Online Shopping Among Thai Millennials:

The Impact of the COVID-19 Pandemic Crisis

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Abstract

The research studies the impact of the Coronavirus (COVID-19) pandemic on online shopping in Thailand and investigates the influences of the pandemic situation along with utilitarian and hedonic motivations on millennials' intention to engage in purchasing products online. The study conceptualizes the consequences of the COVID-19 pandemic as situational influences, which involve the closure of physical stores and health risks associated with visiting such stores.

It is undeniable that the COVID-19 pandemic has an impact on people's lives all over the world. It forces people to change their lifestyle — how they engage in activities such as work, study, and shopping. In recognition of this unprecedented phenomenon's impact on the e-consumption realm, the present study follows a pragmatism philosophy approach in anticipation of a feasible solution for understanding and addressing the needs of contemporary consumers.

To achieve such an aim, it has been explored the situational influence as well as underlying psychological constructs deemed vital to determining consumers' attitudes and behaviors. Implementing a quantitative questionnaire, data was collected from 200 Thai millennials — a rapidly growing online consumption market — by using an online survey. Results have been analysed and presented in a thematic manner, collated with secondary research.

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Chapter 1: Introduction

Background

Since its initial outbreak in late 2019, the coronavirus (COVID-19) has caused a significant disturbance at a global level with respect to the economy, public health, and society. Regardless of their geographical location, many countries have been impacted by the outbreak in both tangible and intangible respects; including, but not limited to human and physical capital losses, disruption of consumer-producer processes, decline in productivity, and many other economic incapacitation consequent of infected cases (Khan & Shafiq, 2021). It is apparent that the pandemic has brought about dramatic reductions in consumption and investment. The shrink in aggregate demands, along with the effects of the original risk, leads to a rapid decline in the capital markets (McKibbin & Fernando, 2021).

Accordingly, country leaders and governments have implemented various measures in an attempt to alleviate the materialised impacts of the virus — among the most universal being the rollout of vaccines. As of 25 June 2021, the most up-to-date statistics reveal that over 2.8 billion doses of COVID-19 vaccine have been injected to the global population since the first vaccination campaign during the first quarter. Regions with the most vaccination coverage are North America, Europe, and South America with 71.2%, 64.4%, and 39.4%, respectively; while Asian countries are worryingly lagging behind with only 37.8% of the population having received at least one dose (Our World in Data, 2021).

This undoubtedly denotes important implications for the countries' recovery, as mass immunization is a crucial factor in the pandemic's cessation; especially as a direct antiviral cure is yet to be developed (American Society of Health-System Pharmacists, 2021). As long as the outbreak is ongoing — if not also well after its ceasing, the everyday life and lifestyle of the general public remains to be fundamentally reshaped as face-to-face interactions or communication with others are actively avoided given fears of contagion. Ergo, virtual platforms have seen a momentous increase in demand — online retail not being an exception. According to recent empirical evidence, 52% of consumers indicated that they will not go shopping at a physical store or go to crowded areas. Further, more than 30% proclaimed that they will not go in-store shopping unless they have gotten the vaccine (Bhatti, Akram & Basit, 2020). Consequently, with reference to the UN trade and development experts (UNCTAD) report, the e-commerce sector has dramatically risen during the COVID-19 period; the share of all retail sales having been raised from 16% to 19% in 2020 (UNCTAD, 2021a). In the same direction, the value of e-commerce retail is projected to rise to USD 5.424 trillion in 2022 (Statista, 2021a).

While these figures demonstrate that online shopping is becoming one of the most popular activities for people worldwide, concurrently with the necessity for social distancing measures, COVID-19 should not be regarded as the sole cause of e-commerce growth. As trends toward digitalisation have been progressing well before the virus' outbreak, it can be understood that the surge in online consumption is not an impact of the pandemic, per se, but rather the transition to digitalisation has been accelerated by COVID-19 (UNCTAD, 2021b). Hence, the rise in consumers' awareness, familiarity with, and reliance on online channels is far from exerting a transient impact on e-commerce sectors. Irregardless of the country being in response to or recovery from the epidemic, it will more or less be undergoing a permanent transformation of digitalised consumption (Pr News, 2020); providing grounds for expediting in-depth explorations to best understand the phenomenon.

