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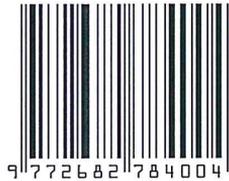
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Assessing The Challenges And Opportunities For Small And Medium Enterprises (SMEs) In Thailand Online Retail Market

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ABSTRACT

Since the Thailand government focuses on its “Thailand 4.0” policy, which includes allocating a budget for the specific purpose of constructing a broadband network for all villages across the country, Small and Medium Enterprises (SMEs) have tremendously contributed to the rapid growth in the country’s economy. Although SMEs play an important role in Thailand’s online retail market, relatively little is known about Thailand’s online retailing market environment and Thai domestic online retailers’ dynamic business performance in the marketplace. Therefore, the present study aimed to extend an understanding of the competitive advantages of Thai domestic small and medium sized online retail firms and examine their growth potential in Thailand’s online retail marketplace.

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1. Introduction

In Thailand, as in every other part of the world, the conventional retail industry has been hit hard by the rapid development of e-commerce. For decades, traditional retailers have defined the way in which consumers consider the location of the physical shops and the selection of products the retailers offer. Relatively recently, this situation has undergone a dramatic change, a transformation driven by the ubiquity of smartphones and new media, and by the proliferation of new sales channels. Taken together, these factors have resulted in a radical shift in consumer behavior, with digital innovation empowering consumers as never before in terms of convenience, speed, and customer service and low-price goods.

For a long period of country developing, GDP per capita in Thailand averaged worth 2647.12 USD from 1960 until 2017, and it is equivalent to 49% of the world’s average (Trading Economics, 2018). Thailand reached an all-time high of GDP per capita record worth 6125.66 USD in 2017; however, Thailand still faces several economic challenges which are “a middle income trap”, “an inequality trap”, and “an imbalanced trap. Consequently, Thailand has a weak track in country development (Thai Trade Center Los Angeles & Commerce, 2016).

Therefore, in 2016, the Thai government launched “Thailand 4.0” to the Thai nation. “Thailand 4.0” is an economic model that aims to unlock the country from several economic traps resulting from past economic development models which are based on agriculture (Thailand 1.0), light industry (Thailand 2.0), and advanced industry (Thailand 3.0) to become Thailand 4.0 (fourth

industrial revolution-4IR), which focuses on turning Thailand's labor force into knowledge workers (Jones & Pimdee, 2017). Thailand 4.0 model is expected to make a transformation from traditional farming to smart farming, traditional SMEs to smart enterprises and startups, traditional services to high value services, and low skill labor to high skill labor (Thairath, 2016). For the achievement plan, the nation digital policy has been implemented to build countrywide high-capacity digital infrastructure, boost the economy with digital technology, create a knowledge-driven digital society, transform digital government-develop workforce for the digital era, and build trust and confidence in the use of digital technology (Ministry of Information and Communication Technology, 2016).

In terms of transforming into digital economy, Thailand is still going through the National Commerce Strategy (2017- 2021). The expected goal is for the value of E-commerce from 2.56 trillion baht in 2017 to double its increase to 5 trillion baht in 2021 based on four strategies. The first strategy is to enhance the entrepreneur by building digital culture, digital marketing, digital innovation and developing E-commerce products and standards. The second strategy is to strengthen the ecosystem for E-commerce and trade facilitation by developing secure and seamless E-payment, improving logistic networking, easing of business process (E-tax refund, E-receipt and E-invoice). The third one is to improve the effectiveness of soft infrastructure by making the pool of data, information, and knowledge available, by making funding resources accessible, and by providing interoperable legal environment, compatible with international norms. The last strategy is trust building rust building for all by encouraging self-regulation and ensuring consumer protection (Wayuprab, 2018).

