

-RESEARCH ARTICLE-

## GUIDELINES FOR BUSINESS-TO-GOVERNMENT (B2G) MANAGEMENT SUCCESS PRINCIPLES FOR MICRO, SMALL, AND MEDIUM ENTERPRISES (MSMES)

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### —Abstract—

The promotion and development of Thai micro, small, and medium enterprises (MSMEs) is essential for enhancing their competitiveness and aligning with the national strategy. This study aims to identify the key factors that contribute to the success of small and medium-sized enterprises (MSMEs) in their Business-to-Government (B2G) management. It will utilise a combination of qualitative and quantitative research methods to develop a structural equation model. The study surveyed 600 entrepreneurs involved in government business listed in the SME-Government Procurement (SME-GP) system. The analysis encompassed descriptive, inference, and multivariate statistics. The findings highlighted key factors for successful B2G management for MSMEs: 1) Organization Agility ( $\bar{X} = 4.15$ ), emphasizing flexibility and crisis recovery; 2) Financial Competency ( $\bar{X} = 4.13$ ), focusing on low-interest government funding;

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3) Information Technology Integration ( $\bar{X} = 4.09$ ), emphasizing electronic document systems; and 4) Public Procurement Capability ( $\bar{X} = 4.08$ ), emphasizing access to procurement announcements. The hypothesis testing found significant differences in the success of micro-enterprises and small- and medium-sized enterprises in implementing B2G management guidelines. The structural equation model analysis showed a satisfactory fit with the empirical data, meeting evaluation criteria with a probability chi-square of 0.089, a relative chi-square of 1.152, a concordance index of 0.970, and a root mean square error of approximation of 0.016.

**Keywords:** MSME Management, Industrial Business Management, Private Sector and Government Sector, B2G Model

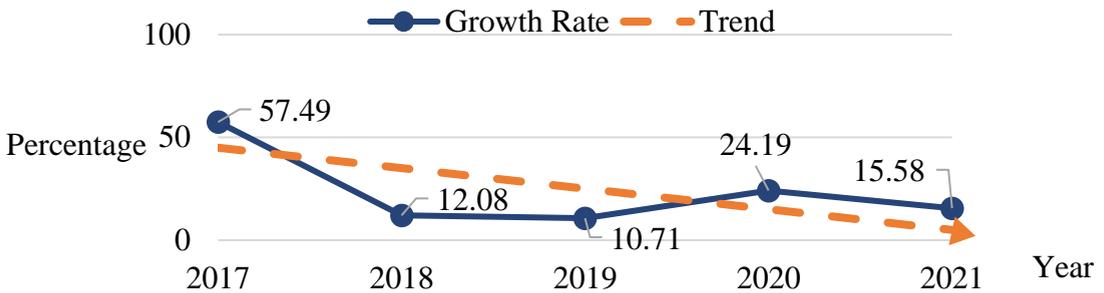
## INTRODUCTION

MSMEs are vital for the economy of Thailand and other countries. The national strategy of the country acknowledges the significance of fostering and enhancing robust MSMEs capable of competing in both domestic and international markets. The management of business-to-government (B2G) interactions is essential for the success of micro, small, and medium enterprises (MSMEs). B2G management facilitates procurement between the private and public sectors, thereby promoting economic growth and stability. The growth rate of B2G operations in Thailand has experienced a decline in recent years. Hence, it is imperative to examine the success principles for MSMEs in business-to-government (B2G) management and establish guidelines to facilitate their growth in this fiercely competitive landscape.

Procurement between the private and public sectors is a business arrangement aimed at promoting and developing the country's economy. Enhancing the competitiveness of micro, small, and medium-sized enterprises (MSMEs) is crucial for bolstering and sustaining the stability of the national economic system.

### **Background and importance of the problem.**

The rate of expansion of Thai business operations in the form of electronic commerce between the private sector and the public sector (B2G) has consistently declined, as shown in [Figure 1](#). The expansion rate of Thai business operations in the form of B2G was 57.49 percent in 2017. However, it is projected to decrease to 15.58 percent by 2021 due to a decline in the growth rate of electronic commerce between the private sector and the public sector (B2G). The researcher aimed to investigate the guidelines for MSME industrial businesses in the B2G form to effectively identify and address issues related to public procurement. This study aimed to contribute to the economic development of the country and enhance international competitiveness by establishing a sustainable competitive advantage. The study investigated the four essential factors that contribute to the success of MSMEs in the B2G sector.



