Contents lists available at GrowingScience

Uncertain Supply Chain Management

homepage: www.GrowingScience.com/uscm

Guidelines for the development of small and medium enterprises into high-value markets

Worravit Kultangwatanaa*, Jusana Techakanab and Sunee Wattanakomolc

- Assistant Professor of Accounting, Candidate DBA in Industrial Business Administration Program, Faculty of Business Administration, King Mongkut's University of Technology North Bangkok, Thailand
- ^bAssociate Professor of Marketing Communication, Faculty of Business Administration, King Mongkut's University of Technology North Bangkok,

ABSTRACT

Article history: Received April 12, 2023 Received in revised format May 18, 2023 Accepted June 10 2023 Available online June 10 2023

Keywords: **SMEs** High-value markets Value Discovery Value Development Value Communication Value Distribution Value Experiences

This study aimed to explore the approaches for transforming Small and Medium Enterprises (SMEs) into high-value markets, focusing on constructing a structural equation model of guidelines for the development of small and medium enterprises into high-value markets. The conceptual research framework consisted of one exogenous latent variable, the Value Discovery element, combined with the four endogenous latent variables, Value Development, Value Communication, Value Distribution, and Value Experiences. The study utilized mixed-methodology research, including qualitative research through in-depth interviews with nine experts, a focus group discussion with 11 successful entrepreneurs, and quantitative research through a survey of 500 SMEs in Thailand. The results revealed that SMEs operating in high-value markets are divided into tangible and intangible products, representing 250 respondents from each group. The five elements of the guidelines for the development of small and medium enterprises into high-value markets were found to be of high importance both overall and in each element. The developed SEM model was consistent with the empirical data of five elements with 27 observed variable factors. Furthermore, the hypothesis test results for analyzing the causal influence between latent variables in the SEM model revealed that all six hypotheses were supported at the 0.001 level of statistical significance. The value of the study is beneficial for SMEs who target to do business in high-value markets and can improve their competitiveness, develop unique value propositions, and provide better customer experiences.

© 2023 Growing Science Ltd. All rights reserved.

1. Introduction

Small and Medium Enterprises (SMEs) in Thailand are recognized as playing a vital role in the country's economy, serving as a mechanism for income distribution and reducing economic inequality while driving real economic progress. Therefore, the Office of Small and Medium Enterprises Promotion, Thailand, issued the 4th SME promotion plan that has established a vision to promote the international competitiveness of Thai SMEs and make them a vital force driving the economy covering 2017-2021. The government plan targets to increase the ratio of SMEs' gross product value to gross domestic product (GDP) to 50.00% by 2021 and focuses on developing SMEs to promote economic growth and reduce inequality. The plan recognizes SMEs as a means of building competitiveness for the country's economic growth and as a tool for income distribution, with the concept of operations aiming to expand the economic role of SMEs to overcome the middle-income country trap within ten years. According to recent data, the growth rate of MSME GDP in Thailand has declined since 2016, following the country's overall GDP proportion trend. In 2021, the growth rate of MSME GDP was only 0.10% compared to 2019, while the country's GDP decreased by 1.00% due to the impact of the Covid-19 pandemic. Although businesses were hit hard during

* Corresponding author

E-mail address worravitk@gmail.com (W. Kultangwatana)

© 2023 Growing Science Ltd. All rights reserved

doi: 10.5267/j.uscm.2023.6.004

^cAssociate Professor of Business, Faculty of Business Administration, King Mongkut's University of Technology North Bangkok, Thailand

the early stages of the pandemic in 2020, they have recovered quickly due to their simple business structure that does not require significant investments and the ability to conduct business online, reducing expenses or shifting to other companies. Moreover, the government has periodically implemented measures to stimulate spending and directly support SMEs. These measures have played a crucial role in helping SMEs recover and continue to contribute to the country's economy.

SMEs are encountering various difficulties in Thailand, including the following six challenges. Firstly, they have difficulty accessing funding for business expansion or receiving benefits from government policies. Secondly, SMEs face a shortage of entrepreneurial knowledge and skills. Thirdly, they cannot use digital technology to manage business information competently, which prevents them from expanding their trade and investment markets. Fourthly, they must improve their knowledge, skills, and abilities in modern business management systems. Fifthly, they encounter cost disadvantages due to a lack of economy of scale, which impedes their pricing strategies, necessitating them to enter high-value markets. Finally, the Bank of Thailand reported that Thailand's industrial transformation towards more complex or value-added industries challenges SMEs. Based on SME challenges in Thailand, the Office of Small and Medium Enterprises Promotion has developed an operational strategy to promote SMEs' competitiveness, enhancing productivity, technology, innovation, and entrepreneurship development. The ultimate goal is to create high-value SMEs in Thailand.

Therefore, the purpose of this study is to explore the approaches for transforming SMEs into high-value markets, with a focus on (1) analyzing the structure and operational characteristics of small and medium enterprises in high-value markets, (2) investigating the elements of the guidelines for the development of SMEs into high-value markets, and (3) constructing a structural equation model for the development of SMEs into high-value markets. The significance of this study lies in its potential to assist entrepreneurs in increasing the proportion of SMEs' gross product value to GDP to 50.00%, as outlined in the 4th SMEs Promotion Plan.