2. Literature Review

2.1 E-Commerce in Thailand

E-commerce platforms in Thailand are divided into three categories: business-to-business (B2B) transactions, business-to-consumer (B2C) transactions, and business-to-government (B2G) transactions. Among the three groups of transactions, B2B transactions are the largest and account for 55%, followed by B2C transactions at 29% and B2G transactions at 16% (U.S.Embassies, 2018). According to the global marketing research firm, Nielsen, Thailand's online retail e-commerce market, excluding online travel, will reach \$3 billion by 2020, an increase of \$2 billion since 2015 (U.S.Embassies, 2018).

According to consumer trends, the number of E-commerce entrepreneurs increased rapidly from 527,324 accounts in 2015 to 592,996 accounts in 2016 (up to 12.45 %). If the Thai E-commerce is categorized by revenue, there are two group of entrepreneurs. The E-commerce entrepreneurs who generate business turnovers that are less than 50 million baht (1.50 million USD) per year are defined as online SME. On the other hand, the E-Commerce entrepreneurs who get business turnovers that are equal to or more than 50 million baht (1.50 million USD) are defined as online Enterprise. However, 60% of SMEs E-commerce value and 40% of Enterprise E-commerce value come from Bangkok and Metropolitan region. Because Bangkok and Metropolitan area is the center of Thailand with fully functioning logistic services, finance and banking, and high purchasing power customers, Bangkok is also the center of E-commerce business in Thailand (Electronic Transactions Development Agency, 2017b).

The value of E-commerce in Thailand has increased continuously from 2014 to 2017. B2B is the largest sector among the three groups. However, the growth rate in B2C is more related to enhancing entrepreneurs to solve the economic challenges in Thailand. In 2017, the value of E-commerce in Thailand was projected to reach 2,812,592.03 million baht (85.22 billion USD), with an increase of 8.63% from the previous year, classified into B2B, B2C and B2G as 1,675,182.23 million baht and growth 59.56%, 812,612.68 million baht and growth 28.89% and 324,797.12 million baht and growth 11.55% respectively. The value of e-Commerce in 8 categories has shown that the highest value in wholesale and retail trade industry is worth 869.61 billion baht (30.92%). The second is accommodation worth 658.13 billion baht (23.40%). The third is manufacturing worth 417, 20 billion baht (14.83%). The fourth is information and telecommunication worth 404.20 billion baht (14.37%). The fifth is transportation worth 104.90 billion baht (3.73%). The sixth is art entertainment and recreation worth 19.71 billion baht (0.70%). The seventh, other service activities worth 11.28 billion baht (0.43%). Finally is insurance worth 2.72 billion baht (0.10%) (Electronic Transactions Development Agency, 2018a).

Table 1 The Value of E-commerce in Thailand by Sectors

Category	Value(Billion USD)		Year		Growth		Year		Growth	
	Year	Growth (%)	Year	Growth (%)	Year	Growth (%)	Year	Growth (%)		
B2B	50.76	59.56	46.73	15.53	40.44	8.15	37.40	N/A		
B2C	24.62	28.89	21.31	37.91	15.45	23.87	12.47	N/A		
B2G	9.84	11.55	9.53	-21.42	12.13	3.30	11.74	N/A		
Total	85.22	8.63	77.57	14.03	68.02	10.04	61.61	N/A		

Source: Electronic Transactions Development Agency (Public Organization), Ministry of Digital Economy and Society Thailand 2015-2017

2.2 The Thai online retail market performance

In 2015, The United Nations Conference on Trade and Development (UNCTAD) launched B2C E-commerce Index, which measures the readiness of countries to engage in to engage in online commerce, covering 130 countries with 4 indicators: internet use, secure servers, credit card penetration and postal delivery services. Thailand is 70th in ranking and occupies the third position among ASEAN countries, lower than Singapore (25th in rank) and Malaysia (45th rank). Thailand had a relatively low ranking in share of individual credit card (4.5%) and share of individual using internet (28.9%) (United Nations Conference on Trade and Development, 2015).

