Developing Digital Marketing to Enhance Business Outcomes of Woven Fabric Entrepreneurs in Uttaradit Province

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Abstract

The objectives of this study were: to study the technology impacts consumer behavior in the digital era; to propose the guidelines on application of digital marketing for woven fabric groups; and to examine the digital marketing model towards business outcomes. The research method was conducted by using triangulation design in order to have an in-depth analyze of data. The first stage, it used questionnaire tool to collect data. The second stage it identified and searched for in-depth information by using in-depth interview and focus groups. The final stage, it examined research hypotheses by using the structural equation model.

The findings found that woven fabric groups customers were mostly having the experience of purchase product online. In addition, content marketing and online advertising were the key influencing factors towards purchasing decision. For consumer attitudes toward online shopping, products can be purchased at anywhere and anytime. As a result of application of digital marketing, the research found that Facebook Fan Page application was the most wanted channel for woven fabric groups. The results of hypotheses testing found that the digital marketing of woven fabric groups had significantly increased on business outcomes. In addition, the digital marketing had also significantly increased on users' experiences. Lastly, good users' experiences had significantly increased on business outcomes. As a result, digital marketing had both direct effects and indirect effects on business outcomes. The users' experiences had a partial mediation in the relationship between digital marketing and business outcomes.

The results of the study can be applied for developing digital marketing to enhance business outcomes of woven fabric entrepreneurs in Uttaradit province. Moreover, it will be the model of woven fabric entrepreneurial business for other provinces, where are interested in developing digital marketing effectiveness.

Keywords: Digital Marketing, Business Outcome, User Experience, Woven Fabric.

บทคัดย่อ

งานวิจัยนี้มีวัตถุประสงค์ เพื่อศึกษาเทคโนโลยีที่มีผลกระทบต่อพฤติกรรมผู้บริโภคในยุคดิจิทัล และเพื่อเสนอแนวทางการประยุกต์ใช้การตลาดดิจิทัลสำหรับกลุ่มผ้าทอ และตรวจสอบรูปแบบการตลาดดิจิทัลที่มีต่อผลลัพธ์ทางธุรกิจ วิธีการวิจัยใช้การออกแบบสามเส้า เพื่อวิเคราะห์ข้อมูลเชิงลึก ขั้นแรกใช้แบบสอบถามรวบรวมข้อมูล ขั้นตอนที่สองระบุและค้นหาข้อมูลเชิงลึกโดยใช้การสัมภาษณ์เชิงลึกและการสนทนากลุ่ม ขั้นตอนสุดท้าย คือ การตรวจสอบสมมติฐานการวิจัยโดยใช้แบบจำลองสมการเชิงโครงสร้าง

ผลการวิจัยพบว่าลูกค้ากลุ่มผ้าทอส่วนใหญ่มีประสบการณ์ในการซื้อสินค้าออนไลน์ นอกจากนี้การตลาดเชิงเนื้อหาและการโฆษณาออนไลน์ยังเป็นปัจจัยสำคัญที่ส่งผลต่อการตัดสินใจซื้ออีกด้วย สำหรับทัศนคติของผู้บริโภคที่มีต่อการซื้อของออนไลน์สามารถซื้อสินค้าได้ทุกที่ทุกเวลา ผลการวิจัยจากแอปพลิเคชันการตลาดดิจิทัลพบว่า Facebook Fan Page เป็นช่องทางที่ต้องการมากที่สุดของกลุ่มผ้าทอ ส่วนผลการทดสอบสมมติฐาน พบว่าการตลาดดิจิทัลของกลุ่มผ้าทอส่งผลต่อผลลัพธ์ทางธุรกิจที่เพิ่มขึ้นอย่างมีนัยสำคัญทางสถิติ นอกจากนี้การตลาดดิจิทัลยังเพิ่มประสบการณ์ผู้ใช้อย่างมีนัยสำคัญทางสถิติ และประสบการณ์ผู้ใช้ที่ดีส่งผลต่อผลลัพธ์ทางธุรกิจที่เพิ่มขึ้นอย่างมากเช่นกัน และส่งผลให้การการตลาดดิจิทัลมีผลทั้งทางตรงและทางอ้อมต่อผลลัพธ์ทางธุรกิจ ประสบการณ์ผู้ใช้เป็นตัวแปรส่งผ่านบางส่วนในความสัมพันธ์ระหว่างการตลาดดิจิทัลและผลลัพธ์ทางธุรกิจ

สำหรับผลการวิจัยสามารถนำไปปรับใช้เพื่อการพัฒนาการตลาดดิจิทัลเพื่อเพิ่มผลลัพธ์ทางธุรกิจของผู้ประกอบการทอผ้าจังหวัดอุตรดิตถ์ อีกทั้งการเป็นต้นแบบธุรกิจของผู้ประกอบการการทอผ้าให้กับจังหวัดที่มีความสนใจเพื่อพัฒนาการตลาดดิจิทัลให้มีประสิทธิภาพมากขึ้น

คำสำคัญ: การตลาดดิจิทัล ผลลัพธ์ทางธุรกิจ ประสบการณ์ผู้ใช้ ผ้าทอ

Introduction

Emerging of digital disruption that caused by changing in digital technology has rapidly affected changes in consumer behavior as well. According to We Are Social on January 2019, it is considered a global digital agency. The survey revealed that 69.24 million Thai people use the internet and social media more than 70 percent of the population, with 90 percent using the internet every day. Google.com is the number 1 website, spending an average of 9 hours a day. The most popular social media platforms are Facebook, followed by YouTube and Line (Kemp, 2019). Due to the change in digital technology, the business model has to adjust according to the occurrence of digital disruption that is creating pressure for businesses to participate in the digital world. This is causing a new business model that affects the old business model leading to create marketing innovations, known as digital marketing (Verhoef et al., 2021). Digital marketing strategies can meet every need at anytime, anywhere. It can also build trust including influencing customers' purchasing decisions. (Torwatthanakittikul, Phanthanasaewee & Srisuk, 2012) Digital marketing is an important tool for businesses to build competitiveness and increase business outcomes in the digital era (Kotler, Kartajaya & Setiawan, 2017).

Entrepreneurs and business owners with the knowledge of digital marketing are more likely to be successful in building relationship with their customers (Nikunen, Saarela, Oikarinen, Muhos & Isohella, 2017) because digital marketing is a combination of technology and innovation that can save time, money and storage space as well as being able to perform important activity and processes through digital media (Grewal, Hulland, Kopalle & Karahanna, 2020). Therefore, using digital marketing, Small and Medium Enterprises have gained great success (Nuseir, 2018). The results of research in Thailand indicated that businesses that applied digital marketing can lead to brand recognition and gain relationship between buyers and sellers, which lead to marketing performance. As a result, digital marketing has an impact both direct and indirect on business outcome (Khankaew, 2019), but Thailand still has problems with lack of research (Ruenrom, 2018) and also found that most Small and Medium Enterprises have not fully utilized digital marketing causing the loss of business opportunities (Taiminen & Karjaluoto, 2015). Moreover, this result of research is consistent with Mogos (2015) research that there are still technology gaps that Small and Medium Enterprises have not yet used to gain a competitive advantage in the market.