2. Theoretical and Literature Review

2.1. High-Value Market

The concept of high-value marketing is the marketing approach of those entrepreneurs who operate products or services that focus on quality and brand image that are higher than competitors and set a price that is higher than the average price of the same type of product in the market. High-value market operators aim to meet the needs of customers who value quality and then consider the image and symbolic meaning of less price sensitivity by being willing to pay a higher price than similar products (Kotler, 2014; Frank, 2023). In addition, Supapon and Sukhawatthanakun (2023) insisted that the brand can establish brand equity that surpasses its competitors in the eyes of consumers, contributing to long-term profitability and sustained growth. Therefore, the researchers have studied relevant research by dividing the research components into five elements, including Value Discovery, Value Development, Value Communication, Value Distribution, and Value Experiences, which were then created as essential variables related to the research as following parts. In Thailand's transition into the 4.0 era, Wongmonta and Techakana (2010) proposed that business practices align with operation 4.0 marketing. This change involves a shift in the marketing mix from the traditional 4 P's (Product, Price, Place, Promotion) to the 4 C's (Co-creation, Currency, Communal Activation, Conversation). In addition, Sukhawatthanakun (2022a) emphasized that conducting business with ethics and morality is essential to enhance the quality of human life.

2.2. Value Discovery

Understanding customers comprehensively, including their characteristics, needs, desires, expectations, aspirations, motivations, and purchase or service behaviors, is vital for identifying the value they seek. Ensuring that products effectively and efficiently meet customers' expectations is essential, leading to satisfaction. Al Idrus et al. (2021) conducted a study involving 140 customers from SMEs in Indonesia. They found a positive relationship between customer satisfaction with three factors: product knowledge, service quality, and innovative products. Addressing these factors contributes to customer satisfaction in SMEs.

Similarly, Stancu et al. (2020) explored the creation of competitive advantage through a value proposition among 399 Romanian SMEs. The study identified three strategic options: providing a superior customer experience, offering affordable products or services, and delivering personalized one-to-one customization. These options increased customer satisfaction and, in turn, contributed to the competitive advantage of SMEs. Additionally, Budur & Poturak (2021) found that positive customer perceptions of employee performance significantly influence customer satisfaction and loyalty. Therefore, efficient interactions between employees and customers are crucial for long-term organizational success. To achieve customer satisfaction and loyalty, SMEs should understand customer needs, deliver quality service, introduce new products, create superior customer experiences, offer affordability, and ensure positive customer perceptions of employee performance (Suyoto & Tannady, 2022). Consequently, Techakana's (2020a) study found that in achieving entrepreneurial heights in this new era, businesses must focus on customers along with a mission to create value for all stakeholders. Entrepreneurs must embrace innovation by emphasizing the quality of products, services, and transactions. Branding is essential in building a brand by differentiating it from the competition.

2.3. Value Development

Handiwibowo et al. (2020) examined the organizational process of SMEs, emphasizing research and development, product improvement, adaptation, and reinvention, including introducing new brands. Their study found that these processes result in products that effectively meet customer needs. The research also emphasized the importance of marketability, R&D ability, and strategic planning ability in driving the efficiency of new product development. Yi et al. (2021) conducted a study on 424 SMEs in South Korea, revealing that unique product creativity and novelty significantly contribute to competitive advantage. The study also found a positive relationship between recent product performance and customer satisfaction. In addition, Morgan et al. (2019) investigated customer engagement's impact on the speed of new product development, showing that engaged customers can accelerate the product development process and facilitate faster sales. These findings are valuable for managing uncertain environments. Noronha et al. (2023) suggested that businesses consider the Eco-Innovation Generation for products as a business model development policy according to environment-friendly customer trends. Additionally, the study suggested that the rate of product development mediates the relationship between customer engagement and new product performance. Especially in Thai industrial management, the executive might consider (Sukhawatthanakun et al., 2023) technology such as big data, IoT, and AI to support communication development between inside and outside organizations to level up high-value products. Industrial manufacturing should focus on research and development for valuable customers individually and must support their customers with comprehensive expert consulting (Wattanakomol & Silpcharu, 2022).

2.4. Value Communication

Techakana (2020b) emphasizes that in this era, promotion strategies must be formulated according to the integrated marketing communications concept that requires a variety of persuasive communications. Integrating marketing promotion tools within an organization involves aligning strategies, such as advertising, public relations, personal selling, sales promotion, and direct marketing, towards a unified direction to effectively communicate the value of products and services and foster positive customer relationships. For example, Amoah & Jibril (2020) emphasized the importance of social media as an innovation tool for advertising and communication based on their study of 650 SMEs in Ghana. Similarly, Djakasaputra et al. (2021) found that digital marketing significantly impacts service quality and sales efficiency in their research on 125 SMEs in Banten, Indonesia. Therefore, effectively utilizing digital marketing strategies is crucial for improving service quality and driving sales performance in SMEs.

In addition, Daud et al. (2022) studied 190 SMEs in Banten Province, Indonesia, and found that digital finance, digital payments, and digital marketing positively and significantly affect financial performance. They emphasize SMEs' need to improve their digital finance efficiency and literacy. Erlangga (2021) examined 210 SMEs in the same province and discovered that social media marketing strongly influences SMEs' product purchasing decisions. These findings highlight the importance of embracing digital technologies and leveraging social media platforms for improved financial performance and business success. Interestingly, Techakana (2020c) provided insights into the current landscape and future forecasts in digital marketing for 2020 on various aspects of digital marketing in 14 sections. These sections cover topics such as digital marketing, social media, video marketing, email marketing, programmatic marketing, native advertising and branded content, content marketing, inbound marketing, SEO, SEM and Google ads, data analytics, web design and design based on diversity, e-commerce, and OOH digital advertising.

2.5. Value Distribution

When selecting marketing channels, consider valuable product distribution through relevant institutions, considering location, time, and customer convenience. Incorporate technology to align with customer behavior, enhancing sales and service experiences. Sudari et al. (2019) found that products, promotions, locations, and prices positively affected customer satisfaction, explaining about 68.90% of customer satisfaction. Additionally, customer satisfaction contributed to approximately 61.70% of customer loyalty. Meanwhile, Al-Tit (2020) identified ten factors influencing e-commerce adoption in SMEs and highlighted four factors affecting customer loyalty: data quality, customer trust, user interface quality, and customer satisfaction. Additionally, Nuseir & Aljumah (2020) studied the impact of digital marketing on business performance in the UAE. They found that digital marketing, including the use of applications, significantly influenced the performance of SMEs in reaching and engaging with customers remotely. Sukhawatthanakun (2022b) argued that the value distribution in agricultural products depends on what selling product, farm distance, distributor, and retailer to keep the quality products to the customers.

