The Component Analysis of Blended Training Model for SME

Sasipin Distanont[1*] and Watsatree Diteeyont[2]

[1*,2]Faculty of Education, Kasetsart University, Thailand

Abstract

This research is a quantitative study that aimed to investigate the components of the blended training model for SME in Thailand. The sample included 466 SME entrepreneurs using a random sampling method. An online closed-ended questionnaire, distributed by the Office of Small and Medium Enterprises (OSMEP), was used to collect data from SME entrepreneurs who registered through the SME registration system and participated in blended training in digital marketing with OSMEP between 2020 and 2022. The content validity and questionnaire reliability were assessed. The data analysis utilized exploratory factor analysis (EFA) techniques to identify essential components of the blended training model for SME. The results showed that the blended training model was found to comprise 5 components which are marketing mix, trainee, course design, trainer, and technology. This research provides valuable insights for government agencies in SME development, facilitating effective training program design for future benefits.

Keywords: 1) Blended Training 2) SME 3) Exploratory Factor Analysis 4) Technology Acceptance

[1*] Ph.D. Student, Department of Educational Communications and Technology; E-mail: sasipin.d@ku.th (Corresponding Author)

[2] Assistant Professor, Department of Educational Communications and Technology; E-mail: feduwtd@ku.ac.th

Introduction

Small and Medium Enterprises (SME) are the backbone of Thailand's economy. They always play a key role as the driving force of economic growth in Thailand. In 2021, Thailand's overall GDP was 16,178,719 million baht, while SME' GDP was worth 5,603,443 million baht, contributing up to 34.6 % of national income (GDP). However, according to the evaluation of Thai SME' growth opportunities and capacity index during 2021-2022 (Office of Small and Medium Enterprises Promotion, 2022, pp. 41-42), micro-enterprises had a growth opportunity and capacity at a low level, approximately 0.45 out of 1 for all the 4 sub-indices. Whereas medium enterprises had a medium level of growth opportunity and capacity at 0.55 out of 1 for all the 4 sub-indices. This reflected that Thai SME still lack the knowledge and skills of entrepreneurs, and it led to low performance. Additionally, in recent years SME have faced various challenges that can affect their performance and growth. Technologies such as the Internet, digital technology, e-commerce, mobile banking, e-payment, and others, coupled with intense market competition, necessitate SME to embrace digital technologies skills to survive, adapt and compete in the market. A lack of digital skills can be a barrier to SME performance and growth (Kij-itti and Jarujittipant, 2020, pp. 226-227; Sariwulan, et al., 2020, p. 278; Klein and Todosco, 2021, pp. 125-129; Zhang, Xu and Ma, 2022, p. 14). In Thailand, SME have digital and technology skills at a low level, and no guidance for digital transformation for businesses. (Ratanabanchuen, 2022).

They are also not yet aware of the importance and benefit of digital technology. Most SME also lack human resources in ICT and digital technology, so they cannot compete with large businesses. and unable to access markets and sales channels (Bolliger & Company, 2022, p. 25). However, most SME have a small number of personnel. In addition, they often face various limitations, such as insufficient budget to organize internal training or to attend training sessions organized by private companies. Consequently, business owners are constantly seeking training courses offered by other organizations, including those organized by government agencies.

Before the Covid-19 pandemic, the predominant format for training programs involved onsite or in-classroom sessions. However, the emergence of the pandemic prompted a shift in the government sector's approach to training SME entrepreneurs. They introduced a novel training method known as "Blended Learning," which combines both onsite and online sessions, resulting in a new form of instruction called "Blended training." This approach has been consistently employed by government agencies in Thailand since 2020. Nevertheless, the outcomes of such training have exhibited a mixed pattern, encompassing both successes and failures. This intriguing context offers an opportunity to delve deeper and identify the key components that contribute to the success of blended training. Consequently, the objective of this research is to investigate and examine the key components of the blended training model.

The research findings have yielded a comprehensive framework for designing and implementing effective training programs. This framework holds significant potential for government agencies involved in promoting and developing SME in Thailand, providing them with valuable insights to enhance their training initiatives.

Research Question

What are the components of the Blended Training Model for SME in Thailand?

Objective

To investigate and examine the key components of the blended training model for SME in Thailand.

Literature Review

1. Context

During the COVID-19 pandemic (2020-2022), the Office of Small and Medium Enterprises Promotion (OSMEP) responded by adapting its training program to enhance the digital capabilities of SME in business. The program is designed in an integrated format with a total duration of 30 hours, split between onsite and online sessions with a total of 30 hours.

The on-site session of the training program consists of 15 hours and will be facilitated by trainers and workshops in the designated training room. The lecture content encompasses four topics, namely digital marketing fundamentals, utilizing digital tools to expand sales funnels, advertising and promotion techniques, and online store management. Following the lectures, trainees will have the opportunity to apply their learning through practical exercises, guided by the advice provided by the trainers. In case participants encounter any difficulties during the practice, a team of trainers and support staff will be available to provide one-on-one assistance and guidance within the training room. Additionally, the training manager ensures infrastructure support, including equipment and various software required for the training, as well as reliable high-speed internet and technical assistance. This comprehensive support aims to ensure a seamless and effective training experience.

