A Causal Influence Model of Innovation and Digital Marketing on the Small and Medium Enterprise (SME) Performance in Thailand

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Abstract- The objective of this research is to (1) study the components of innovation and digital marketing that affect the small and medium enterprises (SME) performance (2) analyze the influence of innovation and digital marketing that affects the SME performance (3) study the SME performance development model. In this mixed research, there were nine key informants and 460 questionnaires were used. The statistics used were percentage, mean, standard deviation, frequency, Pearson correlation coefficient, percentage, mean, standard deviation, survey factor analysis, and analysis of structural equation model. Found that there are three components of innovation, three components of digital marketing, and SME performance has two components. The model shows that innovation has a direct influence on SME performance, innovation has a direct influence on digital marketing, digital marketing has a direct influence on SME performance, and innovation has an indirect influence on SME performance.

Keywords - innovation, digital marketing, small and medium enterprise (SME), performance.

I. INTRODUCTION
Small and medium enterprise (SME) plays an important role and is considered a major mechanism of development and creation the economic growth of each country generates a lot of income and employment, as well as reducing poverty [1, 2]. In 2017, Thailand SME creates a total gross domestic product (GDP) worth 6,551,718 million baht, accounting for 42.4% of the nation's GDP from 12,155,647 people, accounting for 82.22 % of the total employment [3]. It shows that SMEs are energy. It is important to create GDP for the country and create jobs, generate income, which is essential for economic growth as well as building the competitiveness of Thailand.

Thailand's GDP in 2018 was valued at 16,318,033 million baht, an additional 866,078 baht from the previous year's growth increased 4.1 %, accelerating from a 4.0 % expansion in the previous year of the export and tourism sectors including the agricultural sector that continued to expand from the previous year with the GDP value in 2018 being the GDP value in the agricultural sector, it was 8.1 % of the total GDP or was valued at 1,324,140 million baht, expanding 5.1 %, continuing from a 3.9 %
expansion last year. The Thai baht, accounting for 91.9% of the GDP value total growth increased by 4.0%, slightly slowing down from a 4.1% expansion in the previous year [4].

Thailand's GDP in Q3/2020 declined 6.4%, improved from a 12.1% drop in 2Q2020. The main factor was exports of goods and services, private investment and private final consumption expenditure improved while the government's final consumer spending in addition government investment continued to expand agricultural production decreased by 0.9% as a result of a decrease in the production of major crops such as paddy, rubber, and oil palm. The non-agricultural sector declined 6.8%. The 12.9% decline in Q2/2020 were due to the easing of city shutdown measures to control the spread of COVID-19 as well as stimulus measures government economy. As a result, the industry and the service sector began to return able to carry out production activities manufacturing products declined 5.3%, improved from a 14.6% drop in the previous quarter. The service sector declined 7.3% compared to a 12.2% decline in the previous quarter, with major service activities showing signs of recovery, such as wholesale and retail sectors accommodation and food service fields, transportation and storage facilities improved the construction sector and information and communication fields continues to expand spending side private final consumption expenditure fell 0.6%. Investment and exports and imports of goods and services decreased 2.4%, 23.5%, and 20.3%, respectively, while the government's final consumption expenditure expanded 3.4% after the seasonality adjustment Thai economy in Q3/2020 expanded by 6.5% [5].

At present SMEs operate in a dynamic and rapidly changing business environment. SMEs need to adapt and develop their businesses to keep up with the changing and emerging situations steadily and quickly. In this regard, businesses can survive in a rapidly changing environment. Creating innovation is one of the ways in which it is mentioned [6]. Innovation is the key factor in corporate success [7]. Innovation is a key factor in creating a competitive advantage and it is a sustainable advantage [8, 9, 10]. Better marketing operations increase market share can generate new marketing [8, 10, 11] and generate long-term profit [12]. Innovation is very important today as it is the age of change that must bring knowledge expertise and intellectual property to create economic and social benefits. Innovation is a key tool or factor in creating a business competitive advantage and growing the business [13, 14]. However, there have been some notable developments in innovation, such as the size of the business; the culture of each nation had a great influence on the efficiency of the innovation [15].