2.6. Value Experiences

Creating an exceptional customer experiences involves designing service processes, developing personnel quality, and creating a welcoming atmosphere within the establishment. These factors contribute to impressing customers throughout their entire journey, from the initial interaction with the product to the purchase, usage, and even after-sales experience. Flavián et al. (2019) discussed integrating virtual, augmented, and mixed reality in creating new hybrid experiences. By combining physical and virtual elements, these technologies have the potential to enhance the customer experience throughout the

customer journey. In addition, Kurhayadi et al. (2022) found that customer experience management factors play a crucial role in customers, including brand experience, personal experience, and customer behavior. Brand image, trust, and additional airline services increase customer satisfaction and repeat purchases. The study by Alnawas and Hemsley-Brown (2019) revealed customer experience quality in the hotel industry, focusing on 420 hotels. They identified several factors, including emotional experience, employee-customer interaction, customer-customer interaction, learning, lifestyle, guest safety, and atmosphere, contributing to customer satisfaction, perceived value, and strong brand loyalty. All of these ideas lead to a need for experiential marketing strategies (Techakana, 2020b).

3. Conceptual Framework and Hypotheses Development

Based on the research objectives and relevant literature, the researchers formulated seven hypotheses for the theoretical research. These hypotheses are presented in Figure 1, which serves as the conceptual framework of this research. The conceptual research model consisted of one exogenous latent variable, the Value Discovery element, combined with the four endogenous latent variables, Value Development, Value Communication, Value Distribution, and Value Experiences.

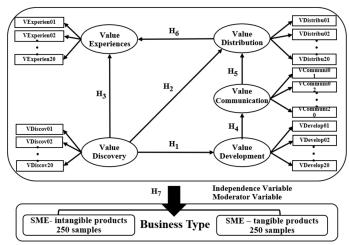


Fig 1. Conceptual Framework **Source:** Prepared by authors (2023)

Hypothesis 1 (H1): The "Value Discovery" element directly influences the "Value Development" element.

Hypothesis 2 (H2): The "Value Discovery" element directly influences the "Value Distribution" element.

Hypothesis 3 (H3): The "Value Discovery" element directly influences the "Value Experiences" element.

Hypothesis 4 (H4): The "Value Development" element directly influences the "Value Communication" element.

Hypothesis 5 (H5): The "Value Communication" element directly influences the "Value Distribution" element.

Hypothesis 6 (H6): The "Value Distribution" element directly influences the "Value Experiences" element.

Hypothesis 7 (H7): The level of importance of the overall average on guidelines for the development of small and medium enterprises into high-value markets when classified by business type is different.

4. Data and Methodology

This study utilizes mixed research methods, comprising qualitative research utilizing in-depth interviews and quantitative analysis utilizing survey research. Additionally, this time incorporates qualitative investigation using focus group discussions to achieve three research objectives: firstly, to examine the structure and characteristics of small and medium enterprises; secondly, to analyze the elements of guidelines for the development of small and medium enterprises into high-value markets; and thirdly, to construct a structural equation model of guidelines for the development of small and medium enterprises into high-value markets.

4.1. Population and Sample

Qualitative research (In-depth interview Technique): The qualitative research conducted in this study utilized the in-depth interview technique, targeting experts who met specific qualification criteria. The sample size for this research method was limited to nine individuals, chosen through a purposive sampling method.

Quantitative Research (Survey Technique): The population for the quantitative research, which employed survey techniques, consisted of 3,858 small and medium-sized enterprises operating in high-value markets (Department of Business Development, Ministry of Commerce, 2020). The sample size for this research method was determined to be 500, chosen through multi-stage sampling, as Silpcharu (2020) recommended. The business operators were categorized into two groups: intangible and tangible products, and a systematic sampling method was used for data collection. The research criteria for this quantitative research method included elemental analysis and structural equation modeling.

Qualitative research (Focus Group Discussion Technique): The population used in qualitative research is the executive of well-known organizations in Thailand, then the researchers employ the focus group discussion technique through 11 experts as purposive sampling.

4.2 Research instruments

Qualitative research (In-depth interview Technique): In the initial research phase, structured interviews were conducted with nine qualified business management experts. The interviews were recorded using video and notes, and the data were analyzed using content analysis. The interview findings were then used to develop a questionnaire for the quantitative research stage.

Quantitative Research (Survey Technique): The instrument utilized in this research was a questionnaire consisting of four parts. Part 1 focused on the general factors of industrial business organizations, using a checklist format with four items and two open-ended questions. Part 2 delved into the structure and general operational characteristics of small and medium enterprises in high-value markets, using a checklist format with 20 items. Part 3 provided guidelines for the development of small and medium enterprises into high-value markets, utilizing a rating scale with five assessment criteria levels and 100 items. Finally, using five open-ended questions, Part 4 gathered opinions and recommendations for developing small and medium enterprises into high-value markets.

Five experts validated and evaluated a drafted questionnaire for construct validity. Variables were analyzed using the Item Objective Congruence method and showed values between 0.80-1.00 (Turner & Carlson, 2002). Cronbach's alpha reliability was employed for 30 try-out questionnaires and showed a weight of 0.99 (George & Mallery, 2003), the standard deviation analysis obtained 0.31-1.80.

Qualitative Research (Focus Group Discussion Technique): In the final stage of the research, a focus group discussion was conducted with 11 business executives and two academic professors, a total of 13 persons. A professional moderator facilitated the meeting to generate ideas and opinions on the research results and SEM models. The discussion was recorded and analyzed using content analysis. The participants unanimously approved the research findings and provided recommendations for report adjustments. The research results were then presented in the subsequent sections.