Thailand's Current e-Commerce Landscape

The global trend of e-commerce growth being accelerated by the pandemic is also consistent with the trend in Thailand. However, as the pandemic situation in many countries has improved, the country is currently facing its third wave of COVID-19. The outbreak can be traced to several bars and nightlife venues in the city centre of Bangkok and has presently spread to at least 62 of Thailand's 77 provinces (Nguyen & Yuvejwattana, 2021). This caused lockdowns in some areas of Thailand and the government has also stipulated regulations for the operation of venues. With public concerns and trepidation for contamination as well as the unavailability of hospital beds, people are less likely to leave their homes. Consequently, an increasing number of consumers are changing their behaviors to buy products online rather than visiting bricks-and-mortars. Since the outbreak began, e-commerce in Thailand has gained significantly more popularity and has driven more consumers online (Promchertchoo, 2020). Many online stores are trying to improve and promote their products. During the pandemic period, retail stores that have not shifted their operations online were shut down.

By contrast, stores that adapt and develop online sales channels can survive and feasibly thrive amidst the crisis. In line with Asian countries accounting for a majority of the global e-commerce landscape — with latest figures from Statista showing 57.4% of the sector's market share being attributable to the region (Eastspring Investments, 2020) — Thailand has seen an online shopping penetration of over 83.6%; making it the second most active nation in terms of e-commerce (Statista, 2021b). This can be noted as an impressive maturation; given that Thailand's enterprises had previously been recognised as among the most lagging developing countries in terms of technology adoption (Kupfer, Ferraz, & Torracca, 2019). According to UNCTAD (2021b), Thailand's downloads of online shopping applications have increased by over 60% within a week during the peak of the pandemic in March 2020. Among these are the major e-commerce platforms Lazada and Shopee — which are mobile-centric sites that function as a medium between retailers and end users as consumers to perform online transactions. To provide a brief background, Lazada had been acquired by the Chinese-owned multinational e-commerce giant Alibaba in 2016 and quickly rose to the industry's leading position; followed by Singapore-based SEA Group's launching of Shopee in

2012. Though both have only recently emerged, Lazada and Shopee have come to dominate Thailand's electronic shopping territory along with others within Southeast Asia (Kaur, 2021). Within Thailand, on a monthly average, there are 39 million visitors to the Lazada application and over 51 million visitors to Shopee's (Statista, 2020b). Subsequent to the COVID-19 outbreak in 2019, the country's e-commerce sector has gained over 81% growth from 2019 to 2020 (Leesa-Nguansuk, 2021).

This paramount shift in consumer trends could be attributed to the ongoing coronavirus situation that may discourage shoppers to visit physical stores in fear of virus transmission risks; thereby causing the demand for online purchases to arise during this period. Therefore, online platforms must improve and develop their services and platform performance. To ensure that these efforts succeed, it is essential to investigate consumers' online purchase motives during this pandemic.

Online Consumption and the Consumer's Perspective: Implications for the Sector Amidst A Global Pandemic

The ongoing COVID-19 pandemic and its impact on contemporary digitalisation developments represent an unprecedented phenomenon. With a lack of empirical evidence in understanding the drive behind consumers' current shift in purchasing behaviors, preliminary insights can only be conjectured by examining extant studies on online consumption, which is also far from ample. One relevant study with a particular attention to Thai consumers had been conducted by Kiadrasamee (2015) with an interest to explore the factors behind e-commerce acceptance. It was found that the platform's ease of use, website design, speed, and personal data security including financial information, are important drivers. This corresponds to a preceding study by Ngamsan (2010), which found that the factors that affect consumers' e-shopping acceptance in Thailand predominantly centers on their recognition of the benefits that will ensue from such activity and the ease of using the sites — which will lead to the development of a positive attitude to use and accept the technology.