Upon completion of the 15-hour on-site training, trainees will transition to the online session, which includes self-paced learning, practice, online mentoring (E-Consulting), and follow-up. The online session enables trainees to
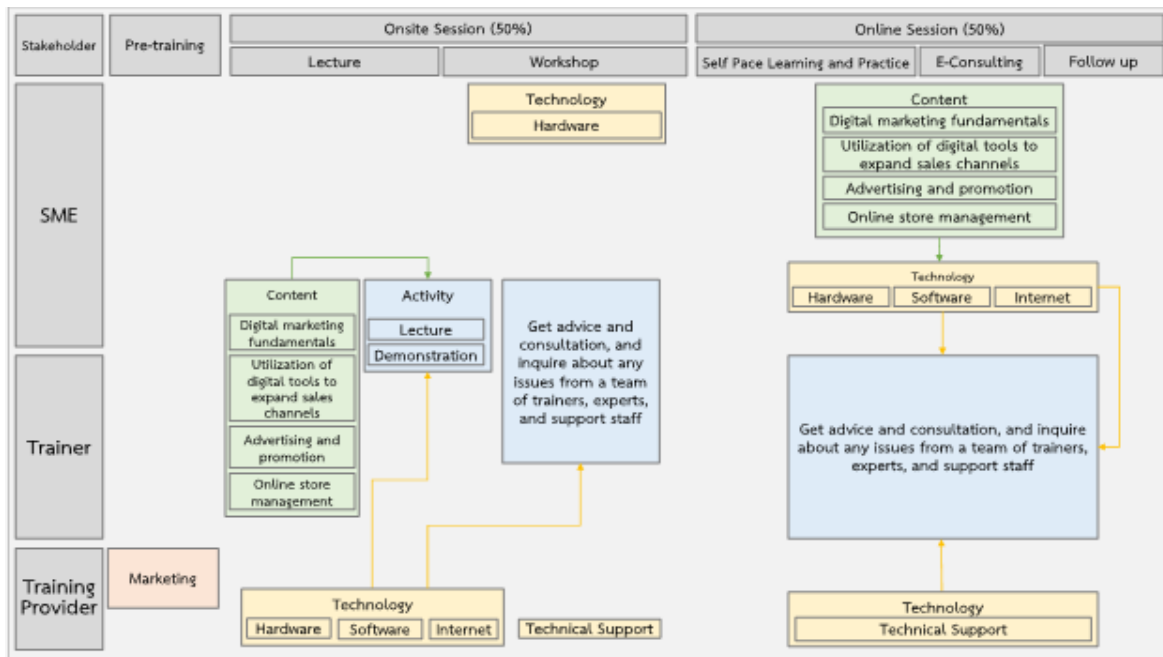
Figure 1 The overall framework of the blended training process in digital marketing for SME conducted by the Office of Small and Medium Enterprises Promotion (OSMEP)

engage in self-paced learning and practice through social media. The training provider will create a closed group classroom on the social media platform, Facebook, where trainees can access training materials and exchange ideas with trainers and fellow trainees. They can also apply the knowledge gained from self-learning to experiment with their own online store for a period of 10 hours. Trainees will receive online counseling sessions (E-Consulting) with experts, allowing them to seek in-depth advice and address any issues encountered during self-learning and practice. Throughout the training period, trainers and training teams will provide consultation and follow-up support via the Line OpenChat group, ensuring that the progress of all participants is monitored. This comprehensive approach facilitates continuous promotion and development for SME entrepreneurs.

2. Blended Training

Blended learning is widely recognized

as a learning approach that combines traditional, face-to-face instruction with online or digital learning methods. (Garrison and Kanuka, 2004, p. 96; Bliuc, Goodyear and Ellis, 2007, pp. 233-234; Boelens, et al., 2015; Van Laer and Elen, 2020). It can incorporate a variety of technologies, such as online course materials, interactive multimedia resources, learning management systems, and communication tools, along with various classroom-based learning, to increase interaction between learners and the instructor strategies, support and enhance learning outcomes. However, blended learning has evolved into broader concepts, and become a process that involves acquiring knowledge, skills, and techniques through a combination of face-to-face, computer-based, distance, and mobile learning (Batista-Toledo and Gavilan, 2022, p. 1765). Blended training is similar to blended learning in education, but it is focused on specific training and development.

In the context of this study, Blended training is defined as a process that aims to enhance knowledge, skill development, and attitude transformation among trainees. It involves a blended learning approach that combines in-person training sessions with on-line learning activities. The in-person training sessions include lectures, demonstrations by trainers, and interactive workshops. The online training sessions consist of self-paced learning and practice exercises, e-consulting, and fol-low-up activities.

The trainee dimension encompasses internal factors such as learner motivation, emotions, cognition, and prior computer use experience. The trainer/instructor dimension includes attitude, knowledge, and teaching style. Course content and objective dimension emphasize the focus on curriculum design and evaluation. The technology dimension centers around information technology systems. Key factors within technology include ease of use, quality, reliability, efficiency, and the utilization of various software tools. The design dimension highlights the importance of aligning teaching features with the institution's learning objectives, teaching methodologies, and strategies.

3. Success Factors of Blended Training Implementation

The success of training depends on preparation in various areas, such as the training provider, trainers/instructors, trainees, curriculum, technology, design, and learning environment, support (Min and Yu, 2023, pp. 11-12; Dewi, et al., 2017, pp. 3-5; Sukmuang and Ek-un, 2009, pp. 15-16). This preparation can be divided into three steps, as follows: (1) Pre-training: It is necessary to provide clear clarification to trainees regarding the details of the training. (2) During training: Appropriate and sufficient facilities, including tools, equipment, and materials, need to be provided. (3) After training: It is important to consider feedback from trainees, facilitators, and training providers.