4.3 Data Analysis

To collect quantitative data, the researchers distributed questionnaires to obtain 500 responses. The collected data was then analyzed using descriptive statistics, reference statistics, and a structural equation model. Descriptive statistics such as frequency, percentage, mean, and standard deviation were used to summarise the general factors data. Bivariate correlations were also analyzed to test the relationship between the structure and general operational characteristics of small and medium enterprises operating in high-value markets. Statistical significance was set at 0.001, 0.01, and 0.05. Pearson Chi-square value was used to analyze the data and test for statistical significance at the 0.05 level. The statistical data analysis with multivariate statistics was conducted using the IBM SPSS Statistics and IBM SPSS AMOS software packages to develop the structural equation model.

To ensure the completeness of the model, the researchers evaluated the consistency of all elements or latent variables using data-model fit criteria. Adjusting the latent variables to ensure the developed model was consistent with empirical data and modifying the model based on observed variables obtained from questionnaire data collection. In addition, the researchers used modification indices, suggested by Arbuckle (2016), to identify unsuitable observed variables and exclude them from the model one by one until the model passed all four statistical criteria values. This process ensured that the structural equation model was consistent with the empirical data (Silpcharu, 2020).

5. Results and Discussion

5.1. Business factors

The research found that small and medium enterprises in high-value markets mainly involved tangible and intangible products businesses, representing 250 respondents from each group, a total of 500 respondents. Most of these businesses had less than or equal to 50 employees (95.80%). Moreover, most of these businesses were owned by Thai individuals (96.80%). In addition, sole proprietorships were the most common form of business establishment (67.40%), and most of these businesses had never received any awards or quality standards (90.40%).

5.2. Importance level

According to the research, the elements of the guidelines for the development of small and medium enterprises into high-value markets were found to be of high importance, with an average score of 4.24 (see Table 1). Furthermore, the importance level and top-ranked of the observed variable factors in each element could be explained as follows.

- (1) Value discovery element was highly important, with an average rating of 4.24. The highest-ranked observed variable factor was 'Analyze direct and indirect competitors to present unique values to customers,' rated at an average of 4.65.
- (2) Value development element was highly important, with an average rating of 4.24. The highest-ranked observed variable factor was 'Develop new products/services to increase the choices of customers continuously,' rated at an average of 4.64.
- (3) Value distribution element was highly important, with an average rating of 4.38. The highest-ranked observed variable factor was 'Use technology or software with modern transportation management systems for accurate delivery,' rated at an average of 4.65.
- (4) Value communication element was highly important, with an average rating of 4.15. The highest-ranked observed variable factor was 'Establish the demonstration center of products and services to communicate the value to customers,' rated at an average of 4.55.
- (5) Value experiences element was highly important, with an average rating of 4.22. The highest-ranked observed variable factor was 'Maintain customer privacy by keeping customer information confidential and avoiding subject to interference by other businesses,' rated at an average of 4.61.

Table 1
Importance level and top-ranked of the observed variable factors in each element

Guidelines for the development of small and medium enterprises into high-value	$\overline{\mathbf{X}}$	S.D.	Importance
markets factors			Level
Overall	4.24	0.37	High
1. Value Discovery	4.24	0.45	High
Observed variable factor: Analyze direct and indirect competitors to present unique values to customers.	4.65	0.52	Highest
2. Value Development	4.24	0.45	High
Observed variable factor: Develop new products/services to increase the choices of customers continuously.	4.65	0.65	Highest
3. Value Distribution	4.38	0.44	High
Observed variable factor: Use technology or software with modern transportation management systems for accurate delivery.	4.65	0.58	Highest
4. Value Communication	4.15	0.43	High
Observed variable factor: Establish the demonstration center of products and services to communicate the value to customers.	4.55	0.73	Highest
5. Value Experiences	4.22	0.41	High
Observed variable factor: Maintain customer privacy by keeping customer information confidential and avoiding subject to interference by other businesses.	4.61	0.67	Highest

Source: Prepared by authors (2023)

Interestingly, the level of importance of the elements for the development of small and medium enterprises into high-value markets was compared based on the type of business. A t-Test was conducted to compare the means of the two population groups independently, and the results showed a statistically significant difference at the 0.05 level. The intangible goods business placed greater importance on development of small and medium enterprises into high-value markets than the tangible product business (see Table 2).

 Table 2

 Comparison of the two groups' analysis results on the difference in business type

Guidelines for the development of small and medium enterprises into high-value markets	t-Value	P-Value
Overall	3.55	0.00*
1. Value Discovery	2.43	0.02*
2. Value Development	1.76	0.08
4. Value Communication	2.47	0.01*
3. Value Distribution	5.25	0.00*
5. Value Experiences	3.33	0.00*

^{*}Statistical difference at the level of 0.05.

Source: Prepared by authors (2023)

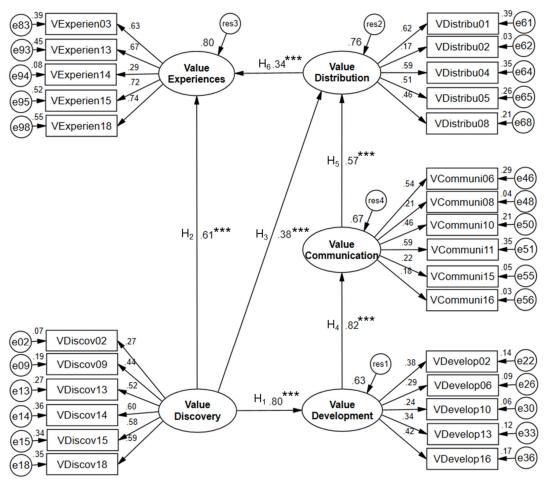
5.3. SEM Analysis Result

The researchers used modification indices to improve the model and excluded unsuitable observed variables until the model passed all four statistical values, as shown in Fig 2. After adjustment, the model showed that the chi-squared probability (CMIN-p) was 0.075, more significant than 0.05, indicating that the model is not statistically significant. Furthermore, the chi-square relative (CMIN/DF) value was 1.116, less than 2.00, indicating a good fit. Moreover, the GFI value was 0.949, more significant than 0.90, indicating a good fit. Finally, the root means a square value of the error estimate (RMSEA) was 0.015, less than 0.08, showing a good fit of 27 observed variable factors (see Table 3-4).