A more recent study was conducted by Jittwat (2018) — which revealed that consumers' selection of e-commerce platforms tend to be reliant on the variety of prices and functions of the products, especially with the offering of lower prices. Moreover, good customer service, such as reliable and fast delivery of the item within the specified timeframe, has also been identified to exert an important motivational impact in choosing a particular provider. Another study by Chaiamnat (2020) discovered that marketing promotion is one of the factors that can effectively attract customers toward considering to make online purchases. While these studies yield valuable insights into the Thai e-commerce market, none of them has explicitly investigated consumer motivations for purchasing online. To peer into the subject matter, a well-established theoretical framework put forth by Batra and Ahtola (1990) should first be attended to. According to the scholars' conceptualization of consumption attitude and behaviors — which can also be applied to the e-commerce context, there are two dimensions of purchasing motivation: utilitarian — concerning the usefulness of the behavior — and hedonic — pertaining to the entertainment and enjoyment experienced from engaging in the behavior (Hirschman & Holbrook, 1982).

As previously mentioned, COVID-19 is a temporary condition that affect how buyers behave, therefore, it is considered to be a situational factor — which is being "particular to a time and place of observation which do not follow from a knowledge of personal and stimulus attributes and have a demonstrable and systematic effect on current behaviour" (Belk, 1975). Such factors can trigger or reduce the frequency of online shopping (Hand et al., 2009). Particularly, the COVID-19 outbreak appears to be a crucial situational factor influencing consumer behaviour toward online shopping.

Conclusion and Rationale for the Current Study

It can be concluded that the contemporaneous consumerism is characterised by a rapid growth in digitalisation — specifically of shopping channels. While this trend had been observed well prior to the outbreak of COVID-19, it has been markedly accelerated after the pandemic's onset and subsequent intensification which had compelled radical changes in individuals' daily life and activities. Evidence has indicated that this is especially apparent among Asian countries where the number of online consumers well surpasses others.

Although these nations' hastened shift to digital consumption may have been aided with the precondition of advanced technological facilities, Thailand, interestingly, is currently recognised as the second leading e-commerce market globally despite being a developing country with a history of slow technology adoption. With such a noteworthy development, the present study deemed Thailand to be a provoking case; eminently valuable to the understanding of a pandemic's impact on a consumer market. As the opportunity for online retail in Thailand has grown significantly and is anticipated to see continuous expansion, such an understanding is considered to be urgently necessary — particularly given that it is largely absent in published works, with COVID-19 and digital disruption in retail being novel phenomena.

Accordingly, the present study is set out to explore the influence of the urge coronavirus outbreak on online shopping in Thai market and contribute to the extant literature the population's attitudes and behaviors. In achieving this, the investigation focused on Thai consumers' motivations, intentions, and practices pertaining to online shopping during the COVID-19 crisis. Putting primary findings in juxtaposition with secondary research, the study provides comprehensive and innovative yet well-founded insights.

Contributions

The findings of this study are conducive to the current literature in four main dimensions. Firstly, this research provides the outlook of Thailand's economy during the COVID-19 pandemic. Secondly, this study extends existing knowledge about e-commerce in Thailand and trade partners as well as the characteristics of the millennial segment. Lastly, it explores the noteworthy impact of COVID-19, SARS, and MERS and infected cases in Thailand. Altogether, it is anticipated that the ensuing results will pave the way for future scholars to solidify the understanding of the relationship between a virus outbreak and online consumption.

Structure of Subsequent Sections

The rest of this study is arranged as follows: Chapter 2 explores the relevant literature and chapter 3 provides a research questions — including research aim, research adjective, sub-qestions and hypotheses. Chapter 4 presents a description of the methodology — including measures, data collection, and sample. Then, chapter 5 describes the empirical results and data analysis. Next, chapter 6 — provides a discussion of the findings and their implications. The last chapter —chapter 7 — contributes a conclusions and recommendations — including strengths and limitations of the research.