**Figure 1.** Growth rate of B2G value in Thailand (Statista.,2022)

## LITERATURE REVIEW

The business-to-government (B2G) business model, as defined by the [IMF \(2023\)](#), involves the private sector procuring assets and delivering infrastructure services. An academic perspective on this topic suggests that a partnership can be established between the public and private sectors to share risks and rewards, as well as to leverage the skills and resources of the private sector in delivering assets and services to the public sector. This collaboration, as defined by Standard & Poor and the European Investment Bank, typically involves a medium- or long-term relationship.

### Summary:

The business-to-government (B2G) business model involves a contract where the private sector is responsible for acquiring goods and providing services. As part of the arrangement, the private sector will receive profits for providing goods and services to help achieve the government's established objectives.

After considering the concerns mentioned earlier, the researcher thoroughly examined concepts, theories, and documents related to research. The findings have been summarised into four key variables, which will be discussed in detail below:

1. The components of Information Technology Integration involve the use of computers, telecommunications equipment, hardware, software, the Internet, and electronic commerce, along with computer services. These components are used to store, search, transmit, communicate, and manage information that is relevant to the organisation's production process. Based on a study conducted by [Siriram et al. \(2023\)](#), the enhancement of purchasing efficiency can be achieved through the implementation of technological advancements in industrial machines, machinery, mechanical systems, and information technology. This innovative approach to procuring electronics has been found to be effective. Technological factors play a vital role in decision-making ([Shtal et al., 2018](#)). It was discovered that the effective

- management of digital competency among human resources and the development of a highly agile teamwork model are crucial factors. Organisations need to prioritise the enhancement of their employees' digital skills in order to stay competitive and meet the changing needs of customers and service recipients.
2. The Financial Competency component involves understanding and deciding on the appropriate management structure for accessing capital sources. Efficiently managing the allocation of assets and cash flow is crucial for maintaining a healthy working capital and ensuring smooth business operations. This involves careful accounting and financial statement management to achieve the desired liquidity (Piromsod et al., 2022). Successful entrepreneurs understand the importance of strategically managing risks to enhance their organisation's competitive advantage and seize new opportunities. It is important to ensure that income is sustainable (Rujya et al., 2023).
  3. The component of organisational agility involves the capacity to effectively respond and adjust to both internal and external changes in a timely manner. Effective planning and policy setting ensure a clear delineation of personnel responsibilities, facilitate rapid communication and decision-making, and foster an organisational culture that embraces change. In today's ever-changing economic landscape, it has become crucial for organisations to develop the necessary skills and capabilities to adapt swiftly, delegate authority effectively, streamline processes, and make prompt decisions in their day-to-day operations. There is potential to reduce costs by developing the production process. Efficiency in warehouse management is achieved by following key management principles that focus on effective planning, organising, leading, and controlling. It is crucial for entrepreneurial organisations to recognise that contemporary customers have evolving expectations when it comes to their experience with products, services, and purchases. Thus, it is crucial to have a contemporary organisational management model in place, and entrepreneurs need to adapt their strategies to stay current with the evolving times (Wattanakomol & Silpcharu, 2023).
  4. The Public Procurement Capability component focuses on enhancing personnel qualifications to align with government procurement requirements. This includes deepening knowledge and understanding of government procurement regulations, bid contract management, and the scope of work. This component also includes seeking business partners and engaging in annual procurement planning. Business owners need to swiftly adjust to cope with the competitive landscape in the business world. They should enhance their production capabilities to become a flexible enterprise, ensuring long-term viability and economic stability. In addition, it is important for the organisation's personnel to actively contribute to supporting a range of benefits or activities, ensuring the smooth running of operations, and fostering an agile environment within the organisation. This is because when individuals collaborate, they develop a strong dedication to the organisation and its mission, fostering a sense of ownership and pride (Nu-ngan & Sinjaru, 2021).

## Research Objectives

The objective of this research is to explore efficient strategies for overseeing micro, small, and medium-sized industrial businesses in the B2G context by analysing the following factors:

1. Analysing the structure and operational characteristics of success principles for MSMEs engaged in B2G management.
2. Identifying the key components of success principles for MSMEs in B2G management.
3. Developing a structural equation model to represent the success principles for MSMEs in B2G management.