Model fit consideration statistics and output of before and after modification

Model Fit Consideration Statistics	Standard Criteria	Before Modification	After Modification
CMIN-P (Chi-square probability level)	Higher than 0.05	0.000	0.075
CMIN/DF (Relative Chi-square value)	Lower than 2.00	3.707	1.116
GFI (Goodness-of-fit-index)	Higher than 0.90	0.497	0.949
RMSEA (Root means the square error of approximation)	Lower than 0.08	0.074	0.015

Source: Prepared by authors (2023)



Chi-square = 354.958, df = 318, p=.075 CMIN/DF =1.116, GFI = .949, RMSEA = .015

Fig. 2 SEM model after modification Source: Prepared by authors (2023)

Table 4Outstanding observed variable factors after SEM modification

Outstanding observed variable factors after SEM modification		Standardized regression weight	
Value Discover	ry		
VDiscov14	Brainstorm with workforces interacting with customers directly (Frontline) to understand customers clearly.	0.60	
VDiscov18	Analyze direct and indirect competitors to present unique values to customers.	0.59	
VDiscov15	Gather customer problems and suggestions to set up a guideline for research and development to present the value that should be in products and services.	0.58	
VDiscov13	Research consumer behavior in high-value markets and provides relevant information to each department matching products and services.	0.52	
VDiscov09	Keep up with new technologies, such as AI and Quantum Technology, that impact changing customer needs and expectations.	0.44	
VDiscov02	Learn how people use social media to understand basic ideas and apply for new products or services discovered.	0.27	
Value Develop	ment		
VDevelop16	Encourage using workpieces from ideal design to further develop into products or services as prototypes or actual work that can be used concretely.	0.42	
VDevelop02	Develop products and services with a unique identity that is difficult to imitate.	0.38	
VDevelop13	Develop new products/services to increase the choices of customers continuously.	0.34	
VDevelop06	Inspect and select the quality raw materials or equipment used in the service must be high quality and in perfect condition.	0.29	
VDevelop10	Meticulous in raw materials storage, production, or service process to maintain quality, hygiene, and safety, serving for high expectations of customers.	0.24	
Value Commu	nication		
VCommuni11	Select the testimonial reviewers who use the product/ service to correspond to the product or service presentation level.	0.59	
VCommuni06	Establish the demonstration center of products and services to communicate the value to customers.	0.54	
VCommuni10	Pin store or services branch into Google Maps to make finding it easier.	0.46	
VCommuni15	Communicate the value of the product or service by choosing media that can present compelling	0.22	
VCommuni08	impact images of the product or service through Instagram, Pinterest, online catalog, or brochure.	0.21	
	Organize activities with specific credit cards targeting the premium customer, such as SCB First, The Wisdom, The Signature, Infinite BBL, or Amex Platinum card.		
VCommuni16	Use Metaverse Technology to allow customers to make a virtual visit to learn about products or services in advance, helping customers understand and appreciate the value presented in products and services.	0.18	
Value Distribu	tion		
VDistribu01	Choose expertise partners to be distributors/ dealers/ agencies for product distribution.	0.62	
VDistribu04	Provide IVR system (Interactive Voice Response) for customers to order products through technology when out of business hours.	0.59	
VDistribu05	Use technology or software with modern transportation management systems for accurate delivery.	0.51	
VDistribu08	Choose a place to sell products or services only in areas with a good environment, high quality, and good image.	0.46	
VDistribu02	Integrate product delivery link omnichannel with showrooming and web-rooming to facilitate customers.	0.17	
Value Experie	nces		
VExperien18	Set a policy to guarantee products and services after sales for a reasonable period.	0.74	
VExperien15	Provide personal shopper services to meet the needs of specific customers.	0.72	
VExperien13	Maintain customer privacy by keeping customer information confidential and avoiding subject to interference by other businesses.	0.67	
VExperien03	Create a faithful fan community of the brand on social media to exchange opinions and share happiness or good experiences consuming the same product or service.	0.63	
VExperien14	Resolve problems or customer complaints quickly (Embrace Criticism).	0.29	

Therefore, the researchers could conclude that the SEM model is consistent with the empirical data. Furthermore, the hypotheses test results for analyzing the causal influence between latent variables in the structural equation model for the development of small and medium enterprises into high-value markets revealed that all six hypotheses were supported at the 0.001 level of statistical significance.

 Table 5

 Overall influence analysis of direct and indirect influence after model modification

Latent Variable	Value	Value	Value	Value
	Discovery	Development	Communication	Distribution
Value Development	0.80	0.00	0.00	0.00
Value Communication	0.66	0.82	0.00	0.00
Value Distribution	0.75	0.47	0.57	0.00
Value Experiences	0.87	0.16	0.19	0.34

Source: Prepared by authors (2023)

Table 5 shows overall influence analysis results in the direct and indirect influence of the SEM after model modification found that the most substantial overall effect was on the 'Value Discovery' influenced the overall direct and indirect effect on the element of 'Value Experiences' with a standardized regression weight of 0.87 (0.61 + 0.13 + 0.13).