Chapter 2: Literature Review

With the aim of establishing a well-founded understanding regarding the context in which the examined topic is being situated, the present section sets forth extant publications and reports of consumers within the online retail sector — along with their attitudes and behaviours — in juxtaposition with relevant research grounds and conceptual frameworks. To orientate readers to the context of the population and phenomenon being investigated, it is first reviewed the country of interest's economic and societal standing — taking into account the impact of the ongoing COVID-19 crisis. The e-commerce landscape in Thailand both pre and during the outbreak is explored; putting into perspective the interplay of existing trends and situational catalysts. Subsequent to this, millennials — a segment of consumers paramount to the online market — and their profile as end users will be inspected. Then, the section probes into communicable diseases' footprints on their surroundings. Following this is a discourse integrating the understanding of consumer behaviors with the current pandemic's influence.

Thailand's Economic and Societal Outlook During the COVID-19 Pandemic

During the past half-century, the economy and society of Thailand have developed notably. Thailand has become an upper-income from a low-income country in less than a generation. Prior to the COVID-19 outbreak having exerted significant impact on the country's economy, Thailand's Gross Domestic Product (GDP) was recorded at USD 543.5 billion; with nearly 60% of the GDP being attributed to exports (World Bank, 2019a). According to the World Bank, economic growth in Thailand for the year 2020 was expected to encounter among the extreme reduction in East Asia and the Pacific region owing to a decline in external demands affecting trade and tourism, supply chain disruptions, and decreasing of domestic consumption (World Bank, 2019b). Surely, in the face of the coronavirus outbreak, the Thai economy has been affected negatively. The pandemic has led to severe job losses, which predominantly affects middle-class households and the poor. Several businesses, especially small and medium-sized businesses, are forced to close and lay off employees (World Bank, 2020).

Especially since the outbreak of the third wave in April 2021 with much higher numbers of infected cases and supply issues causing delays in the vaccine roll-outs, latest data from the Bank of Thailand (2021a) revealed that the financial viability of businesses are anticipated to worsen; if not permanently gone under. The country's workforce is also deemed to be an area of most worrying concern, provided a slow — if any — recovery of labor income along with sensitive balance sheets of Thai households. On the other hand, one of the country's main income-generating industries, exports, is seeing a gradual development owing to foreign demands (Bank of Thailand, 2021a). In accordance with this, SCB EIC forecast growth of 2.2% due to the recovery of foreign tourism, subdued export demand, and the COVID-19 resurgence would be the slower-than-expected (Chutijirawong & Bunyalug, 2021). However, should the COVID-19 situation in Thailand remain at the same slow pace, a recent evaluation estimated that the Thai economy could lose over USD 3 million per month (Reuters, 2021).

Besides the evident societal impact of health and healthcare, the pandemic has demonstrated its reverberations also in terms of poverty, education, and nutrition. According to an analysis by UNICEF Thailand (2020), the worsening economy has instigated students' anxiety towards the uncertainty of receiving education in the near future. Especially as the pandemic and consequent government measures demand that students be equipped with online connection and electronic devices for virtual classrooms, this challenges underprivileged learners with limited access to such resources — while the government is not in a viable position to provide necessary facilitation, as suggested by the Straits Times (Techakitteranun, 2020). The assessment has further forecasted an increase in dropouts given the rise in poverty conditions among students of low-income families. In a similar manner, households of low or disrupted income are disadvantaged in their purchasing power of food. Even taking into account the sustenance provided by organizations and community centers, this population is at significant risk of undernutrition and poor diet (UNICEF Thailand, 2020).