Uttaradit province, Thailand, has well-known culture and local wisdom on Pha Sin Tin Jok, Ikat Fabric, Pha Lai Nam and etc. Weavers have to use both skill and expertise to memorize patterns that truly reflect the identity of the Laplae people by gathering together as a weaving group in each community. From such a group is not just the continuation of cultural traditions, but it is also to help distributed income to the community for hundreds of local households. Therefore, from the interview, Jongjaroon Manokom (2020) mentioned that woven fabric products of entrepreneurs are important economic products in Uttaradit Province, Thailand. At the present, Woven fabric group uses traditional marketing that is store for selling the products, booth exhibition, leaflets or brochures and telephone call. According to the survey of this research, we found that entrepreneurs were requesting to extent of marketing skill development because they were lacking on this skill especially on the digital marketing skill. As a result, Nocharin Suanmuan (2019) stated that ability of competitive is insufficient and unable to respond to consumer behavior in digital era. In the current situation of woven fabric entrepreneurs in Uttaradit province, Thailand, 95 percent of sell is from offline (store and booth exhibition) and another 5 percent is from online selling. It can be seen that there is little online marketing because of lacking on knowledge and digital marketing skill. Online selling is mostly used for introducing the product and communicate to customers. From the interview, Jeranane Mounamang (2019) Woven fabric group needs to use the marketing to be more effective and to have knowledgeable external agencies to recommend to increase digital marketing skill for entrepreneurs.

Pradhan, Nigam and Tiwari (2018) indicated that digital marketing research is the gap that researchers and academic scholar have to study the structural research to create the use of digital marketing among small and medium-sized business entrepreneurs. Vongproamate, Limsiriruengrai, Lertcharoenwanich and Prasertsri (2019) showed that most of woven fabric entrepreneurs were lack of expertise in digital marketing and some had not used it at all. In additions, the results also indicated that Thai entrepreneurs had not taken full advantage of digital marketing that caused to lose on business opportunities, so there are still gaps in marketing technology that entrepreneurs have not yet used to gain a competitive advantage in marketing. Therefore, woven fabric entrepreneurs in Uttaradit province, like many other entrepreneurs in Thailand, are not taking full advantage of digital marketing. This article aims to investigate how technology impacts consumer behavior in the digital era and to identify the guidelines on application of digital marketing for woven fabric groups, then examine the digital marketing model towards business outcomes.

Objectives

1. To study the consumer purchasing behavior in digital era of woven fabric groups in Uttaradit province.

2. To identify the guidelines to apply digital marketing for woven fabric groups in Uttaradit province.

3. To examine the application of digital marketing that affects the business outcomes of the woven fabric groups in Uttaradit province.

Literature Reviews

Digital Marketing and Business Outcomes

Kotler, Armstrong, Saunders, and Wong (1999) defined term of marketing that is an activity that aims to promote the business to achieve its objectives in marketing operations by using the target market and positioning to make the business have a clear competitive advantage. Today the world has changed to the era of the online world. Thus, it is causing a change in marketing operations and has shifted to digital marketing in order to present the products or services by using digital or online channels. In the new era, it makes the marketing activity easier to reach to customers, creates satisfying and can maintain good relationship with customers. There is also a continuous marketing promotion and can increase sales for the business as well (Grewal et al., 2020). Taiminen and Karjaluoto (2015) used application of digital marketing, that is a new way of marketing, which is one-way communication tools including email and websites. Businesses often use for sharing on marketing promotion information to build relationships and maintain relationships with customers. It also uses search engine optimization (SEO) method that is an important tool, which is highly use in large organization. While two-way communication social media such a Facebook and Twitter are becoming powerful media that is making this existing power and marketing becoming the power of customers (Hennig-Thurau et al., 2010). Such communication facilitates quick two-way reactions. It can be seen from likes, posts and comments that are relating to marketing activities (Appel, Grewal, Hadi & Stephen, 2020). Therefore, digital marketing is an important channel that allows businesses to easily present products or services to customers and help customers to recognize and accept the brand more and more (Neti, 2011).

The year 2020 has entered the digital age and has been the pandemic of COVID-19, in a time of lockdown affecting many small businesses as well as every aspect of their lives. Many studies in such situations showed that one of the analytical business outcomes has a correlation between digital marketing and customer satisfaction (Manju & Kavitha, 2021). In additions, digital marketing is also related to the comments structure. All responses, formality and immediacy have a significant impact on the consumer behavior such as brand attitude, corporate trust and purchase intention (Kang & Park, 2018). Kaldeen and Nawaz (2020) research study revealed that digital marketing has been proven to have a very positive impact on both customer participation and purchase intention. Today, businesses need a high degree of adaptability to change because most of consumers are ready to experience new way of marketing approaches like social media and e-mail marketing. The studies have shown that customer satisfaction was one of the indicators of business outcomes because it was due to repeat purchases, additional purchases, referrals and etc. (Reinartz, Krafft & Hoyer, 2004). In addition, Kaldeen and Samsudeen (2020) confirmed that purchase intention can be used to measure business outcomes because it generated sales, revenue and profits for the business. Proven results have been found to influence digital marketing to improve customer participation and purchase intention. Therefore, business outcomes of using digital marketing include purchase intention and satisfaction. As a result, we can conclude:

Hypothesis 1. Digital marketing positively influences business outcomes.

Digital Marketing and User Experience

Chen and Lee (2018) examined the application of digital marketing that was targeting to young consumers. The results showed that using social media is one of the most intimacy, friendly and lively dynamic platforms that is providing information, socializing and entertainment to users. Consumers have a positive attitude towards social media, which affects the purchase intention. Tafesse and Wien (2018) analyzed the digital marketing that was used by businesses such as transformations whereas experience and brand identity focused on desirable psychological characteristics, factual product presentation information, services information in clear terms and interactions advertised on digital marketing cultivates constant interaction with customers (Puto & Wells, 1984; Tafesse & Wien, 2018). Kusumasondjaja (2019) found that interactive brand posts get more replies than informative text content, Twitter is more effective for visibility, Facebook works better for interactive entertainment posts, and Instagram is better suited for interactive content that combines information and entertainment together. Ang, Wei and Anaza (2018) examined according to situation by using social impact theory. The result revealed that in the eyes of consumers, live streaming tools are more reliable than pre-recorded videos. It can also increase consumer search and subscription intention. Hutchins and Rodriguez (2018) mentioned that successful digital marketing requires content marketing tools. As in many aspects of literature reviews have argued that using emotional into the contexts has significant impact on the consumer behavior. The empirical evidence indicated that using emotional in content marketing can lead to competitive advantage and increase the value of the brand, so it suggested that business videos should be continuously shared.

Lai and Mai (2011) studied on building a framework for user experiences based on social media and social networks. There were two processes: interpersonal and interaction. It collects information about desire to create a good user experience. The findings revealed that users have expectations about their user experiences and there is a huge demand for specific functions and convenient use. Consequently, it is clear that digital marketing and user experience are connected. This will lead to the development of digital marketing that meets the needs of consumers and can create user experience. Hwang, Park and Woo (2018) studied on digital marketing using motivation theory in service business contexts. They concluded that digital marketing with comprehensive flexibility of messages, punctuality of arguments, quality and reliability of the source of the message have a positive impact on user satisfaction. It affects the intention of users to visit the website and buy products through digital marketing channels. Pedersen, Methlie and Thorbjornsen (2002) denoted that the newness of internet and customers usage' experience that have greatly various. These will play an important role in the efficiency of digital marketing. Therefore, innovation is essential to digital marketing because it can create user experiences. As a result, we can conclude:

Hypothesis 2. Digital marketing positively influences user experience.