6. Conclusion and Discussion

The study found that Information and Communication Technology (ICT) has played a significant role in helping small and medium enterprises (SMEs) in the intangible goods sector to create products and services for better management efficiency. An electronic commerce system (e-commerce) allows businesses to distribute products more efficiently, driving SMEs in the category of intangible goods to leap forward in the digital age. The study also found that technology is essential in developing business-to-business (B2B) or business-to-consumer (B2C) e-commerce. Moreover, the study shows that extrinsic change agents and competitive pressure positively and significantly influence e-commerce adoption among SMEs. Executives of SMEs recognize the potential advantages of e-commerce as a guide from traditional to online business. SMEs are also recognized as the engine of sustainable economic development in developed and developing countries (Zain et al., 2020; Prasanna et al., 2019). Wattanakomol & Silpcharu (2023) supported this study that small and medium enterprises drive the country's economy and cover all manufacturing sectors.

According to the results of hypothesis testing, the value discovery element significantly influenced the business's overall success, with a standardized regression weight of 0.87. This result indicates that an organization's success depends on its ability to produce products or services that meet consumer needs and to have a clear vision that aligns with those needs. Furthermore, regularly updating business information and maintaining customer communication is crucial for achieving this success. The findings are consistent with the concept of Social Customer Relationship Management (Social CRM), which suggests that engaging with customers through social media can help SMEs achieve the actual benefits of social CRM. Additionally, this research result supported by Ahmad et al. (2022) found that Total Quality Management (TQM) is an essential factor influencing SMEs' performance in Malaysia's service sector, with four key elements: customer focus, continuous improvement, strategy, and total employee engagement. However, the study of Ekawati et al. (2022) showed that social influence does not influence consumers' green purchase behavior toward the society in Bali during the covid-19 new normal conditions.

The results of the hypothesis testing indicate that the value development element has a significant direct influence on the value communication element, with a standardized regression weight of 0.82. This result underscored the importance of research and development in creating value for new and existing industries by applying science, technology, and innovation informed by local knowledge and identity. Entrepreneurs should focus on understanding the market's needs to create products that respond to future trends. Additionally, improving product development and using raw materials wisely can help entrepreneurs produce products that are attractive to consumers. The research results are also vital to ensure that products have clear consumer benefits and pay attention to packaging and promotional design to effectively communicate the product's identity.

Consequently, Mandolfo et al. (2020) provide insights into the psychological factors supporting consumer participation in product development. The results show that depending on the product type, consumers' personality traits affect their motivations and barriers to co-creation. Finally, Ferraris-Méndez et al. (2021) highlighted the role of Entrepreneurial Orientation (EO) in improving SME performance. By analyzing the link between EO performance and new product development through Business Model Innovation (BMI), the study shows that BMI is an effective method for driving an entrepreneurial approach to the innovation process and increasing the success of new product development. In summary, this research highlights the importance of a multi-faceted approach to product development that combines research and development, market research, and an entrepreneurial mindset to create value that responds to market needs and trends.

7. Suggestions

The researchers suggest that the Ministry of Industry should take the initiative to solve SMEs' problems. These problems include technology and innovation, production, marketing, social coexistence, financial, personnel, procurement, and production factors, and organizational and strategic issues. Furthermore, the ministry should integrate plans to reform entrepreneurs and equip them with practical business operation strategies. Moreover, the Office of Small and Medium Enterprises Promotion (OSMEP) should introduce projects to develop marketing channels for SME entrepreneurs to promote their potential and trade opportunities. The focus should be on providing marketing knowledge, especially in high-value markets, fostering a creative economy, and emphasizing value-added products and services with creativity. The emphasis should be on developing products and the potential of Thai SMEs and creating networks and trade alliances in both public and private sectors to build competitive advantages from differences, not prices. By doing so, SMEs can establish a strong market presence and contribute significantly to the economy.

The research results are beneficial for SMEs can improve their competitiveness, develop unique value propositions, and provide better customer experiences.

- (1) SMEs should analyze their competitors and gather customer feedback to develop unique value propositions for their products and services.
- (2) SMEs should develop innovative products and services with specific identities to add customer value.
- (3) SMEs should have an accurate product management system that allows customers to order and pay through different channels.
- (4) SMEs should have testing and demonstration centers for their products and services and put their businesses on Google Maps for greater search convenience.
- (5) SMEs should provide personalized services to meet and impress customers' needs.
- (6) Entrepreneurs should be aware that the value of their products or services is not just in the product itself but also in the experience that customers have in their establishments, the physical environment, and the quality of their personnel.
- (7) Entrepreneurs should set up branding as the primary strategy of their organization to create additional value for their products and services.
- (8) Entrepreneurs should use digital technology to enhance service efficiency and provide good customer experiences, and
- (9) Entrepreneurs in the high-value market should set up a customer data collection system to manage customer relationships and create impressive experiences through customer relationship management (CRM) and product research and development (R&D).

Furthermore, the researchers can suggest that future research should focus on using intelligent diagnostics and consulting or AI plus E-System (Artificial Intelligence + Expert System) to analyze and diagnose the problems and needs of Thai SMEs. The subsequent studies might involve using data from entrepreneurs, big data from integrated national databases, and expert input for more in-depth analysis and diagnosis. The results of this research could then be used to develop research tools, such as quantitative and qualitative surveys, to more accurately and efficiently identify the needs of SMEs. Furthermore, by using artificial intelligence to analyze these needs in-depth, policymakers and entrepreneurs could better understand how to support and promote the growth of SMEs in the country.

Acknowledgments

Thankful to the SME entrepreneurs who responded to the questionnaire. Special thanks to the academics and research fund from the Faculty of Liberal Arts and Management Science, Kasetsart University, Chalermphrakiat Sakon Nakhon Province Campus.