Based on the literature review and previous studies, the following success fac-tors are expected to be significant within the framework of the blended training model in the context of Small and Medium Enterprises (SME) in Thailand:

• **Trainee**

Trainees are considered a crucial factor in the successful implementation of blended training. If trainees possess the necessary skills or prior experience in a specific system or tech-nology, it reduces their apprehension toward new technology. Consequently, they are more open to embracing new forms of training that involve technology and are more willing to participate (Harfoushi and Obiedat, 2011, pp. 16-17). Moreover, the level of IT experience can either support or hinder a trainee's engage-ment with blended training (Kurniawan, Prama-na and Budianto, 2021, pp. 37-38; Anthony, et al., 2022, p. 562). Additionally, the successful implementation of blended training, which is a new format of training for SME, also relies on considering the trainees' absorptive capacity. This ensures their continued effective partic-ipation throughout the training (Yildiz, et al., 2019, pp. 100-101).

• **Course Design**

The course design in this study is as-

sessed based on the content and activities developed for blended training. The content of the blended training should be relevant to the participants' needs and interests, meaning it should be up-to-date and aligned with the training objectives and goals (Aziz, et al., 2022, p. 21; Ja'ashan, 2020, p. 135). The principal should have a clear understanding of the training's purpose before deciding to join. Additionally, there is an expectation that the content can be directly applied to participants' own businesses. Therefore, the content design should be modern and meet their specific needs, enabling entrepreneurs to realize the benefits of the training. It is essential to plan and design the content to maintain consistency. Various learning activities should be incorporated to encourage efficient participation and help entrepreneurs acquire skills they can apply from the training. Consequently, well-designed training content and activities will enable participants to recognize the advantages and benefits of the training, making it easier to integrate into their practices.

• **Trainer**

Trainer characteristics have a significant impact on trainees' learning performance. Professional trainers with strong communication skills are able to create a conducive learning environment, effectively transfer knowledge to trainees, and help them apply their acquired knowledge and skills in real-life situations. In a blended training environment, trainers' roles go beyond traditional lecturers; they also serve as facilitators who motivate and guide trainees. They act as both knowledge providers and mentors, employing effective teaching meth-

ods and fostering trainee engagement and participation (Ahmed, 2010, p. 323). Personal teaching efficiency, enthusiasm, attentiveness, and responsiveness are key trainer characteristics that greatly contribute to fostering trainee motivation (Sun, et al., 2008, p. 1194; Lin, Lu and Fan, 2014, pp. 65-67). When trainers effectively demonstrate their teaching skills, exhibit enthusiasm for the subject matter, show attentiveness to trainees' needs, and promptly respond to problems and requests for help, it creates a positive learning environment that motivates trainees to actively participate and strive for success. Furthermore, the trainer's prompt response plays a crucial role in encouraging trainees to acknowledge the benefits of blended learning for their education.

• **Technology**

A number of studies have confirmed the critical role that technology, which includes devices (computers, laptops, tablets, etc.), software, and internet networks, plays in the success of blended learning implementations. (Selim, 2007, p. 409; Ahmed, 2010, p. 337; Laily, et al., 2013, pp. 430-431; Porter, et al., 2016, pp. 17-18). The lack of adequate hardware and software infrastructure to support effective instruction, coupled with slow internet speed, pose challenges for blended training, as the success of blended training depends on these factors. (Chen, 2009, p. 306; Ahmed, 2010, p. 337; Asunka, 2017, p. 49). Additionally, blended training can present technical disadvantages if not properly planned and implemented, as it relies on technical resources and digital tools. (Rao, 2019, pp. 2-5). These digital tools also require sufficient technological support

that aligns with the demands of teaching and learning processes. (Chen, et al., 2022, p. 4)

Based on a comprehensive review of relevant literature, studies, observations of training programs, and in-depth interviews with experts, we have identified five key components, each comprising fifteen sub-components, that constitute a blended training model tailored specifically for SME. These identified components have been utilized to develop a research model, visually depicted in Figure 2.
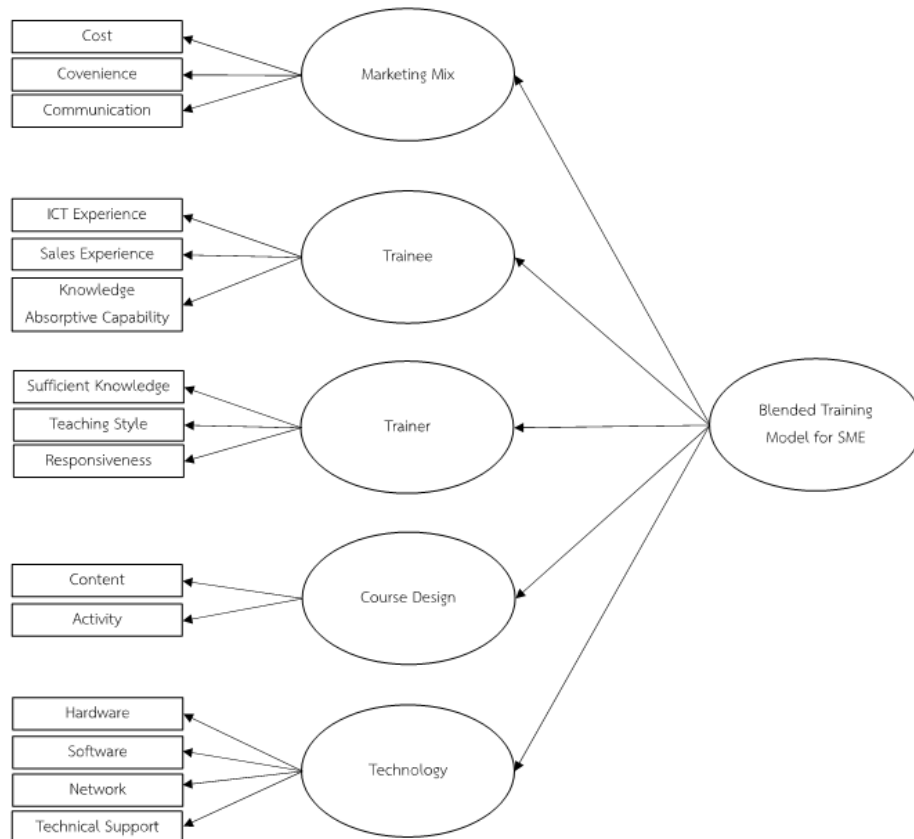
Figure 2 Proposed Research Model of Blended Training for Thai SME