Since 2016, the UNCTAD B2C E-commerce Index measuring 137 economies has been using three of the same indicators which are internet use, secure servers, and credit card penetration. However, postal delivery services is changed to postal reliability score. The ranking of Thailand and ASEAN countries improved little: Thailand got 69th rank, lower than Singapore (23rd rank) and Malaysia (44th rank). Nonetheless, the UNCTAD B2C E-commerce Index (2016) did not measure other electronics payment methods such as E-wallet and crypto currencies. It also did not consider that other electronic payment modes are more popularly used in online shopping. Therefore, rank index might not exactly reflect the result E-commerce readiness in some countries. For example, China has more online shoppers than predicted by its Index value (64th rank). Because only 16% of the population which is made up of 15 year-olds and older in China has a credit card. However, the Alipay

E-money service is the most popular payment method for online shopping in China (used by 68% of Internet shoppers), and accounted for 75% of E-commerce giant Alibaba's gross merchandize value in the year ending in March 2015(United Nations Conference on Trade and Development, 2016).

In 2017, the UNCTAD B2C E-commerce Index expanded the measurement to 144 economies with the same indicators which are internet users, B2C web presence, and delivery. For the last indicator, payment is considered because online shopping can be paid for in different ways. This makes it difficult to choose a single payment method for measuring e-commerce payment readiness. Hence, the share of having a bank account or account penetration is selected because it is a potentially more relevant payment indicator. Moreover, a bank account is usually required to obtain a credit or debit card (and sometimes an E-money account). Due to the new indicator, Thailand significantly improved (49th rank). Singapore (18th rank) and Malaysia (40thrank) also slightly improved in ranking(United Nations Conference on Trade and Development, 2017).

For three years, the UNCTAD B2C E-commerce Index has included three of the indicators namely, the share of internet user, security, and delivery, all of which have not obtained significant improvement for Thailand index. However the payment modes will be more important indicator because of the financial technology advancement.

2.3 Challenges and Opportunities

Building a strong and sustainable E-commerce is concerned with many determinants in the E-commerce ecosystem, which is the complex network or interconnected systems that make up an E-Commerce business (Chan, 2015). The E-commerce ecosystem includes core E-commerce companies, suppliers, customers, financial institutions, certification bodies, payment institutions, logistics companies, insurance companies, telecommunications service providers, software providers, Internet technology providers, government departments, industry associations, Internet marketing services, technology outsourcing business, and e-commerce consulting service providers, among others (Tian, Zhan, & Guan, 2014). To strengthen Thailand's E-commerce ecosystem, there are some opportunities and threats that need to be considered to enhance competitive advantages.

2.4 Demography and Lifestyle

Market size and consumer lifestyle are important for the E-commerce business. Thailand's population is estimated at 66.8 million people. 67% of the population are internet users (46 million). There are 90.94 million mobile subscriptions (133 % of the population) as well as 42 million people (62 % of the population) who are active mobile social user(Funk, 2017). In 2017, Thais surfed the internet averaging 6.30 hours per day on weekdays and 6.48 hours a day on weekends (Electronic Transactions Development Agency, 2017a). However, Thailand Internet User Profile 2018 revealed that Thai people's internet usage increased to 10 hours and 5 minutes daily as a result of the increasing shifts towards more digital lifestyles. The survey also indicated that Gen Y maintained the longest hours in internet use for the 4th consecutive year (Electronic Transactions Development Agency, 2018b). Thais also access internet for online shopping, which was ranked 8th in 2016 and rose to the 5th rank in 2017(Electronic Transactions Development Agency, 2017a) and maintained the same rank in 2018 (Electronic Transactions Development Agency , 2018b).

Moreover, PayPal and Ipsos released the 2016 Global Cross-Border Consumer Research Report, investigating the online shopping habits of more than 28,000 consumers in 32 countries,

including 800 participants in Thailand. Thailand ranked second after China for average proportion of cross-border purchases made via smartphone or tablet, with 33% of Thai cross-border purchases made via smartphone and 13% via tablet (PayPal, 2017). Subsequently, the Thai market is one of the potential markets not only for local E-commerce but also for worldwide E-commerce as well.