User Experience and Business Outcomes

To define user experience (UX), Minge and Thüring (2018) defines it as "a context-dependent, and subjective domain. It has been noted that users' perception of different product qualities as well as emotions that arise before, during and after using a product is changing" (Minge & Thüring, 2018). The user experience is value-centric and all elements of the user experience are associated with value such as the user-to-enterprise to provide valuable products to users. User experience-to-user is for those who are looking for cost-effective and efficient use of a product. The user experience to the context of use is what affects both the components of the (organization and users) and which is a bridge between them and the user experience to the product is linked to the product design (Zarour & Alharbi, 2017). Moreover, it is obviously interested in the way people experience and judge products they use, so UX is a more positive quality, but even the best usability may never be able to "put a smile on users' faces" (Hellweger & Wang, 2014). As matter a fact, UX addresses both, dissatisfiers and satisfiers, on an equal footing. User experience can improve the application of digital marketing to easily use and lead to customer satisfaction as well.

Kaldeen and Samsudeen (2020) research study revealed that digital marketing has been proven to have a very positive impact on both customer participation and purchase intention. Because of user experience, businesses can use these experiences to improve on their digital marketing to increase customer satisfaction and purchase intention, which this research paper is focusing on. Today, businesses need a high degree of adaptability to change because most of consumers are ready to experience new way of marketing approaches like social media and e-mail marketing. Proven results have been found to influence digital marketing to improve customer participation and purchase intention. To measure the effectiveness, efficiency, satisfaction and also the user's perceptions and responses resulting from the human-system interaction, user experience and business outcomes were considered. This equation aims at a better understanding of the impacts that user experience may have an impact on business outcomes when users make (or attempt to make) purchases online. In this research, we are attempting to prove user experience led to business outcomes such as purchase intention and customer satisfaction. As a result, we can conclude:

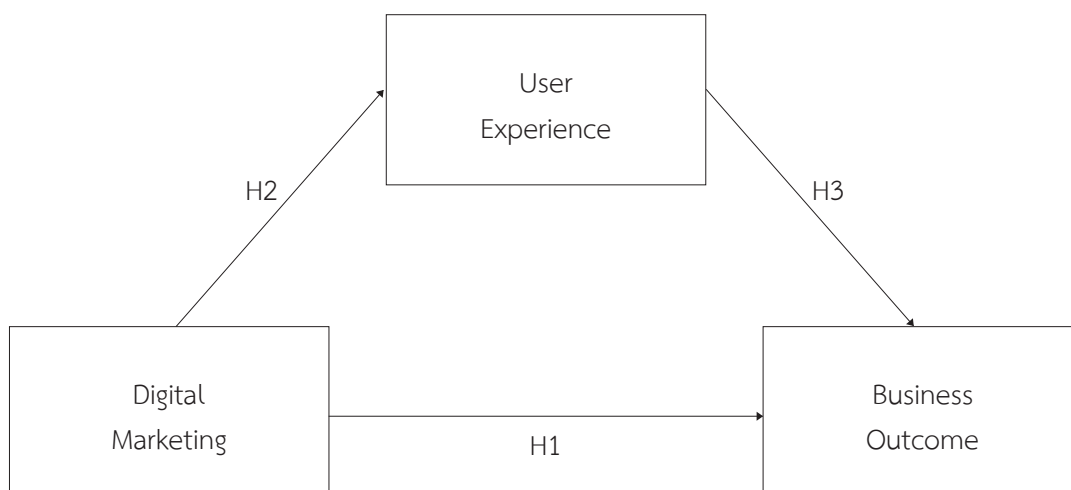*Hypothesis 3. User experience positively influences business outcomes.*

Figure 1 Conceptual framework

Research Methodology

The method of this research was conducted by using mixed method, to acquire different method but complementary data on the topic (Creswell, 2003). From the different key informants, when analyzed the data, we could obtain in-depth and comprehensive findings. First stage was to use questionnaire to collect the data on consumer behavior in the digital era of woven fabric groups customers. Population and sample were customers of 23 woven fabric groups, which received certificate of quality community product, in Uttaradit province, Thailand. At this stage, the key purpose was to investigate how technology impacts consumer behavior in the digital era. 385 samples were calculated by using Cochran (1963), which collected in equal proportion, 17 samples in each group. A questionnaire was used to survey the data from woven fabric groups customers. All the completed questionnaires were checked for completeness and validity.

Then, there were 13 digital marketing applied trial groups for qualitative research. Then, next stage was to examine the digital marketing model towards business outcomes. At the final stage, there were 13 digital marketing applied trial groups. The researchers conducted a screening of the digital marketing applied trial group by specifying the criterial for selecting the trial group as follows: 1. Voluntary as a trial group, 2. Must have a person responsible for marketing and have sufficient knowledge in digital technology, 3. Consent to change and use digital marketing according to recommendations and 4. Consent to invest on the digital marketing development. As a result, final stage was to examine the digital marketing model towards business outcomes. There were 2 groups that meet the required criteria, namely the Ban Nam Ang and Ban Khum Woven Fabric Group. The instrument was questionnaire to collect the data from woven fabric groups customers. The data was analyzed by following the two-step approach suggested by Anderson and Gerbing (1988). Structural equation modeling (SEM) was used with statistical computing software, AMOS. The minimum sample size is at least 10 times the number of observed variables (Klein, 2009) that can be estimated in the model. In this research, there were 49 observed variables, then the minimum sample size is 490 samples. The data was collected online through Link, QR code and Facebook page of 2 woven fabric groups. After checked for completeness and validity of questionnaires, there were invalid 49 questionnaires. Therefore, 441 questionnaires were used to analyzed the data for the results, which is a sufficient number for analysis, because Anderson and Gerbing (1984) propose that 150 is the minimum. Despite this, various rules-of-thumb have been advanced, including a minimum sample size of ≥250 (Hu & Bentler, 1999). In additions, initial studies by Yuan and Bentler (2000) suggest that a sample size of at least 400 is needed.

