DC, digitalization will assist China's SMEs in improving their MAPs. These evaluations assist China's SMEs in making choices by evaluating their management practices. In China's SMEs, the purpose of this study is to enhance business opportunities and reduce company risks by implementing an efficient decision-making process. Small and medium-sized enterprises (SMEs) have the potential to increase their performance and MAPs by effectively allocating their resources through the use of digitalization technology. Both Zehra and Ahmed (2019) and Kajal *et al.* (2021) are able to provide support for this assertion. (Proksch *et al.*, 2024) Information technology skills help to execute policies that improve MAPs for China's SMEs by providing insights for goal planning and decision-making. Wang *et al.* (2020), who found that employees' digital skills enhance the work of SMEs to successfully raise MAPs, reinforce this conclusion. According to Proksch *et al.* (2024), digital culture improves digitalization capacities, which ultimately leads to an improvement in the functioning of the management process. Thus, digitalization enhances the MAPs of SMEs in China by boosting IT skills, personnel's digital capabilities, digital technologies, and digital culture. With these components, the company may be able to gain a competitive advantage and experience economic growth.

## CONCLUSION

Small and medium enterprises (SMEs) play a pivotal role in the economic development of countries, particularly in emerging economies like China. Digitalization has emerged as a key driver of growth and innovation for SMEs, offering numerous opportunities to enhance operational efficiency, decision-making, and competitiveness. Digitalization enables SMEs to streamline their operations, reduce costs, and improve productivity. Kumarasinghe and Haleem (2020) highlight that digital technologies facilitate better inventory management, reduce waste, and enhance supply chain efficiency. Digital tools provide SMEs with access to real-time data and advanced analytics, which are crucial for informed decision-making. Arkhipova and Bozzoli (2018) argue that digital competencies among employees are essential for leveraging data analytics tools effectively. These tools enable SMEs to identify market trends, customer preferences, and operational bottlenecks, allowing for more strategic decisions. Digitalization fosters innovation by enabling SMEs to develop new products, services, and business models. Cetindamar *et al.* (2021) emphasize that digital organizational competence is vital for driving innovation. Digital platforms and tools facilitate collaboration, idea generation, and rapid prototyping, providing SMEs with a competitive edge in the market (Proksch *et al.*, 2021). Investing in digital skills training is crucial for the successful implementation of digital technologies. Sultoni *et al.* (2022) suggest that continuous training programs enhance employees' digital competencies, enabling them to utilize digital tools effectively. This investment in human capital is essential for maximizing the benefits of digitalization. Therefore, digitization improves operational efficiency and cost reduction, enhances the companies' decision-making, improves the innovation and competitive advantages, increases employee's digital capabilities.

SMEs should allocate resources strategically towards the adoption of digital technologies that align with their business objectives. This includes investing in ERP systems, Customer Relationship Management (CRM) software, and other digital tools that enhance business processes (Ragulan, 2021). Collaborations with technology providers and other businesses can provide SMEs with access to digital tools and expertise. Pergelova *et al.* (2019) highlight the importance of partnerships in facilitating the adoption of digital technologies and driving innovation. Digitalization is an ongoing process. SMEs should continuously monitor technological trends and be willing to adapt their strategies accordingly. Regular updates and upgrades of digital tools and systems are essential to staying competitive (Corvello *et al.*, 2023). Finally, by leveraging

digital tools, SMEs can streamline operations, reduce costs, and create new products and services, ultimately gaining a competitive edge in the market. Moreover, adopting a flexible and scalable approach to digital solutions will enable SMEs to grow sustainably and respond effectively to market changes.

The government should provide financial incentives, such as tax breaks, grants, and subsidies, to encourage SMEs to adopt digital technologies. This can lower financial barriers and motivate more SMEs to invest in digital tools (Vilakazi et al., 2020). Developing robust digital infrastructure is critical for the success of digitalization efforts. The government should invest in building and maintaining high-speed internet connectivity, especially in rural and less-developed areas, to ensure all SMEs have access to necessary digital resources (Gyamera et al., 2023). Raising awareness about the benefits of digitalization is crucial. The government should run campaigns to educate SME owners and managers about the advantages of digital transformation, providing case studies and success stories to illustrate the potential impact (Zhang, 2022). The government can facilitate access to affordable digital solutions by negotiating with technology providers to offer discounted rates for SMEs. Additionally, creating platforms where SMEs can easily find and compare digital tools and services can simplify the adoption process (Sultoni et al., 2022). To foster digitalization among SMEs, therefore, the Chinese government should implement improvement policies such as financial incentives, digital infrastructure, training programs, regulatory frameworks, public awareness campaigns, and access to digital solutions.

Among the findings that are most significant for both practitioners and academics is the significance of digitalization in the process of enhancing MAPs. The study also demonstrates that owner-managers of SMEs are aware of digitalization and MAPs and are able to assist their own businesses. Furthermore, it may assist SMEs in addressing global challenges and concentrating on improving MAPs for management and competition. On the basis of the practical suggestions provided by this research, the owner-managers of the company should investigate the growing role that digitalization plays in the development of value. This breakthrough contributes to the existing body of research on digitalization and MAPs. Through these findings, a greater understanding of the implications of digitalization on the MAPs of China's SMEs will be gained. In addition, this research demonstrates how to optimize the performance of MAPs by addressing the issue of digitalization.

The practical implications and recommendations outlined in this literature review highlight the significant role digitalization plays in enhancing the value creation capabilities of SMEs in China. By adopting digital technologies, SMEs can improve operational efficiency, make informed decisions, foster innovation, and maintain competitive advantage. For the government, creating a supportive policy environment that incentivizes digital adoption, builds robust digital infrastructure, and provides training and development opportunities will be essential in driving the digital transformation of SMEs. Together, these efforts will ensure that China SMEs are well-positioned to thrive in a dynamic and increasingly digital global economy.

### LIMITATIONS AND FUTURE RESEARCH DIRECTIONS

While this study has made significant contributions, it still has limitations, suggesting opportunities for future research. One thing that should be brought to your attention is the fact that this research classifies digitalization as a MAP. Despite China's SMEs demonstrating the influence of digitalization on MAP improvement, the results suggest a lack of differentiation between the diverse impacts of digitalization on MAPs in government-owned firms and listed companies across different nations. In light of this, it is recommended that future studies investigate this element in greater depth. Despite the fact that this study has made a substantial contribution to the understanding of digitalization, it is essential to acknowledge that there are some limits. The replies were obtained from SMEs situated in China. The extent of extending the findings to other countries remains uncertain. In future research, it would be beneficial to replicate these findings in other fields to further investigate the issue of generalizability. Additionally, this research achieved its objectives through the use of a questionnaire survey. In subsequent research, it may be possible to collect more information by using a mixed-way or triangulation technique. This may include conducting interviews and analyzing archival material, among other methods. Despite the constraints, this study offers useful insights into the correlation between digitalization and MAPs, according to the evidence it presents.

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