2.5 ICT labor force

Creating potential E-commerce ecosystem is concerned with digital skill human resources. In 2016, there are 570,410 ICT labor force who graduated with bachelor degrees, with just only 15.3 % of them working in the ICT sector while the others working in other fields. However, Thailand's plans for ICT education for the workforce are inappropriate. The 19,781 newly graduates with bachelor degrees in ICT, 40% of them graduated with a degree in computer business. However, the digital industry has a higher demand for software engineering than computer business (Thailand Development Research Institute Foundation (TDRI), 2016).

In addition, startups are young companies that are just beginning to develop. Startups are usually small and initially financed and operated by a handful of founders or one individual (Fontinelle, 2017), which are a very important element of digital economy, particularly for Thailand, because a large number of startups in Thailand work in the E-commerce field (Pinthong, 2016). Some startups succeed in business, and companies that are valued at over \$1 billion are called "unicorns". Thailand has around 1,000 startups, lower than the world average (1,800 startup) and the achievements of startup businesses are slightly lower (Chenphuengpaw, 2017). While there are four unicorns in Indonesia, there is no unicorn in Thailand. Moreover, Malaysia, Singapore, Vietnam and the Philippines have a least one unicorn in their counties (Thailand Development Research Institute Foundation (TDRI), 2018).

2.6 Infrastructure

According to the greater number of Thai SMEs, E-commerce value has been generated from Bangkok and metropolitan. It gained the share of 69.3 % in 2014 (Electronic Transactions Development Agency, 2015), 67.06% in 2015 and 61.85 % in 2016 (Electronic Transactions Development Agency, 2017b). Compared with the north eastern region which is the largest population region in Thailand, the penetration of SMEs E-commerce value is a small proportion, with only 3.87% in 2014 (Electronic Transactions Development Agency, 2015), 4.44% in 2015 and 9.79 % in 2016 (Electronic Transactions Development Agency, 2017b). That caused the imbalance of income in urban and rural areas. Then, the government sector has tried to enhance the E-commerce performance in the rural areas by establishing a number of telecentres in these areas, which have not been effectively leveraged. Another challenge is convincing merchants about the importance of quality control and the effectiveness of E-commerce system (United Nations Conference on Trade and Development, 2016).

However, the ranking in the UNCTAD B2C E-commerce Index (2015-2017) on the share of individuals using internet mode has increased every year from 28.9 % in 2015 (United Nations Conference on Trade and Development, 2015), to 35% in 2016 (United Nations Conference on Trade and Development, 2016) and 48% in 2017 (United Nations Conference on Trade and Development, 2017). The Thai government has been continuously working on improving the telecommunications infrastructure projects by launching an activity related to these projects (broadband network expansion) project (broadband network expansion) or The "Pracharat internet"

project in 2017. The Pracharat Internet project, or village broadband internet project aims to expand broadband network to cover 24700 villages throughout Thailand to drive the country's economic growth (TOT public company limited, n.d.).

2.7 Logistics

In developed digital economies, E-commerce logistics represents the key driver to make E-commerce continue to grow. According to Logistics Performance Index by World Bank, measuring the logistic performance in 166 countries, Thailand improved its ranking from 45th rank in 2016 to 32nd rank in 2018 (World Bank, 2018). This result indicates that Thailand gained competitive advantage in logistics for some reasons. For example, due to Thailand's prominent location in ASEAN's regional supply chains, it is ready to support the rising demand for cross-border logistics services, and extensive multimodal transport networks by at least two different modes of transport (road, rail or sea), resulting in significant savings in fixed costs, operational costs and time (Thailand Board of Investment, 2016). Cost of Logistics in Thailand is apt to decrease. It used to be 17.1% of GDP in 2007 and 14.2% of GDP in 2015 as well as 14.1 of GDP in 2016 (Trade Policy Strategy of Commerce, 2016).