Instruments

In this study, there were 2 questionnaires for quantitative research. First questionnaire that has adopted from Omar and Atteya (2020) was used to survey on the consumer behavior in digital era. Second questionnaire that has adopted from Omar and Atteya (2020); Sivasankaran (2013) and Schrepp, Hinderks and Thomaschewski (2017) was used to survey for examining the digital marketing model towards business outcomes. For qualitative research, this study used semi-structured interview. There were 4 open-end questions. All questionnaires were constructed by reviewing from the literatures that related to the digital marketing towards business outcome. Face-to-face validity was tested by 5 experts, who were 3 marketing specialists and 2 woven fabric entrepreneurs. Index of Item-objective was 0.60 – 1.00 in which showed that the questionnaire was consistent with the research topic (Rovinelli & Hambleton, 1977). The first questionnaire was tried out for reliability testing between 0.86 – 0.97. The second questionnaire was between 0.71 – 0.92. All variables have higher reliability than the threshold (Nunnally, 1978). In additions, the second questionnaire was tested for composite reliability (CR). All variables were between 0.82 – 0.97, which were confirmed that the developed questionnaire to measure variables in the structural equation model has acceptable reliability (Bagozzi & Yi, 1988). Measurement model of this research was analyzed by Cronbach Alpha, Kaiser-Meyer-Olkin (KMO) and Confirmatory Factor Analysis CFA. The results were indicated that Cronbach alpha were overall more than 0.94 (Cronbach ≥0.94), which showed that the instrument was reliable (Nunnally, 1978). KMO value was accepted at least or more than 0.8 (Li, 2015) and the result indicated that KMO was 0.82. In addition, the researchers conducted a factor analysis. Confirmation factor analysis was a tool to study the relationship between observed variables and latent variables (Brown, 2015). Confirmation factor analysis was shown in Table 1 as follows.

Table 1 Measurement items and validity assessment

	Standardize factor loading
1. Digital marketing	
First-order factor, χ^2 = 6.05 CMIN/DF = 3.02, CFI = .99, TLI=.98, NFI=.99 RMSEA = .08	
Convenience	.84
Design and Features	.95
Time Saving	.72
Security	.75
2. User experience	
First-order factor, χ^2 = 23.82 CMIN/DF = 3.97, CFI = .99, TLI=.99, NFI=.99 RMSEA =.07	
Attractiveness	.87
Efficiency	.94
Perspicuity	.94
Dependability	.93
Stimulation	.89
Novelty	.77

Table 1 Measurement items and validity assessment

	Standardize factor loading
3. Business outcome	
First-order factor, χ^2 = 54.00 CMIN/DF = 3.18, CFI = .99, TLI=.98, NFI=.98 RMSEA =.06	
Purchase intention	.81
Satisfaction	.85

Measurement Model Test

Construct validity was tested by using the second try out questionnaire with undergraduate students. It can be seen that the number of experimental groups is appropriate and sufficient for using this technique (Hair, Black, Babin & Anderson, 2010) to consider the conformity of the model based on the theoretical structural equation with the data. The researchers used confirmatory factor analysis to extract the elements. Estimated maximum likelihood orthogonal rotation of the component by varimax method, the result of checking the relationship between variables using Kaiser-Meyer-Olkin statistic, Measure of Sampling Adequacy at 0.89 showed that the variables were correlated at an appropriate size for exploratory analysis (Hair et al., 2010) and the Bartlett's test of Sphericity was found to be statistically significant at the 0.05 level, indicating that the data were appropriate to analyze the composition. The results of checking the structural validity of the model. Based on CMIN/DF values not exceeding 5 (Marsh & Hocevar, 1985) Comparative Fit Index (CFI) values 0.9 or higher (Hair et al., 2010). Tucker Lewis Index (TLI) values 0.9 or more (Bentler & Bonett, 1980) Normed Fit Index (NIF) was 0.9 or more (Bollen, 1989) and Root-Mean-Square Error of Approximation (RMSEA) does not exceed 0.08 (Browne & Cudeck, 1993) as Table 2.

Table 2 Construct validity test of second try out questionnaire (n-200)

Testing Model	χ^2	CMIN/DF	CFI	TLI	NFI	RMSEA
1. Digital marketing	121.84	1.45	0.98	0.98	0.95	0.05
2. User experience	183.90	1.37	0.98	0.97	0.93	0.04
3. Business outcome	90.25	3.61	0.96	0.92	0.95	0.06

Convergent validity considered in each construct, the mean variance extracted (AVE) was between 0.60-0.91, which was greater than 0.5 (Fornell & Larcker, 1981). In the discriminant validity test, Hair, Black, Babin and Anderson (2006) mentioned that it was a research tool that measures the scope of related. The correlation value was used to verify the validity of the classification. It had to be low to show different factors (Schumacker & Lomax, 2015). The discriminant validity coefficient is the relationship between measurements of different structures using the same instrument. As a discriminant validity, Fornell and Larcker (1981) were able to calculate average variance extracted (AVE) (Hair et al., 2006). Factor Loadings found in the CFA results range from 0.63 - 0.97. Comrey and Lee (1992) suggested that Factor Loadings greater than 0.71 are excellent, 0.63 is very good, 0.55 is good, 0.45 is fair and 0.32 is bad.

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Table 3 Fornell-Larcker Criterion for discriminant validity

Variables	$\bar{X}$	S.D.	AVE	√AVE	DM	UX	BO
Digital marketing (DM)	6.04	.83	.62	.79	.79		
User Experience (UX)	6.09	1.13	.50	.71	.49	.71	
Business outcome (BO)	6.08	.81	.64	.80	.67	.45	.80

Data Analysis

Descriptive statistics described the results of the preliminary data analysis and to consider data on consumer behavior in the digital age by using frequency, percentage, mean and standard deviation.

Inferential statistics was for analyzing digital marketing patterns that lead to business outcomes. Structural Equation Model (SEM) analysis is particularly useful for the process of building or developing a theory, which has become a standard in research (Hair, Sarstedt, Ringle & Mena, 2012). Structural equation analysis is a hypothesis analysis technique between many latent variables or second-generation multivariate data, which commonly uses in marketing research. Structural Equation Model (SEM) analysis was done by AMOS software, which was a group of covariance matrix analysis of the model generated and empirical data were most closely related.

Research Findings

Respondents Demographic

From the results of findings, it was found that the customers of the woven fabric group in Uttaradit Province had a habit of using the internet 4-6 hours a day by using the internet regularly for online shopping. More than 80 percent of customers had shopped online, online shopping 2-3 times a month and purchased less than 3,000 baht. They mostly bought food and beverage products, followed by clothing and apparel. The most factors that influenced the purchase decision were content and advertising online. In additions, Customers felt that shopping online can be done anytime and anywhere. The results of the finding are consistent with We Are Social, which is a global digital agency, that had done the research survey. The survey of Thai population indicated that more than 70 percent had used internet and social media and 90 percent were using the internet daily with an average of 9 hours a day. The most popular social media platform is Facebook, where more than 90 percent of ecommerce activity was online shopping (Kemp, 2019). Moreover, this research survey findings were consistent with S-O-R model of Huang (2012) that was in the form of an online contextual trigger, such as the experience gained from using various online platforms, which was stimulus to decision making of the consumer and can also have a continual effect on the responses of consumers as well.

Guidelines for applying digital marketing for woven fabric groups in Uttaradit province

Searching for guidelines for applying digital marketing to woven fabric groups in Uttaradit province has brought data on customer behavior and the data of the woven fabric groups, analyzed, synthesized and summarized the guidelines for applying digital marketing. It was found that Facebook Fan page is a digital marketing channel that woven fabric groups want to apply and meet to the need of customer behavior. The name is adjusted according to SEO principles for the purpose of sales through photography, video clips and content creation. The business outcome after applying digital marketing is targeted reach and increased sales. If considering from the perspective of customers who have used the service on the page, it was found that Facebook Pages are 86.57% more comfortable to use. The design and features are 88.29% simple and intuitive. It helps to save time 84.57% and safety 85.71%. The analysis of the data is consistent with Kannan and Li (2017)'s concept of operating a business with different customers but mutually beneficial on the social media, SEO, user generated, content, new emerging consumer behavior and contextual linking. This analysis is the input of information for the marketing strategy of the business by focusing on how digital technology will derive the proper form of marketing action. The results of marketing actions that come from the overall impact of digital technology can create value for customers and customer satisfaction.