References

- Ahmad, F., Hamid, N. A., Ahmad, A. N. A., Nawi, M. N. M., Rahman, N. A. A. A., & Hamid, N. A. A. (2022). The impact of TQM on business performances based on balanced scorecard approach in Malaysia SME. *International Journal for Quality Research*, 16(1). https://doi.org/10.24874/IJQR16.01-16
- Al Idrus, S., Abdussakir, A., Djakfar, M., & Al Idrus, S. (2021). The effect of product knowledge and service quality on customer satisfaction. *The Journal of Asian Finance, Economics and Business*, 8(1), 927–938. https://doi:10.13106/jafeb.2021.vol8.no1.927
- Alnawas, I., & Hemsley-Brown, J. (2019). Examining the key dimensions of customer experience quality in the hotel industry. *Journal of Hospitality Marketing & Management*, 28(7), 833–861. https://doi.org/10.1080/19368623.2019.1568339
- Al-Tit, A. A. (2020). E-commerce drivers and barriers and their impact on e-customer loyalty in small and medium-sized enterprises (SME). *Verslas: teorija ir praktika*, 21(1), 146–157. https://doi.org/10.3846/btp.2020.11612
- Amoah, J., & Jibril, A. B. (2020). Inhibitors of social media as an innovative tool for advertising and marketing communication: evidence from SME in a developing country. *Innovative Marketing*, 16(4), 164–179. http://dx.doi.org/10.21511/im.16(4).2020.15
- Arbuckle, J. L. (2016). IBM SPSS AMOS user's guide. Amos Development Corporation.
- Bank of Thailand. (2013). Challenges and opportunities for SMEs under the AEC. Retrieved from <a href="https://www.bot.or.th/Thai/PressAndSpeeches/
- Budur, T., & Poturak, M. (2021). Employee performance and customer loyalty: Mediation effect of customer satisfaction. *Middle East Journal of Management*, 8(5), 453–474. https://doi.org/10.1504/MEJM.2021.117510

- Daud, I., Nurjannahe, D., Mohyi, A., Ambarwati, T., Cahyono, Y., Haryoko, A. E., ... & Jihadi, M. (2022). The effect of digital marketing, digital finance, and digital payment on finance performance of Indonesian SMEs. *International Journal* of Data and Network Science, 6, 37–44. https://doi.org/10.5267/j.ijdns.2021.10.006
- Djakasaputra, A., Wijaya, O., Utama, A., Yohana, C., Romadhoni, B., & Fahlevi, M. (2021). Empirical study of Indonesian SME sales performance in digital era: The role of quality service and digital marketing. *International Journal of Data and Network Science*, 5(3), 303–310. https://doi.org/10.5267/j.ijdns.2021.6.003
- Ekawati, N., Wardana, I., Yasa, N., Kusumadewi, N., & Tirtayani, I. (2023). A strategy to improve green purchase behavior and customer relationship management during the covid-19 new normal conditions. *Uncertain Supply Chain Management*, 11(1), 289–298. https://doi.org/10.5267/j.uscm.2022.9.014
- Erlangga, H. (2021). Effect of digital marketing and social media on purchase intention of SME food products. *Turkish Journal of Computer and Mathematics Education (TURCOMAT)*, 12(3), 3672–3678. https://doi.org/10.17762/turcomat.v12i3.1648
- Ferreras-Méndez, J. L., Olmos-Penuela, J., Salas-Vallina, A., & Alegre, J. (2021). Entrepreneurial orientation and new product development performance in SME: The mediating role of business model innovation. *Technovation*, 108, 102325. https://doi.org/10.1016/j.technovation.2021.102325
- Flavián, C., Ibáñez-Sánchez, S., & Orús, C. (2019). The impact of virtual, augmented, and mixed reality technologies on the customer experience. *Journal of business research*, 100, 547–560. https://doi.org/10.1016/j.jbusres.2018.10.050
- Frank D. (2023). Marketing to high-end consumers—use these 11 strategies. Mediaboom. Retrieved from https://mediaboom.com/news/marketing-to-high-end-consumers/
- George, D., & Mallery, P. (2003). SPSS for Windows step by step: A simple guide and reference, 11.0 update (4thed.). Allyn & Bacon, Boston.
- Handiwibowo, G., Nasution, A., Arumsari, Y., & Astuti, R. (2020). Strategic fit implication of technological innovation capabilities for SME with new product development. *Management Science Letters*, 10(12), 2875–2882. https://doi.org/10.5267/j.msl.2020.4.020
- Kotler, P. (2014). Kotler on marketing: How to create, win and dominate markets. Free Press, New York.
- Kurhayadi, K., Rosadi, B., Yusuf, M., Saepudin, A., & Asmala, T. (2022). The effect of company reputation and customer experience on customer loyal behavior Citylink Indonesia. *Riwayat: Educational Journal of History and Humanities*, 5(2), 381–385. https://doi.org/10.24815/jr.v5i2.28848
- Mandolfo, M., Chen, S., & Noci, G. (2020). Co-creation in new product development: Which drivers of consumer participation? *International Journal of Engineering Business Management*, 12, 1847979020913764. https://doi.org/10.1177/1847979020913764
- Department of Business Development, Ministry of Commerce. (2020). Business Statistical Data-DBD Datawarehouse. Retrieved from https://datawarehouse.dbd.go.th/juristic/index
- Morgan, T., Anokhin, S. A., Song, C., & Chistyakova, N. (2019). The role of customer participation in building new product development speed capabilities in turbulent environments. *International Entrepreneurship and Management Journal*, 15, 119–133. https://doi.org/10.1007/s11365-018-0549-9
- Noronha, M. E. S. de., Martins, J. B. N., Iamamoto, A. T., Bidin da Silva, P., & Vieira Silva, R. de S. (2023). The dynamic capabilities of cleantechs and eco-innovation in the use of green fiscal public policies. *Journal of Law and Sustainable Development*, 11(1), e0248. https://doi.org/10.37497/sdgs.v11i1.248
- Nuseir, M. T., & Aljumah, A. (2020). The role of digital marketing in business performance with the moderating effect of environment factors among SMEs of UAE. *International Journal of Innovation, Creativity and Change*, 11(3), 310–324. https://ijicc.net/images/voll1iss3/11325 Nuseir 2020 E R.pdf
- Office of Small and Medium Enterprise Promotion. (2022). SME Promotion Plan 4th (The year 2017–2021). Retrieved from https://www.sme.go.th/th/download.php?modulekey=12
- Prasanna, R. P. I. R., Jayasundara, J. M. S. B., Naradda Gamage, S. K., Ekanayake, E. M. S., Rajapakshe, P. S. K., & Abeyrathne, G. A. K. N. J. (2019). Sustainability of SME in the competition: A systemic review on technological challenges and SME performance. *Journal of Open Innovation: Technology, Market, and Complexity*, 5(4), 1–18. https://doi.org/10.3390/joitmc5040100
- Silcharu, T. (2020). Research and Statistical Analysis with SPSS and AMOS (18th ed.). Business R&D, Nonthaburi.
- Stancu, A., Filip, A., Roşca, M. I., Ioniţă, D., Căplescu, R., Cânda, A., & Roşca, L. D. (2020). Value creation attributes-clustering strategic options for Romanian SME. *Sustainability*, *12*(17), 7007. https://doi.org/10.3390/su12177007
- Sudari, S., Tarofder, A., Khatibi, A., & Tham, J. (2019). Measuring the critical effect of marketing mix on customer loyalty through customer satisfaction in food and beverage products. *Management Science Letters*, 9(9), 1385–1396. https://doi.org/10.5267/j.msl. 2019.5.012
- Sukhawatthanakun, K. (2022a). Thai consumer perspective on marketing ethics of consumer products. *Humanities and Social Sciences Letters*, 10(2), 213–222. https://doi.org/10.18488/73.v10i2.3012
- Sukhawatthanakun, K. (2022b). Marketing channels of chili in the upper northeastern region of Thailand. *Kasetsart Journal of Social Sciences*, 43(3), 637–644. https://doi.org/10.34044/j.kjss.2022.43.3.14
- Sukhawatthanakun, K., Roopsing T., & Silpcharu, T. (2023). Industrial procurement management efficiency guidelines: Perform excellence through organizational change strategies. *International Journal of Professional Business Review*, 8(5), 1–29. e1770. https://doi.org/10.26668/businessreview/2023.v8i4.1770