## Research Hypothesis

Research on the guidelines to success principles for micro small and medium enterprises (MSMEs) in Business-to-Government (B2G) Management includes the following hypotheses:

**H1:** Information Technology Integration components have a direct influence on Financial Competency components. In a recent study by [Bawono et al. \(2020\)](#), the focus was on examining the impact of information technology on financial management outcomes, with a particular emphasis on modern technological capabilities. Having a strong focus on IT-related human resource management can greatly enhance operating results in areas such as innovation creation, marketing planning, and building relationships with suppliers of production factors. Thus, it is crucial for corporate executives to prioritise information technology resources and foster the development of capabilities for integrating modern information technology. This will enable the organisation to achieve efficient operations and long-term success.

**H2:** Information Technology Integration components have a direct influence on Organization Agility components. In a recent study, [Cepeda and Arias-Pérez \(2019\)](#) examined the impact of analytical programs on the use of information technology in enterprise resource management. Their findings revealed that these programmes facilitate information sharing, coordination of activities, and increased operational efficiency. By transforming traditional working models (data transformation) into digital systems, organisations can enhance their infrastructure, including computers, data communication network equipment, and database systems, thereby gaining greater operational flexibility.

**H3:** Information Technology Integration elements have a direct influence on Public Procurement Capability elements. [Nabukenya et al. \(2022\)](#) conducted a recent study

which revealed that the implementation of digital technology in procurement, along with the adoption of new technology, can present both opportunities and challenges for organisations. The study suggests that organisations should leverage their existing resources to embrace these new operations. Well-structured work processes and effective digital leadership closely link to the effective utilisation of information and communication technology. By possessing the necessary skills, attitudes, knowledge, abilities, and experience, organisations can strategically plan and operate with optimal efficiency, ultimately transforming into a sustainable digital organisation.

**H4:** Public Procurement Capability components have a direct influence on Organization Agility components. [Rane et al. \(2020\)](#) conducted a study on organisational management with the aim of achieving agility by adapting work processes to enhance flexibility and leverage the potential of organisations and networks. The aim of this approach is to yield maximum benefits and establish a competitive edge. The organisation's stakeholders contribute to its agility by adapting and improving their ability to respond defensively and proactively. This includes expanding into new markets and developing new products. This involves effectively responding to market demands and network dynamics.

**H5:** The Public Procurement Capability component directly influences the Financial Competency component. [Kumar and Ganguly \(2021\)](#) emphasised the significance of information transparency and supply chain coordination in enhancing a company's financial performance through public procurement and sourcing electronics externally. The study findings suggest that supply chain coordination plays a mediating role in the connection between e-procurement and the financial performance of firms.

**H6:** The structural equation model for the success principles for MSMEs in business-to-government (B2G) management reveals differences when classified according to the size of industrial businesses. [Hossain et al. \(2022\)](#) examined the disparities in the development of business management potential among MSME industrial businesses. Medium-sized industrial businesses have greater access to capital compared to micro- and small-sized industrial businesses. In addition, they have a greater amount of loan collateral and a clearer understanding of the market. Medium-sized industrial businesses have an advantage in foreign language communication skills, which allows them to use social media channels for more effective market expansion compared to small industrial businesses. Medium-sized industrial businesses have greater access to government agency information compared to their smaller counterparts.

## RESEARCH METHODOLOGY

The objective of this study is to generate novel insights through the use of Mixed-

Methodology Research, specifically focusing on Inductive Research.

1. The SME-GP system is a database of MSMEs in Thailand that conduct business with the government. Entrepreneurs must register their companies in the SME-GP system to engage in government business. The Office of MSMEs Promotion (OSMEP) oversees this system, which government agencies use to identify qualified MSMEs for business partnerships. To register, entrepreneurs are required to provide company information, such as their business registration number, tax identification number, and other relevant details. Entrepreneurs' names and information are included in the SME-GP system upon registration, which enhances their competitiveness for government contracts and provides them with access to additional opportunities. 600 entrepreneurs, already registered in the SME-GP system and involved in government business, participated in the survey. The data collected from these entrepreneurs was analysed to identify success principles for MSMEs in B2G management.
2. In-depth interviews are a common method in qualitative research. This investigation classified nine experts into three distinct categories. The first group consists of three entrepreneurs or executives from business organisations. The second group comprises three individuals from government and related agencies. Finally, the last group comprises three academic experts ([Chantruprakakul et al., 2023](#)). The researcher created an interview guideline consisting of four essential elements. The topics of interest are Information Technology Integration, Financial Competency, Organisational Agility, and Public Procurement Capability.
3. A draft questionnaire and evaluation form were given to 5 experts for the purpose of quantitative research. These experts were asked to assess the quality of the tool by examining the Index of Consistency (IOC) between the questions and research objectives. The range of IOC values was 0.60 to 1.00, indicating good consistency. The questionnaire was then subjected to a try-out test. The analysis of discriminant power for each item resulted in values ranging from 0.31 to 2.53, which met the established criteria. The reliability of the questionnaire was assessed using the alpha coefficient, yielding a value of 0.98, indicating high reliability. The questionnaire was completed by executives responsible for managing small industrial businesses engaged in government procurement. The sample was randomly selected from the SME-GP system of the Office of Small and Medium Enterprises Promotion (OSMEP). A total of 600 individuals were selected using the Lottery Method, with 200 participants per group ([BOONNUAL & THAWORNSUJARITKUL, 2021](#)). The data analysis involved the use of descriptive and inferential statistics in SPSS, as well as structural equation modelling using AMOS. The assessment of the structural equation model was based on four key factors:
4. A statistically significant result requires a Chi-square probability level value (CMIN- $p$ ) greater than 0.05.
5. The Chi-Square Relative Value (CMIN/DF) must be less than 2 to meet the