In the digital era, the impact of consumer purchasing patterns is rapidly changing in a customer-focused market environment (Dastidar & Datta, 2009). However, consumers are the most complex. The changing preferences of today consumers influence purchasing patterns. Chaffey (2013) mentions that marketing activities that use technology to help marketing activities to meet the needs and wants of customers is called digital marketing, which is a method or approach to business operation that uses modern technology to be applied in accordance with the current market environment by using marketing tools with technology that can communicate to specific target customers. It is providing an important and useful information. The use of influential media is to help stimulate the demand for more customers including having a system to manage problems and complaints efficiently and quickly, which will lead to the achievement of marketing performance as well. Sivasankaran (2013) studies digital marketing and its impact on purchasing decisions. It is pointed out that digital marketing convenience, design and features, time-saving and safety, will have an influence to consumers' purchasing decisions. Therefore, before applying digital marketing, businesses need to analyze their internal and external environments and then use these data to determine the marketing operation model. This will get the model that fits the business potential and meet the need of consumer behavior. It also creates an effective marketing tool that reflects to business outcomes.

Structural Model Test

The original model was adjusted by modification indices. This adjustment allowed for more optimized final modeling (Figure 2), which had been created and adjusted 15 times. From the analysis of index summaries, it was showed that the 14 modifications and improvements to the model resulted in a more optimized final modeling, where Model#15 is a structural model with good consistency with empirical data. It indicates that the structural equations of digital marketing model that leads to business outcomes are consistent with empirical data on statistical conditions, independent variables, mediating variables and dependent variables, which were consistent with the criteria.
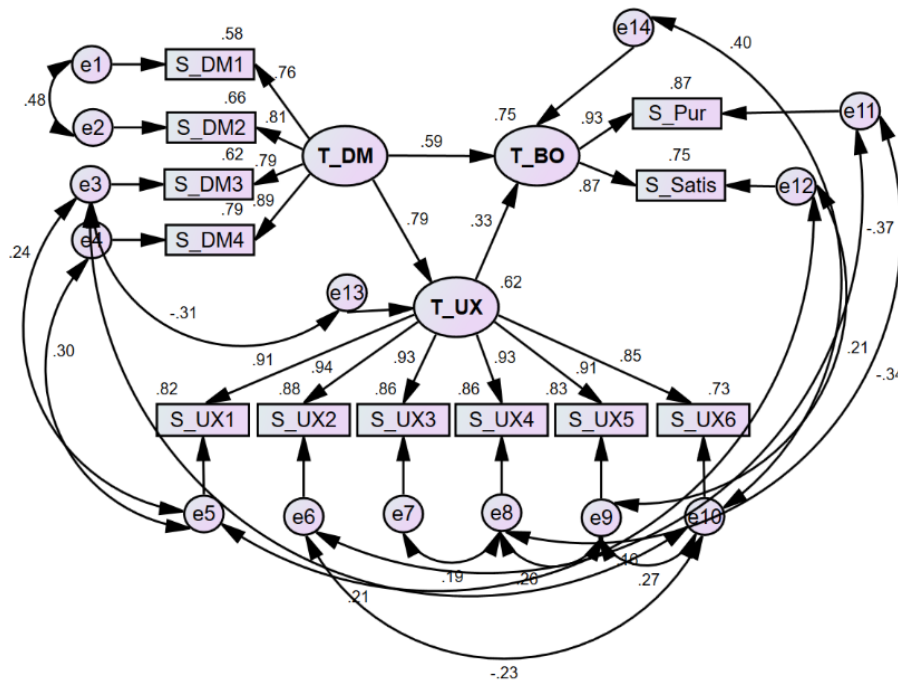
Chi-square = 86.48 Probability level = .000 n=441

Figure 2 Digital marketing model influences on business outcomes.

The structural equation modeling of digital marketing leading to business outcomes as Final Model, as shown in Figure 2, lead to the consideration of conformity with empirical data, it was found that all indexes passed and consistent with the criteria as well as these statistical values passed the specified criteria. The results of analysis were shown that final model had Chi-Square 86.48, df 37 and p-value 0.000 as shown 8 indices. The results can be summarized as follows:

1. Relative Chi-Square X^2/df = 2.43 indicated that the value passed the criteria and can also be interpreted as the model was consistent with the empirical data at a good level because it was less than 3 (Hair et al., 2010).

2. Root Mean Square Error of Approximation (RMSEA) = 0.05, this indicated that it was good value. The result of this index indicated that the model was consistent with the empirical data or that the model had a good level of relative coherence (Hu & Bentler, 1999).

3. Root Mean Square Residual (RMR) RMR = 0.04, this is less 0.05, which is a good value. This indicated that the model was consistent with the empirical data or that the model had a good degree of relative harmonization (Jöreskorg & Sörbom, 1997).

4. Goodness of Fit Index (GFI) = 0.97, Schumacker and Lomax (2015) pointed that Level of GFI should exceed 0.95, which indicated that the model was consistent with the empirical data and relative harmonious.

5. Adjusted Goodness of Fit Index (AGFI) = 0.95, this showed that the model was consistent with the empirical data at a good level (Schumacker & Lomax, 2015).

6. Normed fit index (NFI) = 0.99, this showed that the model was consistent with the empirical data and relative harmonious (Hu & Bentler, 1999).

7. Tucker – Lewis Index (TLI) = 0.98, the model was consistent with the empirical data at a good level (Schumacker & Lomax, 2015).

8. Comparative Fit Index (CFI) = 0.99, The model had a good level of consistency (Hu & Bentler, 1999).

Table 4 Summary of research hypothesis testing

Hypothesis	Hypothesis path	λ	SE.	t-value	p-value	Results
H1	T_DM → T_BO	0.59	0.06	10.36	0.000*	Supported
H2	T_DM → T_UX	0.79	0.04	17.14	0.000*	Supported
H3	T_UX → T_BO	0.33	0.06	6.10	0.000*	Supported

The results of testing structural equation modeling, which were shown in the Table 4, can be summarized as follows:

H1: Digital marketing positively influences business outcomes. The finding showed that path coefficient value was 0.59, t-value was 10.63 and p-value was 0.000, which indicated that application of digital marketing resulted in increased business results. This means that the hypothesis is statistically supported at 0.01 level of significant.

H2: Digital marketing positively influences user experience. The finding showed that path coefficient value was 0.79, t-value was 17.14 and p-value was 0.000, which indicated that application of digital marketing resulted in increased user experience. This means that the hypothesis is statistically supported at 0.01 level of significant.

H3: User experience positively influences business outcomes. The finding showed that path coefficient value was 0.33, t-value was 6.10 and p-value was 0.000, which indicated that user experience has an impact on business outcomes. This means that the hypothesis is statistically supported at 0.01 level of significant.