Moreover, digital transformation threatens business growth trends and transforms traditional business models. Business must be invented to adjust the business model so that it does not become a lagging business or have to stop the operation and operations in the near future [16]. The Internet has resulted in a change in the form of marketing, especially the opposition among the businesses to gain insights into the customer behavior wealth and meet their needs. The business has a broader market scope, building customer awareness, create new markets, and give customers more access to business information via the internet. There was a change in the organization and new business opportunities for organizations of all sizes will help businesses achieve success in marketing and overall business [17, 18, 19].

The digital marketing can create opportunities, increase business effectiveness and gain a competitive advantage for SMEs [20]. Most SMEs are not taking full advantage of digital marketing [18]. This has resulted in a loss of business opportunities correlated with Gallagher & Gilmore [21] indicating that small businesses have a slow response to changes that have occurred from the internet and small businesses are not the ones to take advantage of efficiency, although digital marketing or internet marketing is useful and is the opportunity of small business regardless.

II. LITERATURE REVIEW

2.1 Innovation

Innovation as renewal referred to improving the old and developing the capabilities of people and departments or organizations [22]. Innovation is not eliminating or overthrowing the old gone but to improve, enhance and develop. Innovation as the introduction of new methods that come into practice after being tested or being developed in stages, starting from the invention, development, which may be in the form of a pilot project and then put into practice, which is different from the previous practice [23]. Innovation refers to a new idea, practice, or that has not been previously used, is a modified development from an existing one being more modern and more effective, when innovation is applied
[24]. It can help make that work more productive, more efficient, and efficient, while also saving time and labor. Innovation can mean the following new things; something new that no one has ever done before; something new that has been done in the past but has been revived; new things that are evolving from the old that have existed.

Innovation studies have been conducted studied and mentioned for a long time, but give a definition or meaning of innovation and understand. There are still differences according to the perspective and background of the student individual academic which still cannot be defined as that generally accepted [25]. Innovation is a new product or new process or that has made improved for commercial use for the first time [26]; is the creation of a new product, service, or process [27]; is the extension of the invention to reach and be accepted by the market as a new product or is it a new process that has been developed for the first time and resulting in economic benefits [28, 29]; is the success of combining materials, devices, and ideas for social and economic benefits [30]; is an idea or new behavior in the organization and innovation can be a new product, a new service, or a new technology, which can be caused by an acute change or gradually [31]; is a result of applying knowledge of new markets And or new technical knowledge leading to product development [32]; is a matter of putting the idea into practice to get something new or new process [33]. However, the core of the definition of innovation includes dimensions of 1) newness 2) economic benefits and 3) use of knowledge and creativity [34].

Innovation is a key driver of economic growth [35, 36]. It is an important opportunity to innovate and create new markets [11]. It grows its business and is the source of its ability to maintain a competitive advantage [13], contributes to the development and connectivity of other sectors which will lead to an advantage in operating the company for the long term [37]. It is important to the organization, is something that promotes and supports organizations to be able to bring their knowledge and technology skills and experience in creating new products and services, as well as methods and processes for creating, producing, and delivering products and services to customers [38]. Innovation influences the performance of SMEs, both on sales revenue in terms of market share, operational efficiency, and loyalty [39], on revenue and business growth [40, 41].

When it comes to innovation, we usually think of inventions, new operational processes, but there is one type of innovation that can be a strategic concept that is service. Service innovation is also an important business tool leading to creating a competitive advantage [42]. Service innovation will bring innovation to develop and improve the service model and process to provide services to customers need with an emphasis on facilities and the speed of getting the service. The benefits of business service innovation are helping make a difference in service to lead to the creation of customer satisfaction. Service innovation is a concept that intends to serve customers, to meet customer satisfaction, and in order to improve and increase profits for the business [43].

At present, the competition in the marketing business is increasing very seriously. According to globalization, SME has to adapt to keep up with changing circumstances. As a result, the current business operations are not challenging just from an investment in manufacturing perspective or the quality of products and services only. Innovation is a new thing. From the use of knowledge and creativity that benefits the economy and society, innovation is the process of combining knowledge and creativity with management competencies to create an innovative business or new business [44].