Methodology

Component analysis of the Blended Training Model for SME in Thailand is a survey and development research that utilizes a questionnaire to explore and identify the essential components of the blended training model for SME. The research employs the Exploratory Factor Analysis (EFA) technique to analyze the data, with the following details:

4.1 Participants

The population and sample of this research consist of small and medium enterprises (SME) in Thailand who have registered through the SME registration system of the Office of Small and Medium Enterprises Promotion (OSMEP) in Thailand and had previously participated in OSMEP's blended training program on digital marketing during the years 2020-2022, totaling 14,149 people. To determine the sample size, the maximum likelihood method was employed, which suggests that the sample size should be at least 20 times the number of observed variables (Lindeman, Merenda and Gold, 1980, as cited in Khongmalai

and Distanont, 2018, p. 116). In this study, there were 15 observed variables, as indicated in Figure 1. Therefore, the ideal sample size would be 300 participants. This was achieved by employing a random sampling method. However, in order to prevent data loss or incomplete data, the researchers decided to collect data from a sample size of 400 people. The researcher requested assistance from the Office of Small and Medium Enterprises Promotion (OSMEP) to distribute the URL link and QR code of the questionnaire to collect data from SME entrepreneurs who registered through the SME registration system and participated in blended training in digital marketing with OSMEP between 2020 and 2022. Of the total responses received, 466 were complete and suitable for further analysis.

4.2 Instrument

This study used a questionnaire as an instrument to collect the data, it was developed based on the established research purpose and research model. It consists of two main parts, outlined as follows: Part 1 is demographic information. This section aims to gather relevant demographic details of the participants. It includes seven questions related to their gender, age, education level, business type, primary product/service category, SME classification, and online sales experience. Part 2 is an indicator question about the components of the blended training from the literature review along with the data from the OSMEP's training program observations and interviews conducted with SME development experts. This section includes forty-eight questions distributed across 5 variables. It is structured with a 5-point Likert scale, with response options ranging from strongly agree to strongly disagree (5= strongly agree, 4 = agree, 3= neither agree nor disagree, 2= disagree, and 1= strongly disagree). Five experts, including one officer from the OSMEP, one instructor with experience in SME development and training, one instructor with experience in human resource development, one digital marketing professional, and one micro-enterprise entrepreneur, evaluated the questionnaire for content validity using the Index of Item-Objective Congruence (IOC). The results show that the value of content validity ranges between 0.67 and 1.00. After the content validity assessment, the questionnaire was administered to a similar group of 40 samples, who were not part of the study's sample group, to assess its reliability by calculating Cronbach's alpha coefficient. Cronbach's alpha coefficient should have values of Alpha higher than 0.7 based on the correlations of indicators (Hair, et al., 2012, p. 429). However, Cronbach's alpha coefficient, ranging from 0.50 to 0.70, was considered moderately reliable according to studies conducted by Hinton, McMurray and Brownlow (2014, p. 359) and Dall'Oglio, et al. (2010, p. 421). The analysis results indicated that all the components within each factor had Cronbach's alpha coefficients ranging from 0.577 to 0.857, and every factor had Cronbach's alpha coefficient between 0.786 to 0.859.

4.3 Data Collection and Analysis

The online questionnaire was created using Google Forms and distributed to SME who have registered through the SME registration system of the OSMEP in Thailand and had

previously participated in OSMEP's blended training program on digital marketing during the years 2020-2022. The questionnaire was distributed by sending the URL link and QR code through various channels, including email and social media platforms such as Facebook and Line application. A total of 466 complete questionnaires were received.

Analysis proceeded through two stages. First, a descriptive analysis of SME entrepreneurs' socio-demographics was carried out. Second, an exploratory factor analysis (EFA) was conducted by applying principal component analysis with the varimax rotation method to identify the underlying components or factors that explain the relationships among a set of variables. Variables with high correlations were grouped into the same factor. If a variable does not fit into any factor or has weak correlations, it would be removed. The Kaiser-Meyer-Olkin (KMO) test and Bartlett's

Test of Sphericity were used to measure the suitability of the sample data.