In additions, the authors examined the pattern of mediator variable following 4 processes of Baron and Kenny (1986). The first process analyzed simple regression between T_DM and T_BO (Path coefficient value = 0.716, p-value = 0.000). Second process analyzed simple regression between T_DM and T_UX (Path coefficient value = 0.697, p-value = 0.000). Third process analyzed simple regression between T_UX and T_BO (Path coefficient value = 0.691, p-value = 0.000). The last process was analyzed multiple regression analysis by using T_DM and T_UX together to predict T_BO (Path coefficient value = 0.438, p-value = 0.000 and Path coefficient value = 0.399, p-value = 0.000). The results revealed that all tests were statistically significant. At the end of testing, the path coefficient of step 1 compared with the last step showed that path coefficient was reduced. Therefore, it can be concluded that user experience variable is partial mediator variables in this study.

Table 5 Results of Total effect, Direct effect and Indirect effect

Variables	T_DM			T_UX			T_BO		
	DE	IE	TE	DE	IE	TE	DE	IE	TE
S_DM1	762*		.762*						
S_DM2	.815*		815*						
S_DM3	.790*		.790*						
S_DM4	.888*		.888*						
T_DM				.789*		.789*	.586*	.275*	.844*
S_UX1				.907*		.907*			
S_UX2				.939*		.939*			
S_UX3				.927*		.927*			
S_UX4				.927*		.927*			
S_UX5				.909*		.909*			
S_UX6				.854*		.854*			
T_UX							.326*		.326*
S_Pur		.788*	.788*		.305*	.305*	.934*		.934*
S_Satis		.733*	.733*		.283*	.283*	.869*		.869*

Remarks: Total effect =TE Direct effect = DE Indirect effect = IE

From the analysis as shown in Table 5, it was found that the application of digital marketing, that are affecting to business outcome, consisted of convenient to use (S_DM1), design and features ease to use (S_DM2), time saving (S_DM3) and security (S_DM4). Moreover, the application of digital marketing is not only affecting business outcomes, but it is also indirectly through the user experience. The empirical result also reveals that the application of digital marketing of woven fabric Group was affecting to user experience. It indicated that factor, which were novelty (S_UX1), efficiency (S_UX2), attractiveness (S_UX3), ease to understand (S_UX4), reliable (S_UX5) and safety (S_UX6). Lastly, the finding also revealed that user experience influenced an increase in business outcomes, which were customer satisfaction and purchase intention.

Discussions

Theoretical Contribution

The use of digital marketing model that affects the business outcomes of woven fabric group reveals that woven fabric group's application of digital marketing has resulted in increased business outcomes, both directly and indirectly, which results to higher chances of satisfaction and purchase intention. The finding of this research is consistent with Kannan and Li (2017) study that digital marketing can bring interactions between entrepreneurs and customers through the use of search engine optimization on the social media and content created online in which by examining the overall results of digital technology in creating customer value and customer satisfaction. In addition, Uppapong, Photchanachan and Thechatakerng (2021) also suggested on their research that the application of digital marketing tools can produce results for businesses by generating financial and non-financial benefits, which is customer satisfaction and generating sales for entrepreneurs. Moreover, according to research by Kaldeen and Samsudeen (2020) showed that digital marketing has been proven to have a very positive effect on customer purchase intention. As well as Manju and Kavitha (2021) research study has confirmed that digital marketing results on customer satisfaction. Finally, Khankaew (2019) concluded that digital marketing directly and indirectly affects business outcomes. From the results of this research and the confirmation of academic research results, it shows that the application of digital marketing directly and indirectly affects business outcomes, which is consist of customer satisfaction and purchase intention. Because of the application of digital marketing, it is correspondence with customer. With the use of digital tools, it can also operate fast, accurate and saves time. Thus, it will effect on customer satisfaction and purchase intention, which is considered as a result of digital marketing.

The research finding also reveals that digital marketing influences increasingly on user experience and user experience of customers also influences increasingly on business outcomes. Chen and Lee (2018) have examined the application of digital marketing. The results showed that using social media is one of the most intimate, intimate and dynamic platforms, providing information, socializing and entertainment to users. This is considered to create a good experience and lead to a positive attitude as well. Then, it becomes the intention to purchase on the product. Therefore, novelty is important to digital marketing because it can create user experiences. Koufaris and Hampton-Sosa (2002) also implied that experienced consumers will evaluate its ease of use, which determines the intention of use. Consequently, user experience with the importance of ease of use and perceived benefits are the factors that determine future intentions to implement digital marketing such as website or social media. Rauschenberger, Schrepp, Perez-Cota, Olschner and Thomaschewski (2013) defined six dimensions of user experience such as attractiveness, efficiency, perspicuity, dependability, stimulation and novelty that lead to business outcomes. Thus, the application of digital marketing research gains on user experience that digital marketing must be able to create user experiences in terms of attractiveness, efficiency, perspicuity, dependability, stimulation and novelty. These factors can lead to purchase intention because if you have a good experience and attitude, it will lead to purchase intention itself.

Managerial Implications

The findings reveal that most consumers of woven fabric group were surfing on the internet at least 4-6 hours and they were looking for purchasing the product online. More than 80 percent of consumer had experience purchasing online for at least 2 times a month. These results are consistent with We Are Social, which has done the survey in the global. More than 70 percent of Thai people use the internet and social media. With these people, 90 percent use the internet every day and average 9 hours a day. Facebook is the most popular social media (Kemp, 2019). From these findings, it is associate with Huang (2012) S-O-R model on the online contextual triggers model. Such an experience gained from using various online platforms, which is a stimulator. These stimulators influence on organism of consumer. Then, it will reflect to the responses of consumers. For Eroglu, Machleit and Davis (2003) research study, they suggested that context of online platform is the stimulus actor that directly affects to the property of platform technology such as design, feature, spacing management, symbol and other conditions. In addition, online purchase, the stimulus directly triggers the response on the design characteristics of online channels that sell products, which is an intermediary used to interact with customers.

For this reason, in the fast-changing digital era, digital technology plays a vital role in every life. The first thing to see clearly is the change in consumer behavior of people. If you try to observe the changes all around you in the past few years, it can be seen that mobile phones or smartphones that used to be used for only communication devices. Today, these mobile phones have become a convenient tool for everyday transactions because it is faster and less complicated. It is also saved time. In addition, there is also another factor that affects consumer behavior. It is the pandemic of COVID-19. Over the past two years, Thai consumers' behavior have adapted to digital more in the blink of an eye. Therefore, it is not surprising that consumer behavior will change to consumer behavior in the digital age.

Conclusion

The results of path analysis show that user experience is partial mediator for increasing business outcomes. The application of digital marketing of the woven fabric group must be convenient to use, design and features ease to use, time saving and safety. All of these factors result in increased business outcomes. Applications of digital marketing do not directly affect only, but it is also indirectly through user experience. It can be implied that application of digital marketing of woven fabric group affects user experience and user experience results in increased business outcomes. This empirical finding of this research is consistent with the results of research that digital marketing has affected on the business both directly and indirectly (Kannan & Li, 2017). Sivasankaran (2013) studied digital marketing and its purchase decision. It pointed out that digital marketing that is convenience, design and features, time saving and security have an impact on customers' purchase decision. The results show that the application of digital marketing has to be convenience for the customer, design and features ease to use, time saving and safety for user. Thus, this is affecting to user experience and business outcomes. However, if the customer has an unsatisfactory experience, for example, accessing of digital marketing services very complexity, complicated to use, take time to learn and understand the system and unsecure to use, using these digital marketing will definitely not lead to business outcomes and may cause customers to turn to try to use competitors. Businesses may result to lose customers to competitors.