threshold for statistical significance.

6. The Good Fit Index (GFI) must be greater than 0.90 to achieve an adequate fit.
7. The Root Mean Square Error of Approximation (RMSEA) should be less than 0.08 to obtain a suitable level of accuracy.

The criteria were derived from (Arbuckle, 2016) work. The study utilised qualitative research methods, specifically group discussions with 11 experts, to validate the model (Arbuckle, 2016).

## RESULTS

**Table 1. Descriptive statistics of the data**

Latent variable		Micro Enterprise			Small Enterprise			Medium Enterprises		
		$\bar{X}$	S.D.	Level	$\bar{X}$	S.D.	Level	$\bar{X}$	S.D.	Level
Overall		4.13	0.37	High	4.16	0.44	High	4.06	0.23	High
1	Organization Agility	4.17	0.43	High	4.22	0.51	High	4.07	0.28	High
2	Financial Competency	4.13	0.44	High	4.22	0.47	High	4.05	0.27	High
3	Information Technology Integration	4.12	0.42	High	4.09	0.48	High	4.07	0.26	High
4	Public Procurement Capability	4.09	0.44	High	4.11	0.55	High	4.05	0.28	High

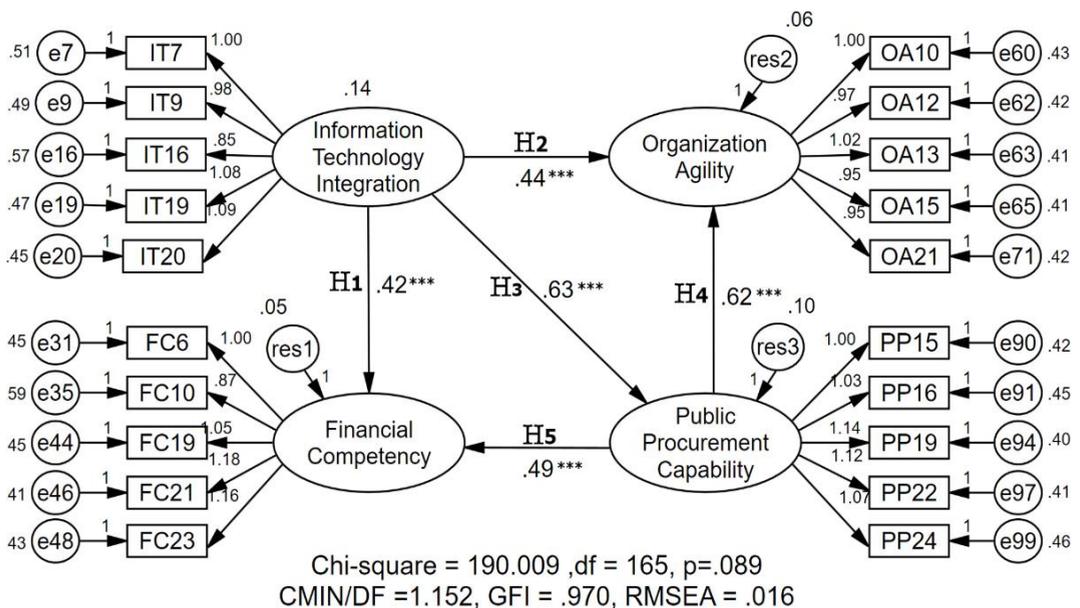
### Research results:

The importance of guideline components for managing MSME industrial businesses in the B2G form varies based on the size of the industry business. In summary, the results are as follows:

The study revealed a high value for micro-enterprises, with an average score of 4.13. Furthermore, each aspect of organizational agility was considered highly important, with an average score of 4.17. The importance of financial ability and information technology integration was rated highly, with average scores of 4.13 and 4.12, respectively. The average score for the government's procurement ability was 4.09. Small businesses have been shown to be significant, with an average score of 4.16. The specific important aspects were as follows: The average score for financial capability was 4.22, with a standard deviation of 0.47. Furthermore, the average score for organisational agility was a high 4.22 (SD = 0.51). The government's procurement

ability received a high rating of 4.11, while Information Technology Integration was also highly valued, with an average score of 4.09. Medium-sized enterprises must prioritise several key aspects, with an average importance rating of 4.06. The integration of information technology is highly important, with an average rating of 4.07 and a standard deviation of 0.26. Organisational agility is considered important, with an average rating of 4.07 and a standard deviation of 0.28. The average rating of 4.05 and a standard deviation of 0.27 highlight financial capability as a significant factor. Government procurement capability is considered essential, with an average rating of 4.05 and a standard deviation of 0.28.

1. The statistical analysis reveals significant differences in the levels of importance among micro, small, and medium-sized industrial businesses in the B2G form for successful management. Overall, these differences exhibit statistical significance at the 0.05 level.
2. The first step in the analysis is to assess the consistency of the structural equation model using statistical measures. The Chi-Square Probability Level (CMIN- $\rho$ ) was determined to be 0.089, exceeding the significance threshold of 0.05. The Chi-Square Relative Value (CMIN/DF) was measured at 1.152, indicating a value below 2. The Good Fit Index (GFI) was found to be 0.970, surpassing the minimum acceptable threshold of 0.90. The RMSEA was found to be 0.016, below the threshold of 0.08. All four statistical values were consistent with empirical data and met the criteria.



**Figure 2.** Structural equation model for “The success principles for MSMEs in business-to-government (B2G) management” in Standardized Estimate mode after model improvement.

Figure 2 depicts the outcomes of hypothesis testing in a structural equation model to evaluate causal effects between latent variables. Based on this figure, five hypotheses were proposed:

1. According to the first hypothesis (H1), the research findings indicate that the Information Technology Integration component has a significant and direct influence on Financial Competency at a highly significant level ( $p < 0.001$ ). The Standardised Regression Weight for this relationship is 0.41.
2. Hypothesis number two (H2) indicates that the research findings indicate that the Information Technology Integration component has a significant and direct impact on the Organisation Agility factor at a high level of statistical significance ( $p < 0.001$ ). The Standardised Regression Weight for this relationship is 0.37.
3. The third hypothesis (H3) suggests that the study found that the Information Technology Integration component has a significant direct effect on the Public Procurement Capability factor ( $p < 0.001$ ), with a Standardised Regression Weight of 0.60.
4. According to the fourth hypothesis (H4), the Public Procurement Capability component has a significant and direct impact on Organisation Agility at a high level of statistical significance ( $p < 0.001$ ). The Standardised Regression Weight for this relationship is 0.55.
5. The fifth hypothesis (H5) indicates that the Public Procurement Capability has a statistically significant direct effect on the Financial Competency at the 0.001 level and a Standardized Regression Weight of 0.51.

**Table 2. Following the improvement of the model, statistics from structural equation modeling analysis.**

Variables	Estimate		R <sup>2</sup>	Variance	C.R.	P
	Standard	Un-standard				
<b>Information Technology Integration</b>				0.14		
Financial- Competency	0.41	0.42	0.68	0.05	6.03	***
Organization Agility	0.37	0.44	0.70	0.06	4.25	***
Public Procurement Capability	0.60	0.63	0.36	0.10	6.40	***
Public Procurement Capability			0.36	0.10		
Organization Agility	0.55	0.62	0.70	0.06	6.03	***
Financial- Competency	0.51	0.49	0.68	0.05	5.33	***
Information Technology Integration				0.14		
IT7	0.47	1.00	0.22	0.51		
IT9	0.47	0.98	0.22	0.49	9.34	***
IT16	0.39	0.85	0.15	0.57	6.55	***
IT19	0.51	1.08	0.26	0.47	7.68	***
IT20	0.52	1.09	0.27	0.45	7.79	***
<b>Financial Competency</b>			0.68	0.05		
FC6	0.50	1.00	0.25	0.45		