Results

The results of the exploratory factor analysis (EFA), which utilized the principal component analysis (PCA) with the varimax rotation method, were employed to analyze all five components: (1) marketing mix, (2) trainee, (3) course design, (4) trainer, and (5) technology. The analysis indicated that there are 31 items in all five components met the criteria, explaining a significant portion of the variance in the data. The KMO values for all components exceeded the minimum standard of 0.50. Bartlett's Test of Sphericity resulted in a significant value of 0.000, indicating the suitability of the dataset for factor analysis. Table 2 presents the values of the KMO test and Bartlett's Test of Sphericity.

Table 2 Exploratory Factor Analysis Results of the Blended Training Model

Factor	KMO	Approx. X^2	df	Sig.	Total Variance
Marketing Mix	0.616	669.695	21	0.000	71.25
Trainee (TNE)	0.806	2217.193	55	0.000	67.94
Course Design (CD)	0.629	221.470	3	0.000	60.31
Trainer (TNR)	0.785	559.193	6	0.000	62.53
Technology (T)	0.692	650.255	15	0.000	61.78

Exploratory factor analysis (EFA) was conducted using principal component analysis with varimax rotation. The data suitability was assessed based on the Kaiser-Meyer-Olkin (KMO) measure and Bartlett's test of sphericity. A KMO value of 0.50 or higher is considered suitable (Field, 2009, p. 651), and Bartlett's test of sphericity should yield a p-value (Sig.) below

0.05 to be significant (Hair, et al., 2019, p. 137). Meeting these criteria indicates that the EFA method is appropriate for the analysis. Additionally, the criteria of common components were considered. The cumulative percentage of variance explained should be equal to or greater than 60.00 percent, indicating that the new components adequately explain the

overall variability. The communalities, which measure the ability of variables to describe their shared components, should be greater than or equal to 0.50, indicating sufficient representation. Furthermore, the factor loadings statistics, which demonstrate the relationship of variables to a group of components, should be greater than or equal to 0.50, indicating practical significance and serving as a criterion for grouping new variables (Hair, et al., 2019, p. 151). The analysis results are as follows:

1. Marketing Mix: the suitability test results indicated that the data were sufficiently suitable for applying the EFA method. The KMO statistical value was 0.616, and Bartlett's test showed statistical significance at a level of 0.05. Additionally, the cumulative variance explained was 71.25 percent. The communalities ranged from 0.630 to 0.812, while the factor loadings ranged from 0.639 to 0.900. As a result, the components were divided into three groups. However, the new groups were renamed due to the reorganization of variables within each group. The renamed groups are as follows:

(1) Cost. There is a variance (explained variance) of 25.75 percent, comprising three variables. The component related to "E-consulting reduces the cost and time associated with manual trial and error." holds the highest factor loading within this group, at 0.845.

(2) People Network (previously known as Communication). There is a variance (explained variance) of 23.74 percent, comprising three variables. The component related to "SME entrepreneurs obtain training information from local government network channels." holds the highest factor loading within this group, at 0.900.

(3) Social Network (previously known as Convenience). There is a variance (explained variance) of 21.76 percent, comprising three variables. The component related to "Platforms such as Line and Zoom are convenient for obtaining advice and assistance." holds the highest factor loading within this group, at 0.826.

Table 3 Factor Loading Values for Marketing Mix

Items	Component		
	1	2	3
Cost 3	0.845		
Cost 2	0.807		
Cost 1	0.639		
Communication 3		0.900	
Communication 2		0.874	
Convenience 2			0.826
Communication 1			0.766

2. Trainee: the suitability test results indicated that the data were sufficiently suitable for applying the EFA method. The KMO statistical value was 0.806, and Bartlett's test showed statistical significance at a level of 0.05. Additionally, the cumulative variance explained was 67.94 percent. The communalities ranged from 0.569 to 0.794, while the factor loadings ranged from 0.669 to 0.872. As a result, the components were divided into three groups:

(1) ICT Experience. There is a variance (explained variance) of 25.99 percent, comprising three variables. The component related to "Before the training, you are already familiar with using smartphones." holds the highest factor loading within this group, at 0.842.

(2) Knowledge Absorptive Capacity. There is a variance (explained variance) of 25.99 percent, comprising three variables. The component related to "You are able to comprehend the content of the various topics described by the speakers." holds the highest factor loading within this group, at 0.784.

(3) Sales Experience. There is a variance (explained variance) of 25.99 percent, comprising three variables. The component related to "You are experiencing difficulty in selecting the appropriate online sales channel." holds the highest factor loading within this group, at 0.872.

Table 4 Factor Loading Values for Trainee

Items	Component		
	1	2	3
ICT Experience 1	0.842		
ICT Experience 3	0.827		
ICT Experience 2	0.791		
ICT Experience 4	0.778		
Knowledge Absorptive Capacity 2		0.784	
Knowledge Absorptive Capacity 4		0.782	
Knowledge Absorptive Capacity 3		0.768	
Knowledge Absorptive Capacity 1		0.669	
Sales Experience 2			0.872
Sales Experience 3			0.812
Sales Experience 1			0.769

3. Course Design: the suitability test results indicated that the data were sufficiently suitable for applying the EFA method. The KMO statistical value was 0.629, and Bartlett's test showed statistical significance at a level of 0.05. Additionally, the cumulative variance explained was 60.31 percent. The communalities ranged from 0.547 to 0.702, while the factor loadings ranged from 0.739 to 0.838. As a result, the components were consolidated into

a single group, comprising three variables. The component related to "The training content assists you in understanding and selecting a suitable online sales channel for your product or service." holds the highest factor loading within this group, at 0.838.