The Current E-Commerce Landscape in Thailand

Today, e-commerce has become one of the most popular methods of generating income online. As is already commonly known, e-commerce is the process that uses computer networks to buy, sell and exchange products, services, and information (Heijden, Verhagen & Creemers, 2001). The adoption of e-commerce could be identified as buyers who use the internet systematically to purchase goods and services (Mahrieian, 2012). From a different angle, e-commerce is a business transaction that uses the internet to connect buyers and sellers with products and services (Bauer, 1960).

In Thailand the shopping online market was worth $26.2 billion in 2019 (Parcelmonitor, 2020). With 8.71% of the e-commerce market's growth rate in 2019, incresting from the previous year of 4.69%. In the same year, this market value in Thailand was forecasted to reach roughly USD 3.42 million (Statista, 2020a).

Cross-border spending accounts for 50% of Thailand's total e-commerce expenditure, considering a solid appetite for international goods and brands. According to the Ministry of Commerce of Thailand in 2019, the top three overseas sales destinations were China, Japan, and the United States. Although China and Japan were the top trading partners of Thailand, the country still had a trade deficit with the two countries: USD 21,101.12 million and USD 7,873.06 million, respectively (Ministry of Commerce, 2019). On the other hand, the United States was the third-largest trade partner of Thailand, but the country had a trade surplus with the U.S. of USD 14,066.02 million (ITA, 2021).

Thailand is reckoned with a mobile-first country using smartphones and other mobile devices, outstripping desktop internet usage. The use of 52% of all online shopping transactions demonstrates that the mobile commerce market in Thailand is the notable e-commerce sales channel — worth USD 13.6 billion. (ITA, 2019).

Millennials as E-Consumers

Millennials or "Generation Y" — individuals born between 1981 to 2000 (Ladhari, Gonthier & Lajante, 2019) — are widely recognised as a crucial segment of consumerism owing to their purchasing power and considerable proportion, relative to other generations. According to Pinto, Parente and Palmer (2000) millennials have access to above-average financial resources (which often come from family members). The socialization of this generation thus occurs in a highly materialistic society, which views consumption as evidence of strong financial health and purchasing as a way of self-expression. (Kim & Jang, 2014). In Thailand, the number of millennials is almost 19 million in 2020, accounting for 28.5% of the total population (National Statistical Office, 2020). In 2020, the number of working-age people (15-59 years) was approximately 42.65 million. The number of millennials made up 44.2% of the Thai working age, which is the largest group of the population compared to other generations (National Statistical Office, 2020).

With reference to Moreno, Lafuente, Carreón, and Moreno (2017), millennials are a distinguished population given the centrality of technology that overshadows their daily life, experiences, and values. Accordingly, they are predominantly characterized by connectivity: with the communication of their fast-changing preferences and attitudes via the observation of the technological objects that they use, as well as their real-time sharing via social media platforms. Given that the emergence of this generation coincides with vast technological transformations — millennials have virtually grown up with the internet — their attitude towards technology naturally tends to be more favourable than that of previous generations (Pardue & Morgan, 2008). As illustrated by researchers Lee, Ward, Raue, D'Ambrosio, and Coughlin (2017), generation Y indicated greater interest and behavioral intention in accepting a potential technological innovation compared to the studied generation X, Baby Boomers, and the Silent Generation representatives — identified with birth years 1965-1980, 1946-1964, and 1945 or earlier, respectively. More specifically, higher age was associated with decreased appeal with regards to new technology. It has further been explained that this generational distinction could be attributed to each age group's differential familiarity with and knowledge of technology and, correspondingly, trust towards technology. This was also supported by extant empirical evidence arguing for millennials' higher self-efficacy with respect to their ability and expertise in using technology, given their comfortable acquaintance with technological innovations and digital developments (Mosquera, Juaneda-Ayensa, Olarte-Pascual, & Pelegrín-Borondo, 2018; Warden, Yi-Shun, Stanworth, & Chen, 2020).