FC10	0.40	0.87	0.16	0.59	7.24	***
FC19	0.52	0.05	0.27	0.45	8.52	***
FC21	0.58	1.18	0.33	0.41	9.05	***
FC23	0.56	1.16	0.32	0.43	8.94	***
<b>Organization Agility</b>			0.70	0.06		
OA10	0.56	1.00	0.31	0.43		
OA12	0.55	0.97	0.30	0.42	9.79	***
OA13	0.58	1.02	0.33	0.41	10.10	***
OA15	0.55	0.95	0.30	0.41	9.76	***
OA21	0.54	0.95	0.30	0.42	9.70	***
<b>Public Procurement Capability</b>			0.36	0.10		
PP15	0.52	1.00	0.27	0.42		
PP16	0.52	1.03	0.27	0.45	8.95	***
PP19	0.58	1.14	0.33	0.40	9.58	***
PP22	0.57	1.12	0.33	0.41	9.51	***
PP24	0.53	1.07	0.28	0.46	9.08	***

\*\*\* Statistically significant at the 0.001 level.

The enhanced structural equation model consists of four latent variables, divided into one exogenous latent variable, namely the Information Technology Integration component, and three endogenous variables: the Financial Competency component, the Organisation Agility component, and the Public Procurement Capability component. The Information Technology Integration component has a variance of 0.14 and has a significant direct impact on the Financial Competency component, with a standardised regression weight of 0.41 ( $p < 0.001$ ). The R<sup>2</sup> value was 0.68, and the variance was 0.05. The Information Technology Integration aspect has a significant and direct impact on Organisation Agility, with a standardised regression weight of 0.37, which is statistically significant at the 0.001 level. The R<sup>2</sup> value was 0.70, and the variance value was 0.06.

The Public Procurement Capability element has a highly significant impact on the Agility element of the Organisation, as indicated by a standard regression weight of 0.55 and a statistical significance level of 0.001. In addition, the regression weight for the Financial Competency component is 0.51, which is statistically significant at a level of 0.2. Additionally, the statistical significance for this component is 0.01. The Information Technology Integration component has a standardised regression weight of 0.60 and a statistical significance level of 0.001, indicating a significant direct association with Public Procurement Capability. The Public Procurement Capability element is reported to have a squared multiple correlation value (R<sup>2</sup>) of 0.70 and a variance of 0.06. The squared multiple correlation (R<sup>2</sup>) for Financial Competency is 0.68, with a variance of 0.05.

The aspect of Information Technology Integration consists of five observational variables, arranged in descending order according to their standardised regression

weight:

1. Implementation of the electronic document system (e-Document) for internal document processing (IT20) demonstrated a standard regression weight of 0.52. The results further demonstrate a statistical significance at the 0.001 level, an R2 value of 0.27, and a variance of 0.45.
2. Online banking transactions (Virtual Bank) (IT19) with a standard regression weight of 0.51, 0.001 level of significance, an R2 value of 0.26, and a variance of 0.47.
3. Installation of a Firewall for network security (IT7) with a weight of 0.47, statistically significant at the 0.001 level, an R2 value of 0.22, and a variance of 0.51.
4. Utilization of IT systems for competitive advantage (IT9) with a standard regression weight of 0.47 and an R2 value of 0.22, and variance of 0.49.
5. Integration of artificial intelligence for supply chain management (Real Time Supply Chain Visibility) (IT16) with a standard regression weight of 0.39, and a 0.001 level of significance, an R2 value of 0.15, and a variance of 0.57 was observed.

The Financial Competency component comprises 5 key variables ranked by weight (Standardized Regression Weight) as follows:

1. Implementing Enterprise Resource Planning (ERP) to combine production, service, and financial data (FC21) with a standard regression weight of 0.56 and a 0.001 level of significance. The R2 value is 0.33, and the variance is 0.41.
2. Using the Balanced Scorecard to evaluate financial performance (FC23) with a standard regression weight of 0.56. The R2 value is 0.32, and the variance is 0.43.
3. Applying accounting and tax software (FC19) with a weight standard regression weight of 0.52 and a 0.001 significance. The R2 value is 0.27, and the variance is 0.45.
4. Managing financial liquidity risks (FC6) with a standard regression weight of 0.50 and a 0.001 significance. The R2 value is 0.25, and the variance is 0.45.
5. Improving financial liquidity through joint ventures (FC10) with a weight standard regression weight of 0.40 and a 0.001 significance. The R2 value is 0.16, and the variance is 0.59.