2.2. Digital Marketing

Digital marketing is marketing developed from old marketing by marketing all through digital media. It is a new type of marketing that uses digital channels to communicate with consumers. Although it is a new medium, traditional marketing principles are still used. Only change the channels of communicating with consumers and collecting consumer information. Digital Marketing is as the future market developments [45]. This occurs when the company operates most of its marketing efforts through digital communication channels. Digital media is a coded medium, user identification enables marketers to communicate in a continuous two-way with individual customers. The information obtained from each communication with each customer is learning together which may be useful to the next customer continuous and coherent like the function of the motor neuron network. Marketers can take this information in real-time including opinions that are accepted directly from customers to be used to make the most of consumers in future opportunities or the ways to promote products and
services through online database channels to reach consumers in fast time, have a relationship with demand, have privacy and use it cost-effectively [46].

Digital marketing has been mentioned frequently in all aspects of management. Sometimes you may hear the term online marketing or E-Commerce marketing or internet marketing. These three terms have been described by many scholars and experts who have similar meanings and indicate that they are interchangeable [47, 48, 49, 50, 51].

It is the use of channels digital to marketing, powered by the internet as a medium, enabling exchange and create value [52]. It is a measure and activity to promote products and services and build customer relationships via the internet [53]. Digital marketing refers to marketing that brings the internet and electronic media to work together. It allows buyers and sellers to communicate in two ways and interaction [54] where buyers and sellers can interact with each other in a convenient way is beneficial and valuable in terms of efficiency, ease, convenience, speed, and cost reduction in consumers purchasing decisions as well as reducing the company's management costs [51]. Internet technology is recognized as having a direct impact on business operations and customer behavior. This has contributed to the advancement and the social economy growth [55]. The Internet has evolved communication into sales and distribution channels and a platform for managing relationships with consumers and virtual communities have interactive which is the main feature of the internet. It is a new dimension of connection among all market participants and is vital to marketing such as market research, consumer behavior analysis management of network marketing, and measuring the effectiveness of marketing activities [56]. Internet marketing gives businesses a broader scope of marketing. Build customer awareness create new markets and give customers more access to the latest information via the internet [17]. Digital marketing helps businesses achieve better success. Both marketing and overall business enables businesses to gain insights into consumer behavior and better meet the customer needs [19].

Digital Marketing means the use of all kinds of digital and social media tools that help businesses to interact with their customers [50], such as mobile websites, IPTV (Internet Protocol Televisions), or other digital wireless media [57, 58, 59, 51]. Another key benefit of digital marketing is that executives can take information from buyers, whether they are B-to-B or B-to-C, is analyzed it to formulate a marketing strategy that is more responsive to consumer needs [60].

2.3. Performance

Performance is the right act, at the right time, and behavior-dependent [61]. It can be concluded that the performance of the organization is to achieve its goals. They consist of indicators with various dimensions, some of which may be important to an organization while it may not matter to one another. Organizational performance is defined as an assessment of a reflection of the results view obtained from the input perspective according to the main objectives of the business by focusing on the benefits that the organization receives, both monetary and non-monetary [62]. Performance of an organization refers to the results resulting from business operations by meaning, including financial results, namely revenue, market share, and non-financial aspects such as the ability to meet customer needs and satisfaction including image entity reliability [63]. There are two types of organizational performance measurement: monetary performance measurement and non-monetary performance measurement. Monetary performance is measured by net profit, sales, and market share, economic value-added, and non-monetary performance is measured by the quality of the customer relationships competitive advantage [64, 65].

Performance refers to the resulting from the operation of the SME that effectively achieves the goals can meet the needs of customers and satisfies the personnel in the organization. Some of the results of operations are called Growth [66], survival, success, or competitiveness [67] in measuring business performance. A trader can use several indicators such as profitability, ROI, and ROA [68]. The measurement of business performance with financial indicators is limited to evaluate the performance in the past only [69], inability to foresee future results, therefore, the measurement of business performance is popular to measure with other indicators in conjunction with financial indicators [70, 71], such as operational efficiency, employee satisfaction, increasing market share, human resource results, marketing results, efficiency and effectiveness of the process of learning and growth, etc.
It can be concluded that the performance of an organization is the organization's ability to achieve its goals through the efficient and effective use of its resources. Delivering financial returns consists of market share, market share growth, return on investment, sales growth, net profit on sales, ability to retain customers service access communication, and reliability.