Table 5 Factor Loading Values for Course Design

Items	Component
	1
Content 2	0.838
Content 5	0.749
Activity 1	0.739

4. Trainer: the suitability test results indicated that the data were sufficiently suitable for applying the EFA method. The KMO statistical value was 0.629, and Bartlett's test showed statistical significance at a level of 0.05. Additionally, the cumulative variance explained was 62.53 percent. The communalities ranged from 0.742 to 0.826, while the factor loadings ranged from 0.742 to 0.826. As a result, the components were consolidated into a single group called Trainer, comprising four variables. The component related to "Trainers specialize in digital marketing." holds the highest factor loading within this group, at 0.826.

Table 6 Factor Loading Values for Trainer

Items	Component
	1
Sufficient Knowledge 1	0.826
Sufficient Knowledge 2	0.822
Teaching Style 3	0.770
Sufficient Knowledge 3	0.742

5. Technology: the suitability test results indicated that the data were sufficiently suitable for applying the EFA method. The KMO statistical value was 0.692, and Bartlett's test showed statistical significance at a level of 0.05. Additionally, the cumulative variance explained was 61.78 percent. The communalities ranged from 0.500 to 0.727, while the factor loadings ranged from 0.622 to 0.846. As a result, the components were divided into two groups. However, the new groups were renamed due to the reorganization of variables within each group. The renamed groups are as follows:

(1) Software and Support. There is a variance (explained variance) of 31.58 percent, comprising three variables. The component related to "The applications used by trainers help SME prepare themselves for online sales" holds the highest factor loading within this group, at 0.839.

(2) Internet and Device. There is a variance (explained variance) of 30.20 percent, comprising three variables. The component

related to "The internet connection has sufficient speed and remains stable without disconnections during online sessions" holds the highest factor loading within this group, at 0.846.

Table 7 Factor Loading Values for Technology

Items	Component	
	1	2
Software 2	0.839	
Software 1	0.802	
Technical Support 2	0.629	
Internet 1		0.846
Internet 2		0.762
Hardware 2		0.622

Based on the results of the Exploratory Factor Analysis (EFA) conducted for each factor studied above, new components can now be grouped as illustrated in Figure 3
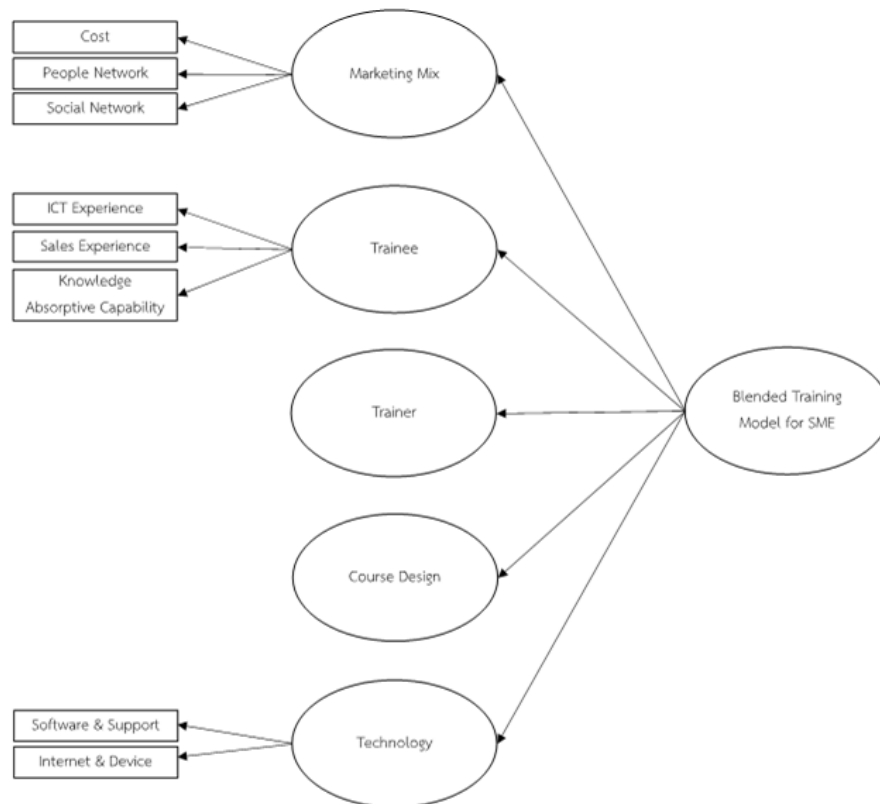
Figure 3 Developed Research Model of Blended Training for Thai SME after Conducting EFA

Discussion

When comparing this study to previous research on the success factors of blended learning, both similarities and differences were identified. The consistent aspect with other studies (Lee, Yoon and Lee, 2009, p. 1326; Chen and Yao, 2016, pp. 1668-1669; Ghazal, et al., 2018, p. 77195; Aziz, et al., 2022, pp. 18-21; Chen, et al., 2022, pp. 9-11) is the recognition of key components in blended training, namely trainee, course design, trainer, and technology. However, this research study also revealed significant differences, particularly in relation to the marketing mix. In the context of blended training organized by government agencies, awareness of such programs is often limited. Many entrepreneurs are unaware of the availability of government-sponsored training opportunities. Therefore, effective communication to raise awareness about these programs becomes crucial. This requires the dissemination of news and information through appropriate channels, including government agencies, individuals within both the government and private sectors in the area, and social media platforms that entrepreneurs are familiar with, such as Facebook and Line.