Limitations and Suggestions for Future Research

This study aims to examine the digital marketing model that leads to business outcomes. In this section, the research team therefore presents the limitations and recommendations for future research as follows: 1. A study of digital marketing models that lead to business outcomes should be continuously doing the research study to identify the direction related to digital technology that will be appropriately applied to various business and situations. 2. Due to the limited research time, this research is therefore limited to focus the woven fabric group in Uttaradit Province. Therefore, in the future, if there should be expanding area of research study to find evidences that can explain the phenomenon comprehensively in the target group such as northern woven fabric group and northeast woven fabric group and etc. 3. In term of customer's point of view, user experience of digital marketing should be done in-depth on the qualitative research to develop a digital marketing approach that has been created by the use of customers in detail. 4. This research has been done under the circumstance of pandemic of COVID-19.

References

Anderson, J. C., & Gerbing, D. W. (1984). The effect of sampling error on convergence, improper solutions, and goodness-of-fit indices for maximum likelihood confirmatory factor analysis. *Psychometrika, 49*(2), 155-173.

Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin, 103*(3), 411–423.

Ang, T., Wei, S., & Anaza, N. A. (2018). Livestreaming vs pre-recorded: How social viewing strategies impact consumers' viewing experiences and behavioral intentions. *European Journal of Marketing, 52*(9/10), 2075–2104.

Appel, G., Grewal, L., Hadi, R., & Stephen, A. T. (2020). The future of social media in marketing. *Journal of the Academy of Marketing Science, 48*(1), 79–95.

Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science, 16*(1), 74–94.

Baron, R., & Kenny, D. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51*, 1173-1182.

Bentler, P. M., & Bonett, D. G. (1980). Significance tests and goodness of fit in the analysis of covariance structures. *Psychological Bulletin, 88*(3), 588–606.

Bollen, K. A. (1989). *Structural equations with latent variables.* New York: John Wiley & Sons.

Brown, T. A. (2015). *Confirmatory factor analysis for applied research.* (2nd ed.). New York, NY:The Guilford Press.

Browne, M. W., & Cudeck, R. (1993). *Alternative ways of assessing model fit.* In K. A. Bollen & J. S. Long. (Eds.), Testing structural equation models (pp. 136-162). Newbury Park, CA: Sage.

Chaffey, D. (2013). *Definitions of E-marketing vs Internet vs Digital marketing, Smart Insight Blog.* Retrieved from https://www.smartinsights.com/digital-marketing-strategy/online-marketing-mix/definitions-of-emarketing -vs-internet-vs-digital-marketing/

Chen, H., & Lee, Y. J. (2018). Is Snapchat a good place to advertise? How media characteristics influence college-aged young consumers' receptivity of Snapchat advertising. *International Journal of Mobile Communications, 16*(6), 697-714.

Cochran, W.G. (1963). *Sampling Technique.* (2nd ed). New York: John Wiley and Sons Inc.

Comrey, A. L., & Lee, H. B. (1992). *A First Course in Factor Analysis.* (2nd ed). Hillsdale, NJ: Lawrence Erlbaum.

Creswell, J. W. (2003). *Research design: Quantitative, Qualitative, and Mixed Methods approaches.* (2nd ed.) Thousand Oaks, CA: Sage.

Dastidar, S. G., & Datta, B. (2009). Demographic Differences in Consumer Exploratory Tendencies: An Empirical. *IIMB Management Review, 21*(4), 297-312

Eroglu, S. A., Machleit, K. A., & Davis, L. M. (2003). Empirical testing of a model of online store atmospherics and shopper responses. *Psychology and Marketing, 20*(2), 139–150.

Fornell, C., & Larcker, D.F., (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research, 18*(1), 39-50.

Grewal, D., Hulland, J., Kopalle, P. K., & Karahanna, E. (2020). The future of technology and marketing: A multidisciplinary perspective. *Journal of the Academy of Marketing Science, 48*(1), 1–8. doi: 10.1007/s11747-019-00711-4

Hair, J, F., Black, W, C., Babin, B, J., Anderson, R, E., & Tatham, R, L. (2006). *Multivariate Data Analysis.* (6th ed). New Jersey: Pearson Prentice Hall.

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis: A global perspective.* (7th edition). New Jersey: Pearson Prentice Hall.

Hair, J. F., Sarstedt, M., Ringle, C. M., & 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.

Hellweger, S., & Wang, X. (2014). *What is User Experience Really: Towards a UX Conceptual Framework.* 4. Retrieved from https://peterme.com/index112498.html.

Hennig-Thurau, T., Malthouse, E. C., Friege, C., Gensler, S., Lobschat, L., Rangaswamy, A., & Skiera, B. (2010). The impact of new media in consumer relationships. *Journal of Service Research, 13*(3), 311-330.

Hu, L.T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling, 6*(1), 1–55.

Huang, L. (2012). Social Media as a New Play in a Marketing Channel Strategy: Evidence from Taiwan Travel Agencies' Blogs. *Asia Pacific Journal of Tourism Research, 17*(6), 615–634.

Hutchins, J., & Rodriguez, D.X. (2018). The soft side of branding: leveraging emotional intelligence. *Journal of Business & Industrial Marketing, 33*(1), 117-125.

Hwang, J., Park, S., & Woo, M. (2018). Understanding User Experiences of Online Travel Review Websites for Hotel Booking Behaviours: An Investigation of a Dual Motivation Theory. *Asia Pacific Journal of Tourism Research, 23*(4), 359–372.

Jöreskorg, K, G., & Sörbom, D. (1997) *LISREL 8: A Guide to the Program and Applications.* Chicago, IL: SPSS Inc.

Kaldeen, M., & Samsudeen, S. N. (2020). Impact of Knowledge Management Capabilities on Performance of Star Hotels in Sri Lanka. *International Journal of Advanced Science and Technology, 29*(4), 1102-1112.

Kang, M., & Park, B. (2018). Sustainable Corporate Social Media Marketing Based on Message Structural Features: Firm Size Plays a Significant Role as a Moderator. *Sustainability, 10*(4), 1167. https://doi.org/10.3390/su10041167

Kannan, P. K., & Li, A. H. (2017). Digital marketing: A framework, review and research agenda. *International Journal of Research in Marketing, 34*(1), 22–45.

Kemp, S. (2019). *Digital around the world in 2019.* Retrieved from https://datareportal.com/reports/digital-2019-thailand.

Khankaew, C. (2019). Digital Marketing Strategy and Marketing Performance Evidence from Service Businesses in Thailand. *Chulalongkorn Business Review, 41*(1), 1-32.

Klein, S. B. (2009). *Learning: Principles and applications.* (5th ed.). Thousand Oaks, CA: Sage Publications, Inc.