Due to the E-commerce logistics, international E-commerce platforms come to invest in Thailand. Recently, Chinese E-commerce giant Alibaba injected 11 billion baht (320 million USD) into the Eastern Economic Corridor (EEC) for smart digital hub, setting up its facility and using its technology to process logistics data, with the expectation of serving shipments between Thailand and China, as well as border trade with Cambodia, Laos, Myanmar (Apisitniran, 2018). However, Thailand will get benefits from Alibaba in several ways. For instance, Alibaba's intelligence will be shared with local entrepreneurs, and Thailand will develop its logistics capabilities using Big Data and artificial intelligence (AI), and expand the E-commerce business supported by Alibaba's facilities. However, there are also concerns that Alibaba may gain an unfair advantage compared with other operators, particularly the Thai local operators. Furthermore, it is possible for Alibaba to integrate into Thailand's systems and gain unique access to Thailand's data or dominate E-commerce business as a whole.

2.8 E-payment

The electronic payment system is considered as the backbone of E-commerce and one of its most crucial aspects (Shergill & Zhaobin Chen, 2005). In Thailand, the government adopted the National E-Payment policy which aims to increase the efficiency of Thailand's payment infrastructure system, helping the public make E-payments more easily and conveniently, with less need for cash. One of the strategies affecting E-commerce payment is the "promptpay". It is an alternative way to receive and transfer money using the citizen's ID number or mobile phone number without providing a bank account number. Furthermore, the banks' customers who transfer money by prompt pay will be charged less for transaction fees as compared to those who transfer money using the regular process for any transfer transactions under 5,000 baht (151.51 USD). (Revenue Department, 2016).

Recently, many banks in Thailand have enhanced the use of mobile banking by launching promotional campaigns (i.e. free transaction charge) for mobile banking activities. These programs support the expansion of E-commerce require both demand side and supply side. However, electronic payment will still be optional payment method for E-commerce transactions. If other payment methods such as paying using cash, a personal cheque or a money order are not available and

consumers are required to pay online, it may trigger some concerns about payment security, and this would reduce the number of users in the future (Black, 2005). The study of Thailand Internet user profile 2017 indicates that almost 15% of Thai online shoppers prefer to pay E-commerce transactions by cash or cash on delivery (COD), and 14.6% of them prefer to go to the bank to transfer money. In addition, 9% of online shoppers in Thailand prefer to pay cash at the counter payment (Electronic Transactions Development Agency, 2017a).

2.9 Discussion

The situation in digital transforming era has been rapidly changing. Thailand's online retail marketplace is also disturbed by technology. Therefore, some strategies which government sectors have adopted for support the growth of SMEs such as strength the infrastructure, labor force skills, and fin-technology have to more practical and up-to-date enough for competitive. For the SMEs entrepreneurs, many of them offer the customer many choices of channel distribution, hence SMEs entrepreneurs should concern the synergy of each channel strategies, and otherwise SMEs will get the problem from channel conflicts. Besides, the SMEs have to adopt the big data analytic to their business. The big data refers to "the information assets characterized by such a High Volume, Velocity and Variety to require specific Technology and Analytical Methods for its transformation into Value" (De Mauro, Greco, & Grimaldi, 2015, p.103). It can equip the E-commerce architecture aids in obtaining extensive to insight into customer behaviour, industry trends, to improve more accurate decisions in every aspect of the business such as marketing and advertising, merchandising, operations, and even customer retention (Zikopoulos, P., Eaton, C., deRoos, D., Deutsch, T. & Lapis, 2016). Therefore, the big data is very powerful and efficiency implement for the digital era.

3.0 Conclusion

SMEs play an important role in Thailand's online retail market, and the performance of SMEs in E-commerce is a key factor for a digitally-driven economy. Although Thailand has gained competitive advantages as a potential E-commerce market, there are areas that still need to be improved for sustainable growth in future.

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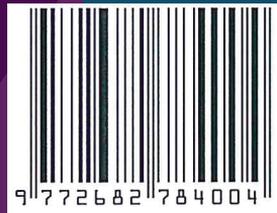
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