Conclusion

This quantitative research aimed to investigate the components of the blended training model for SME in Thailand. The research employed an online questionnaire to collect data from 466 samples. Based on the results of data analysis using the EFA method, the blended training model was found to comprise 5 components as follows: (1) the mar-keting mix factor consisted of three groups of components: cost, human network, and social network; (2) the trainee factor comprised three groups of components: ICT experience, sales experience, and knowledge absorptive capacity; (3) the trainer factor was represented by a single component; (4) the course design factor also had one component; (5) the technology factor consisted of two groups of components: software and support, and internet and device.

Recommendations

Recommendations for applying the research results

The results obtained from the analysis of the components of the blended training model in this research can now be used as valuable information for shaping the framework of government agencies involved in SME development. This will aid in designing and developing high-quality and effective blended training programs for SME in the future. When planning a blended training program for SME entrepreneurs, it is important to consider multiple factors. These include the qualifications of the trainees, attributes of the trainers, training content and activity design, and the technology used to support the training. Furthermore, government agencies responsible for providing the training should develop plans for effective communication and widespread promotion of the program to SME entrepreneurs. This can be achieved through targeted communication channels, such as agencies or individuals who are well-known and respected within the specific area. The objective is to increase entrepreneurial awareness and encourage active participation in the training program.

Recommendations for future research

This study is based on the results gathered from SME across all business groups. However, for researchers interested in further investigation, conducting separate studies that focus on specific business groups would be beneficial. They may consider exploring specific types of businesses, such as food and beverages, beauty products and supplements, clothing and apparel, among others. Furthermore, it is important to conduct additional studies to investigate other relevant factors, including demographic factors such as income level and level of education.

Bibliography

Ahmed, H. M. S. (2010). Hybrid E-learning acceptance model: Learner perceptions. **Decision Sciences Journal of Innovative Education,** 8(2), 313-346.

Anthony, B., Kamaludin, A., Romli, A., Raffei, A. F. M., Phon, D. N. A. L., Abdullah, A., et al. (2022). Blended learning adoption and implementation in higher education: A theoretical and systematic review. **Technology, Knowledge and Learning,** 27, 531-578.

Asunka, S. (2017). "We had a blast!": An empirical affirmation of blended learning as the preferred learning mode for adult learners. **International Journal of Mobile and Blended Learning,** 9(3), 37-53.

Aziz, S. F. A., Hussein, N., Husin, N. A. and Ibrahim, M. A. (2022). Trainers' characteristics affecting online training effectiveness: A pre-experiment among students in a Malaysian secondary school. **Sustainability,** 14(17), 11047.

Batista-Toledo, S. and Gavilan, D. (2022). Implementation of blended learning during COVID-19. **Encyclopedia,** 2(4), 1763-1772.

Bliuc, A. M., Goodyear, P. and Ellis, R. A. (2007). Research focus and methodological choices in studies into students' experiences of blended learning in higher education. **The Internet and Higher Education,** 10(4), 231–244.

Boelens, R., Van Laer, S., De Wever, B. and Elen, J. (2015). **Blended learning in adult education: Towards a definition of blended learning.** Retrieved July 15, 2022, from www.iwt-alo.be/wp-content/uploads/2015/08/01-Project-report-Blended-learn ing-in-adult-education-towards-a-definition-of-blended-learning.pdf

Chen, W. (lecture). (August 25-27, 2009). A study of using blended learning in teaching and learning modern educational technology. In **International Conference on Hybrid Learning and Education** (pp. 299-308). Macau: University of Macau and partners.

Chen, W. S. and Yao, A. Y. T. (2016). An empirical evaluation of critical factors influencing learner satisfaction in blended learning: A pilot study. **Universal Journal of Educational Research,** 4(7), 1667-1671.

Chen, X, Xu, X., Wu, Y. J. and Pok, W. F. (2022). Learners' continuous use intention of blended learning: TAM-SET model. **Sustainability,** 14(24), 16428.

Dall'Oglio, A. M., Rossiello, B., Coletti, M. F., Caselli, M. C., Ravà, L., Di Ciommo, V., et al. (2010). Developmental evaluation at age 4: Validity of an Italian parental questionnaire. **Journal of Paediatrics and Child Health,** 46(7-8), 419-26.

Dewi, K. C., Ciptayani, P. I., Surjono, H. D. and Priyanto. (September 27–28, 2017). Critical success factor for implementing vocational blended learning. In **International Joint Conference on Science and Technology (IJCST)** (pp. 1-6). Bali: Bali State Polytechnic and Partners.

Field, A. (2009). **Discovering statistics using IBM SPSS statistics** (5th ed.). London: SAGE edge.

Garrison, D. R. and Kanuka, H. (2004). Blended learning: Uncovering its transformative potential in higher education. **The Internet and Higher Education,** 7(2), 95–105.