Kotler, P., Armstrong, G., Saunders, J., & Wong, V. (1999). *Principles of Marketing.* (2nd European ed) NJ: Prentice Hall.

Kotler, P., Kartajaya, H., & Setiawan, I. (2017). *Marketing 4.0: Moving from traditional to digital*. Hoboken, NJ: Wiley.

Koufaris, M., & Hampton-Sosa, W. (2002). *Customer trust online: examining the role of the experience with the Web-site.* Department of Statistics and Computer Information Systems Working Paper Series, Zicklin School of Business, Baruch College, City University of New York, New York.

Kusumasondjaja, S., (2019). Exploring the role of visual aesthetics and presentation modality in luxury fashion brand communication on Instagram. *Journal of Fashion Marketing and Management*: *An International Journal, 24*(1), 15-31.

Lai, M. S., & Mai, X. H. (2011). Exploring process-oriented user experience in social networking sites. *Proceeding of the 7th Joint Conference on Harmonious Human Machine Environment (HHME).* Beijing, China.

Li, Y. (2015). *Expatriate Manager's Adaption and Knowledge Acquisition*. Singapore: Springer.

Manju, P., & Kavitha, M. (2021). Digital Marketing and Customer Satisfaction and Customer Satisfaction in Covid-19. *Elementary Education Online, 20*(5), 2761-2764.

Marsh, H. W., & Hocevar, D. (1985). Application of Confirmatory Factor Analysis to the Study of Self-Concept: First- and Higher Order Factor Models and their Invariance Across Groups. *Psychological Bulletin, 97*(3), 562–582.

Mogos, I. R. (2015). Digital Marketing for Identifying Customers' Preferences- A Solution for SMEs in Obtaining Competitive Advantages. *International Journal of Economic Practices and Theories, 5*(3), 240-247.

Minge, M., & Thüring, M. (2018). Hedonic and pragmatic halo effects at early stages of user experience. *International Journal of Human-Computer Studies, 109*, 13–25.

Neti, S. (2011). Social media and its role in marketing. *International Journal of Enterprise Computing and Business System, 1*(2), 1-15.

Nikunen, T., Saarela, M., Oikarinen, E.L., Muhos, M., & Isohella, L. (2017) Micro-Enterprises' Digital Marketing Tools for Building Customer Relationships. *Management, 12*(2), 171-188.

Nunnally, J. C. (1978). *Psychometric theory.* (2nd ed). New York: McGraw-Hill.

Nuseir, M. T. (2018). Impact of misleading/false advertisement to consumer behaviour. *International Journal of Economics and Business Research, 16*(4), 453-465.

Omar, A. M., & Atteya, N. (2020). The Impact of Digital Marketing on Consumer Buying Decision Process in the Egyptian Market. *International Journal of Business and Management, 15*(7), 120-132.

Pedersen, P. E., Methlie, L. B., & Thorbjornsen, H. (2002). Understanding mobile commerce end-user adoption: a triangulation perspective and suggestions for an exploratory service evaluation framework. *Proceedings of the 35th Annual Hawaii International Conference on System Sciences.* Big Island, Hawaii. doi: 10.1109/HICSS.2002.994011.

Pradhan, P., Nigam, D., & Tiwari, C. K. (2018). Digital Marketing and SMEs: An Identification of Research Gap via Archives of Past Research. *Journal of Internet Banking and Commerce, 23*(1), 1-14.

Puto, C. P., & Wells, W. D. (1984) Informational and Transformational Advertising: The Differential Effects of Time. *Advances in Consumer Research, 11*, 638-643.

Rauschenberg, M., Schrepp, M., Perez-Cota, M., Olschner, S., & Thomaschewski, J. (2013). Efficient Measurement of the User Experience of Interactive Products. How to use the User Experience Questionnaire (UEQ). Example: Spanish Language Version. *International Journal of Interactive Multimedia and Artificial Intelligence, 2*(1), 39-45. doi: 10.9781/ijimai.2013.215

Reinartz, W., Krafft, M., & Hoyer, W. D. (2004). The Customer Relationship Management Process: Its Measurement and Impact on Performance. *Journal of Marketing Research, 41*(3), 293–305.

Rovinelli, R. J., & Hambleton, R. K. (1977). On the use of content specialists in the assessment of criterion-referenced test item validity. *Dutch Journal of Educational Research, 2*, 49-60.

Ruenrom, G. (2018). The Identification of Research Problems in Digital Marketing for Thailand in the Future. *Chulalongkorn Business Review, 40*(3), 100-140.

Schrepp, M., Hinderks, A., & Thomaschewski, J., (2017). Die UX KPI - Wunsch und Wirklichkeit. In S. Hess & H. Fischer (Hrsg.), *Mensch und Computer 2017* - Usability Professionals. Regensburg: Gesellschaft für Informatik e.V. DOI: 10.18420/muc2017-up-0100

Schumacker, R. E., & Lomax, R. G. (2015). *A Beginner's Guide to Structural Equation Modeling* (4th ed.). New York, NY: Routledge.

Sivasankaran, S. (2013). Digital marketing and its impact on buying behaviour of youth. *International Journal of Research in Management & Business Studies, 4*(3), 35-39.

Tafesse, W., & Wien, A. (2018). Implementing social media marketing strategically: An empirical assessment. *Journal of Marketing Management, 34*(9–10), 732–749.

Taiminen, H. M., & Karjaluoto, H. (2015). The usage of digital marketing channels in SMEs. *Journal of Small Business and Enterprise Development, 22*(4), 633-651.

Torwatthanakittikul, W., Phanthanasaewee, S., & Srisuk, N. (2012). The Bank's digital lifestyle marketing strategy that influences the decision to use the K Plus application of consumers in Bangkok and its surrounding provinces. *Journal of Business Administration the Association of Private Higher Education Institutions of Thailand, 9*(2), 81-95.

Uppapong, K., Photchanacha, S., & Thechatakerng, P. (2021). Influence of Social Media Customer Relationship Management towards Financial Performance: Empirical Evidence of Spa Business in Thailand. *NIDA Business Journal, 28*, 51-72.

Verhoef, P. C., Broekhuizen, T., Bart, Y., Bhattacharya, A., Dong, J. Q., Fabian, N., & Haenlein, M. (2021). Digital transformation: A multidisciplinary reflection and research agenda. *Journal of Business Research, 122*, 889-901.

Vongproamate, D., Limsiriruengrai, P., Lertcharoenwanich, P., & Prasertsri, J. (2019). The Study of The Efficiency and Problems of Using Digital Advertising in The Southern Isaan Silk Weaving Culture on Social Media. *Proceedings of the 11th Connecting Local Research to International Perspectives* (pp. 1403 – 1409). Retrieved from http://dspace.bru.ac.th/xmlui/handle/123456789/5423

Yuan, K. H., & Bentler, P. M. (2000). Three Likelihood-Based Methods for Mean and Covariance Structure Analysis with Nonnormal Missing Data. *Sociological Methodology, 30,* 165-200. doi: 10.1111/0081-1750.00078

Zarour, M., & Alharbi, M. (2017). User experience framework that combines aspects, dimensions, and measurement methods. *Cogent Engineering, 4*(1), 1-25.