Further, millennials' relationship with technology is found to be unique in its associated values. To exemplarise, Calvo-Porral and Pesqueira-Sanchez (2019) explored the behaviors of generations Y and X and discovered that the former group had a tendency to ascribe technology usage with hedonic values whereas the latter with utilitarian values. In other words, generation Y is more likely to engage in technology-oriented activities for entertainment purposes rather than to satisfy the platforms or tools' usefulness. It can thus be understood that millennials are generally driven by emotions in their use of technology — a conclusion commonly reached among scholars and researchers. As the empirical findings of Berraies, Yahia, and Hannachi (2017) have demonstrated, generation Y places a significant importance on emotional values; such that the cohort is more inclined to seek for experiences that are pleasurable and gratifying. Therefore, the level of satisfaction assigned to any impression of technology is contingent on the individuals' emotional involvement with the activity. In addition to the importance of hedonic values, Berraies, Yahia, and Hannachi (2017) identified social values as another imperative driver. To explain, generation Ys prioritize the development of their social identity. With their use of new technologies that connect them with others — be it service providers or platform users, millennials can enhance their social esteem (Berraies, Yahia, & Hannachi, 2017). Especially within the context of electronic consumption, another study found that the influence of social norms — such as the opinions or suggestions put forward by peers — effectively predicted generation Y's perceived trust in an e-retailer and, consequently, repeated purchases via the online platform (Purani, Kumar, & Sahadev, 2019). However, the work of Dhanapal, Vashu, and Subramaniam (2015) asserted that the social value of online consumption is impactful for millennials as well as their preceding generations.

A study conducted by Alam, Babu, Noor, Rahman, and Alam (2020) further sheds light on the determinant of generation Y's attitude and behavioral intention towards consumption with a particular attention to hedonic and utilitarian values. The conclusion was found to be corroborative of Calvo-Porral and Pesqueira-Sanchez (2019)'s revelation with regards to the dominance of hedonic over utilitarian values among the age group's technology engagement. To explain, Alam and colleagues (2020) observed that while functional considerations are indispensable for purchasing decisions, inclinations for hedonic experiences are more impactful among generation Y online consumers. This is owing to the age group's positive attitude resulting from shopping and its provision of stimulating and joyful experiences, which in turn motivates repeated purchases and word-of-mouth recommendations. Having focused on the age group in a developing economy, the study explicated that hedonism-oriented expenditures are a manifestation of capitalism; which encourages materialistic consumption and reveres consumerism (Alam et al., 2020; Scott, 2006). While the work of Alam et al. (2020) did not investigate the phenomenon in the specific context of online retail, it uncovered valuable insights into the underlying forces of millennials' shopping tendencies. Moreover, as overwhelming evidence has shown, other generations exhibit a significant predilection for traditional offline purchases whereas millennials dominate the online consumption realm (Statista, 2019). Although there is limited research that explores both aspects of cohort effects and consumer values emphasized on generation Y as online shoppers — an example being Koch, Frommeyer, and Schewe (2020)'s Western-centered investigation of the cohort's e-consumption motive, it is speculated that these studies could be built upon to delve into the context of Thailand's e-retail landscape.

COVID-19, SARS and MERS

COVID-19

COVID-19, currently a global health emergency, is short for "coronavirus disease 2019." The International Committee on Taxonomy of Viruses (ICTV) announced "severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2)" as the name of the new virus (WHO, 2021). Wuhan Municipal Health Commission reported that this disease was first identified in Wuhan, Hubei Province of China, on December 31, 2019 (WHO, 2020). Since January 2020, a multitude of countries and regions have been severely affected by the pandemic. The current number of cases is more than 157 million and deaths of 3.27 million worldwide (WHO, 2021).

The outbreak of COVID-19 caused significant economic damage at a global scale; in Thailand, almost 10 million people would be facing unemployment (Reuters, 2020). The country had significant experience fighting other new infectious diseases such as SARS and MERS, however, the secondary effect of the lockdown was indeed arising in terms of mental health issues across the Thai population during the COVID-19 pandemic (UNICEF Thailand, 2020).