Ghazal, S., Al-Samarraie, H. and Aldowah, H. (2018). "I am still learning": Modeling LMS critical success factors for promoting students' experience and satisfaction in a blended learning environment. **IEEE Access,** 6, 77179-77201.

Hair, J. F., Black, W. C., Babin, B. J. and Anderson, R. E. (2019). **Multivariate data analysis** (8th ed.). Hampshire: Cengage Learning EMEA.

Hair, J. F., Sarstedt, M., Ringle, C. M. and Mena, J. A. (2012). An assessment of the use of partial least squares structural equation modeling in marketing research. **Journal of the Academy of Marketing Science,** 40(3), 414–433.

Harfoushi, O. and Obiedat, R. (2011). E-training acceptance factors in business organizations. **International Journal of Emerging Technologies in Learning,** 6(2), 15-18.

Hinton, P. R., McMurray, I. and Brownlow, C. (2014). **SPSS explained** (2nd ed.). London: Routledge.

Ja'ashan, M. M. N. H. (2020). The challenges and prospects of using E-learning among EFL students in Bisha university. **Arab World English Journal,** 11(1), 124-137.

Kij-itti, T. and Jarujittipant, P. (September 2-3, 2020). Digital literacy of the entrepreneur and the success of SME in digital economy. In **The Conference on Research and Creative Innovative** (pp. 220-229). Bangkok: Rajamangala University of Technology Lanna and Partners.

Khongmalai, O. and Distanont, A. (2018). **Research techniques in technology and innovation management.** Pathumthani: Thammasat Publisher.

Klein, V. B. and Todosco, J. L. (2021). COVID-19 crisis and SME responses: The role of digital transformation. **Knowledge Process Management,** 28(2), 117–133.

Kurniawan, R., Pramana, E. and Budianto, H. (2021). The adoption of blended learning in Non-formal education using extended technology acceptance model. **Indonesian Journal of Information Systems,** 4(1), 26–41.

Laily, N., Kurniawati, A. and Puspita, I. A. (March 20-22, 2013). Critical success factor for e-learning implementation in Institut Teknologi Telkom Bandung using structural equation modeling. In **2013 International Conference of Information and Communication Technology** (pp. 427-432). Bandung: Telkom Institute of Technology and Partners.

Lee, B. C., Yoon, J. O. and Lee, I. (2009). Learners' acceptance of e-learning in South Korea: Theories and results. **Computers & Education,** 53(4), 1320-1329.

Lin, P. C., Lu, H. K. and Fan, S. M. (2014). Exploring the impact of perceived teaching style on behavioral intention toward Moodle reading system. **International Journal of Emerging Technologies in Learning,** 9(3), 64–67.

Min W. and Yu, Z. A. (2023). A systematic review of critical success factors in blended learning. **Education Sciences,** 13(5), 469.

Office of Small and Medium Enterprises Promotion. (2022). **White paper on MSME 2022.** Retrieved May 20, 2022, from https://sme.go.th/upload/mod_download/down load-20220930104411.pdf

Porter, W. W., Graham, C. R., Bodily, R. G. and Sandberg, D. S. (2016). A qualitative analysis of institutional drivers and barriers to blended learning adoption in higher education. **The Internet and Higher Education,** 28, 17–27.

Rao, V. C. S. (2019). Blended learning: A new hybrid teaching methodology. **Journal for Research Scholars and Professional of English Language Teaching,** 3(13), 1-6.

Ratanabanchuen, R. (2022). **The Puey Ungphakorn institute for economic research recommends that the government expedite the enhancement of digital skills for SMEs in order to bolster their competitiveness during this transitional era.** Retrieved May 20, 2022, from https://www.infoquest.co.th/2022/198461

Sariwulan, T., Suparno, S., Disman, D., Ahman, E. and Suwatno, S. (2020). Entrepreneurial performance: The role of literacy and skills. **Journal of Asian Finance, Economics and Business,** 7(11), 269-280.

Selim, H. M. (2007). Critical success factors for e-learning acceptance: Confirmatory factor models. **Computer & Education,** 49(2), 396-413.

Sukmuang, U. and Ek-un, N. (2009). Training approach according to ISO 10015 standard. **Journal of Science Department Service**, 57(179), 14- 17.

Sun, P. C., Tsai, R. J., Finger, G., Chen, Y. Y. and Yeh, D. (2008). What drives a successful e-Learning? An empirical investigation of the critical factors influencing learner satisfaction. **Computers & Education,** 50(4), 1183–1202.

Bolliger & Company. (2022). **Thailand digital government development plan 2023-2027 Project.** Retrieved May 20, 2022, from https://www.dga.or.th/wp-content/up loads/2022/02/ร่าง-แผนพัฒนารัฐบาลดิจิทัลของประเทศไทย-พ.ศ.-2566-2570-for-Public-Hear ing-1.pdf

Van Laer, S. and Elen, J. (2020). Adults' self-regulatory behaviour profiles in blended learning environments and their implications for design. **Technology, Knowledge and Learning,** 25, 509–539.

Yildiz, H. E., Murtic, A., Zander, U. and Richtner, A. (2019). What fosters individual-level absorptive capacity in MNCs? An extended motivation–ability–opportunity framework. **Management International Review,** 59, 93-129.

Zhang, X., Xu, Y. and Ma, L. (2022). Research on successful factors and influencing mechanism of the digital transformation in SMEs. **Sustainability,** 14(5), 2549.