2.4. Conceptual framework

The researcher used the variables to define the relationship structure of factors affecting the SME performance and set the conceptual framework for the research as shown in figure 1.

![Conceptual framework](image)

Figure 1: Conceptual framework

III. METHODOLOGY

3.1. Research methodology

This research is a mixed methods research that consists of quantitative and qualitative research are conducted in four stages: (1) review of literature, concepts, related theory, and research and an in-depth interview to create questions (2) analyze and validate the tool quality by testing for the consistency index between the questionnaires and the main points of the text was performed by five experts and found that the consistency was between 0.80 - 1.00, which met the criteria greater than 0.05. The questionnaire was used to try out 30 samples and the confidence was determined using the Cronbach alpha coefficient found as follows: Innovation 0.935, Digital Marketing 0.920 SME Performance 0.860, which meets the belief criterion must be greater than 0.70 (Hair et al., 2010) (3) collecting data and analyzing (4) confirmation of research results by focus group.

3.2. Population and sample groups

Qualitative research

In-depth interviews from key informants, the data were used to create questions, consisting of 6 SME entrepreneurs in the manufacturing sector, 6 in the service sector, and 6 in the commercial sector, totaling 18 people, with the appropriate number of key informants and in accordance with the Macmillan (1971) [72] and in the process of confirming the findings by focus group. There were 9 participants in total, consisting of SME entrepreneurs, the manufacturing sector 3 people, the service sector 3 people, and the commercial sector 3 people.

Quantitative research

The population used for the quantitative analysis was 3,105,096 SME divided into 1,280,741 commercial sector, 1,244,464 service sector, and 579,891 manufacturing sector [73]. The sample size was considered appropriate for the structural equation model analysis, which Hair et al. [74] suggested that the sample size was suitable for analysis. The structural equation model should be at least 10 times the number of parameters in the research work. In this research, 46 of the parameters of the model were suitable, and enough, it should be at least 460. The statistics used in the analysis were percentage, mean, standard deviation, frequency, Pearson union coefficient, exploratory factor analysis, and analysis of structural equation models.

IV. RESULTS

The study found that there are three components of innovation, three components of digital marketing, and SME performance has two components. The model shows that innovation has a direct influence on
firm performance, innovation has a direct influence on digital marketing, digital marketing has a direct influence on SME performance, and innovation has an indirect influence on SME performance as shown in figure 2.

![Causal Influence Model of Innovation and Digital Marketing on the SME Performance](image)

**Figure 2: A Causal Influence Model of Innovation and Digital Marketing on the SME Performance**

V. CONCLUSION

Product, service, and process innovation have a statistically significant effect on SME performance corresponds to Weng et al., 2012; Rosli & Sidek, 2013 and Valdez-Juárez et al. 2016. Therefore, SME must have development planning on these three areas. There are three key components of digital marketing: attraction, interaction and building customer confidence are consistent with the idea of Kotler et al., 2017 [75]. There are two key components of SME performance, customer & finance, and learning and development, which are indicators of financial and non-financial business performance, consistent with the analysis of Valdez-Juárez et al., 2016; Avirutha, 2018.

The model shows that innovation has a direct influence on SME performance, innovation has a direct influence on digital marketing, digital marketing has a direct influence on SME performance, and innovation has an indirect influence on SME performance. SMEs must focus on digital marketing strategies. This requires adjusting the new marketing paradigm to be in line with digital consumer behavior connected by a variety of digital media. In addition, there must be an emphasis on creating innovation in these three areas. Innovation is an element for has great importance in creating differentiate them with products and services including reducing costs or labor in the production and service processes.

For future research (1) Should study the problems and obstacles of business development in the digital economy to provide information to all relevant sectors, able to plan to reduce problems and obstacles business development for SME (2) Should study other variables that may affect the business success which creates a competitive advantage when the timing and technology or other environmental factors change (3) Information should be kept as a comparison between medium-sized businesses and small and large businesses development in the digital economy era to guide business development have more potential in competing with competitors.

REFERENCES