The Organization Agility component comprises 5 key factors ranked by importance as follows:

1. Creating new value for customers (Distinctive Competency) (OA13) has a weight of 0.58, significant at the 0.001 level.

2. Fostering a learning organization (OA10) has a weight of 0.56, significant at the 0.001 level.
3. Maintaining core competitiveness for a competitive advantage (Core Competency) (OA12) has a weight of 0.55.
4. Introducing innovative products and services (New Innovation) (OA15) has a weight of 0.55.
5. Cultivating a resilient mindset in personnel (Resilient Mindset) (OA21) has a weight of 0.54, significant at the 0.001 level.

The Public Procurement Capability component comprises 5 key variables ranked by weight (Standardized Regression Weight) as follows:

1. Accessing procurement announcements through websites and government organizations (PP19) has a standard regression weight of 0.58, 0.001 significance, with R2 of 0.33 and variance of 0.40.
2. Contract management and inspection of supplies and rights in case of contract changes (PP22) has a standard regression weight of 0.57, 0.001 level of significance, with R2 of 0.33 and variance of 0.41.
3. Developing projects with government organizations to set budgets and project specs (PP24) has a standard regression weight of 0.52, with R2 of 0.28 and variance of 0.46.
4. Understanding penalty provisions for inconsistent contract performance (Concession Risk) (PP16) has a weight of 0.52, 0.001 significance, with R2 of 0.27 and variance of 0.45.
5. Establishing trust in government organizations during the bidding process through transparency (PP15) has a standard regression weight of 0.52, significance with 0.001, with R2 of 0.27 and variance of 0.42.

The study identified four success principles for MSMEs in business-to-government (B2G) management. This was done through a combination of qualitative and quantitative research, which involved 600 entrepreneurs engaged in government business. The study utilised descriptive, inferential, and multivariate statistics to determine the key factors that contribute to the success of MSMEs in B2G management.

The four success principles for MSMEs in B2G management are as follows:

### **Organizational Agility:**

This principle underscores the importance of developing organizations that are flexible and capable of swift recovery from crises. Specific actions and strategies include:

1. Creating a crisis management plan for quick implementation during emergencies.
2. Cultivating a culture of adaptability and flexibility within the organization.

3. Promoting innovation and experimentation to discover new problem-solving approaches.

### **Financial Competency:**

This principle emphasises the importance of choosing low-interest funding sources from the government to support investments in MSMEs. Some specific actions and strategies include:

1. Identifying and applying for government funding programs tailored for MSMEs.
2. Establishing relationships with banks and financial institutions to secure low-interest loans.
3. Developing a robust financial management plan encompassing budgeting, forecasting, and cash flow management.

### **Information Technology Integration:**

This principle emphasises the significance of adopting an electronic document system for internal document processing. Various actions and strategies can be implemented:

1. Investing in IT infrastructure and software to streamline document processing and enhance efficiency.
2. Training employees on system usage and providing ongoing support.
3. Implementing security protocols to safeguard sensitive information.

### **Public Procurement Capability:**

This principle focuses on developing a strategy for accessing procurement announcements from websites and government agencies. Some specific actions and strategies include:

1. Cultivating relationships with procurement officers and government agencies.
2. Staying updated on procurement announcements and bidding on contracts aligned with the organization's capabilities.
3. Crafting a compelling proposal and presentation showcasing the organization's strengths and capabilities.

## **CONCLUSION AND DISCUSSION**

The critical success factors for MSMEs in business-to-government (B2G) operations consist of four key variables: Information Technology Integration, Financial Competency, Organisational Agility, and Public Procurement Capability. These variables are not immediately evident but are highly significant. The hypothesis testing indicated a significant relationship between Information Technology Integration and

Financial Competency, with a standardised regression weight of 0.72. Financial statements provide essential information about a company's financial performance and are useful for making informed economic decisions. Having knowledge of accounting standards specifically designed for SMEs enables these businesses to make informed decisions regarding their operations. Access to IT support and investment opportunities are important factors that can enhance the financial performance of SMEs (Hastuti et al., 2021).

This study emphasises the importance of the four success principles for MSMEs in B2G management. The research findings support previous studies that highlight the significance of financial competency, information technology integration, and public procurement capability for the success of MSMEs in the B2G format (Nabukenya et al., 2022).