- Sukendia, J., & Harianto, N. (2021). The impact of e-service quality on customer engagement, customer experience, and customer loyalty in B2C e-commerce. *Turkish Journal of Computer and Mathematics Education (TURCOMAT)*, 12(3), 3170–3184. https://doi.org/10.17762/turcomat.v12i3.1556
- Supapon S., & Sukhawatthanakun. (2023). The effect of brand equity on Thai cosmetic purchasing decisions. *Uncertain Supply Chain Management*. 11(4). https://doi.org/10.5267/j.uscm.2023.6.001
- Suyoto, Y. T., & Tannady, H. (2022). Ideal self-congruence: Its impacts on customer love and loyalty to luxury brands in Indonesia. *International Journal of Professional Business Review*, 7(6), 1–18. e0769. https://doi.org/10.26668/businessreview/2022.v7i6.e769
- Techakana, J. (2020a). Innovative business model for high achievement. *Journal of Social Science and Buddhistic Anthropology*, 5(3), 431–445. https://so04.tci-thaijo.org/index.php/JSBA/article/view/237872/163995
- Techakana, J. (2020b). Integrated Marketing Communications 4.0. Samnao Plus, Bangkok.
- Techakana, J. (2020c). Book review: 130 trends and predictions for digital marketing 2020. *Journal of the Association of Researchers*, 25(2), 475–492. https://so04.tci-thaijo.org/index.php/jar/article/view/245375/166665
- Turner, R. C., & Carlson, L. (2002). Index of item objective congruence for multiple objective measures. *International Journal of Testing*, 3(2), 163–171. https://doi.org/10.1207/S1532757 4IJT0302 5
- Wattanakomol, S., & Silpcharu, T. (2022). Second-order confirmatory factor analysis of auto parts manufacturing industry management guidelines for sustainable success. *Uncertain Supply Chain Management*. 10(3), 905–912. https://doi.org/10.5267/j.uscm.2022.3.004
- Wattanakomol, S., & Silpcharu, T. (2023). Characteristics of entrepreneurs in sustainably successful micro, small, and medium enterprises. *Uncertain Supply Chain Management*. 11(3), 1359–1368. https://doi.org/10.5267/j.uscm.2023.3.012
- Wongmonta, S., & Techakana, C. (2010). Marketing 4.0 in the Context of Thailand. *Journal of Economics and Public Policy*, 8(15), 1–16. https://so01.tci-thaijo.org/index.php/econswu/article/view/117795/90375
- Yi, H. T., Amenuvor, F. E., & Boateng, H. (2021). The impact of entrepreneurial orientation on new product creativity, competitive advantage and new product performance in SME: The moderating role of corporate life cycle. Sustainability, 13(6), 3586. https://doi.org/10.3390/su13063586
- Zain, Z. M., Jusoh, A. A., Munir, R. I. S., & Putit, L. (2020). Drivers of e-commerce adoption amongst small & medium sized enterprises (SME) in the business service sector. *Journal of International Business, Economics and Entrepreneurship*, 5(1), 50–58. https://jibe.uitm.edu.my/images/jun2020/zahariahabs.pdf



© 2023 by the authors; licensee Growing Science, Canada. This is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC-BY) license (http://creativecommons.org/licenses/by/4.0/).