Furthermore, research suggests that organisational agility is a crucial factor for the success of MSMEs in B2G management. This finding supports the growing literature trend that highlights the importance of agility and adaptability for MSMEs in response to market changes (Hossain et al., 2022). MSMEs in the B2G format should promptly adapt to government policy changes, regulations, and procurement processes to maintain competitiveness, as indicated by the research.

The study revealed variations in the perceived significance of success principles for managing micro, small, and medium-sized industrial businesses in the B2G format among different micro, small, and medium-sized enterprises. This finding aligns with prior research that highlights the significance of creating customised approaches for various categories of MSMEs (Rane et al., 2020). It is important for policymakers and business owners to take into account the specific needs and challenges of micro-enterprises when formulating policies and strategies to support MSMEs in the B2G format. The research findings align with the current literature on B2G management and offer a solid basis for further research in this field.

## SUGGESTIONS

Suggestions from the policy level:

1. The Digital Economy Promotion Agency, operating under the Ministry of Digital Economy and Society, should offer guidance, promotion, and support for marketing activities. This will facilitate the development of platforms that enable small and medium-sized enterprises to participate in electronic commerce auctions (e-bidding) with greater ease and convenience.
2. The Ministry of Commerce should establish information systems for domestic trade to disclose statistical data and offer services to foster fair trade competition, prevent monopolies, and streamline procurement processes.

3. The Ministry of Industry's Office of Small and Medium Enterprises Promotion should facilitate SMEs' access to loans for research, development, and promotion activities, thereby enhancing their competitiveness in government procurement.
4. The budget of the Provincial Administrative Organisation, which falls under the Ministry of Interior, should be allocated to local administrative organisations for the purpose of conducting training seminars and providing information and documents related to bidding procedures. For local small and medium-sized enterprises.
5. The Revenue Department is a department under the Ministry of Finance. An announcement should be made regarding tax assistance, exemption of security deposits, or any other special tax privileges. In order to assist businesses Small and medium-sized businesses located in regions that compete for government contracts.

### **Suggestions from the operational research level:**

1. Micro, small, and medium-sized industrial businesses should prioritise organisational agility by adopting flexibility, streamlining processes, and implementing Lean system principles to facilitate quick recovery from crises.
2. Micro small and medium-sized industrial businesses should enhance financial capabilities with digital technology, utilizing software for accounting, tax management, and financial planning to ensure transparency, reduce costs, and access government funding support.
3. Micro, small, and medium-sized industrial businesses can enhance their competitiveness by implementing integrated information technology. This can be achieved through the development of internal database systems, categorization of customer information, and utilisation of electronic document systems. These measures enable businesses to effectively conduct research and utilise knowledge.
4. Micro, small, and medium-sized industrial businesses should enhance their government procurement expertise by familiarising themselves with electronic bidding processes, accessing procurement announcements, and conducting regular inspections to improve procurement efficiency.
5. Micro, small, and medium-sized industrial businesses should thoroughly examine the Terms of Reference (TOR), consult legal professionals, and adhere to regulations to minimise contract-related risks and guarantee prompt project completion when participating in government contracts.
6. Miro small and medium-sized industrial businesses should consider joining non-profit institutions or associations to receive guidance, exchange information, and learn best practices for working with the government sector to prevent errors and enhance operational efficiency.
7. Micro, small, and medium-sized industrial businesses should seek S Industrial Standard or TIS certification to improve product quality, increase sales to government agencies, and gain a competitive edge in government procurement.

## Recommendations for Future Research

1. The study findings demonstrate that industrial business operators place importance on the elements of maximum organizational agility. Therefore, it is considered appropriate to conduct additional studies to find out. Guidelines for management in research on “Organizational agility and guidelines for managing micro small and medium-sized industrial businesses in the B2G form to be successful”.
2. The research study revealed that the obtained management guidelines pertain to industrial business operators. The government still lacks sufficient information. Hence, it is deemed necessary to further investigate management approaches utilising the Delphi Technique, wherein experts responsible for government procurement work are assigned as research officers on “Guidelines for managing micro small and medium-sized industrial businesses in the B2G form to be successful”.
3. The study findings indicate that industrial business operators prioritise various components and elements for effectively managing SMEs in the B2G form. Hence, it is imperative to broaden the scope of the study by conducting further research to identify management strategies among the population of general industrial business operators on “Guidelines for managing micro small and medium-sized industrial businesses in the business-to- business (B2B) form to be successful”.

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