According to extant research, the coronavirus was found to be associated with SARS and MERS epidemic in 2002 and 2012. Both SARS and MERS coronaviruses had their reservoir in bats and transferred to humans from palm civets and camels (House, Palissery, & Sebastian, 2021).

SARS

Severe acute respiratory syndrome (SARS) is a viral disease associated with an outbreak of typical pneumonia caused by a SARS-associated coronavirus (Perlman & Netland, 2009). It first emerged in China and spread to 4 other countries at the end of February 2003 (WHO, 2021). In Thailand, the first case was found in March 2003. The case came to Thailand on March 11 from Hanoi, Vietnam. However, after arriving in Thailand, the case was immediately isolated. After this case, there was no evidence of the transmission of SARS in Thailand (WHO, 2003).

MERS

Middle East Respiratory Syndrome (MERS) was first identified in Jeddah, Kingdom of Saudi Arabia (KSA), in June 2012 by a patient with acute pneumonia and renal failure (Cinatl, J, et al., 2003). There were three cases of MERS in Thailand, the first case was reported in a 75-year-old Omani man who was found to be infected after he flew to Bangkok to treat a heart condition in June 2015 (WHO, 2015). The third MERS case in Thailand was a young traveller from Kuwait in late July 2016 (WHO, 2016).

From prior disease outbreaks such SARS and MERS, Thailand has successfully dealt with and can control the spread of infectious diseases. More importantly, Thai public health workers worked cooperatively in the controlling and surveillance of infectious disease situations. However, the current COVID-19 situation in Thailand has worsened since the third wave in April 2021, even though the country has robust public health. The significant cause of this chaos is the slow COVID-19 vaccine rollout by the authorities, and as such, it could delay recovery to the Thai economy (Bangkokpost, 2021).

The preceding illustrations have centered on the understanding of the present situation in Thailand — taking into account the ongoing COVID-19 pandemic and its impact on the country's well-being. It is surmised that to conduct a fruitful primary investigation of the e-commerce trend in Thailand with millennials as the key players, a comprehensive assessment of the country's landscape should first be achieved as to better understand the dynamics between demographic characteristics, industry directions, along with situational factors and contextual constraints. While the examined literature has shed some light to the current topic of interest, it essentially lacks a focused approach in probing the interrelationship between the impact of a global virus outbreak, pre-existing trends, and consumers' attitudes and behaviors. Regardless, available insights have paved the way for the present study to establish a direction with which the investigation will follow.

The Relationship between COVID-19 and Online Consumption

The global COVID-19 pandemic is undoubtedly consequential to the physical, psychological, as well as financial well-being of the population. Given its rapid communicability and detrimentality without the concoction of a reliable cure, the outbreak has effectively re-shaped consumer behaviors as previously illustrated. With reference to a discussion from McKinsey & Company — a leading international consulting firm, consumers are re-prioritising their spendings on consumption categories that pertain to essential items rather than commodities that fundamentally satisfy emotional needs (Arora et al., 2020). This has also been corroborated by many researchers and experts; the consensus being that consumption trends are descending down the hierarchy of needs (see Figure 1). Accordingly, there were significant reductions in travel, apparel, entertainment, and services expenditures (Arora et al., 2020; Coibion, Gorodnichenko, & Weber, 2020; Gössling, Scott, & Hall, 2020; Wilson, 2020). In line with this, McKinsey & Company oversaw a survey that revealed a mindset shift among consumers toward spending less amounts of money on products and making more rational purchasing decisions; notably among Asian countries (Arora et al., 2020). This observation is not exclusive to a global crisis such as the ongoing virus outbreak — but is also characteristic of past international emergencies and plights such as the SARS epidemic in 2003 and the Great Recession in 2007 (De Nardi, French, & Benson, 2011; Fan, 2003; Wen, Huimin, & Kavanaugh, 2005).

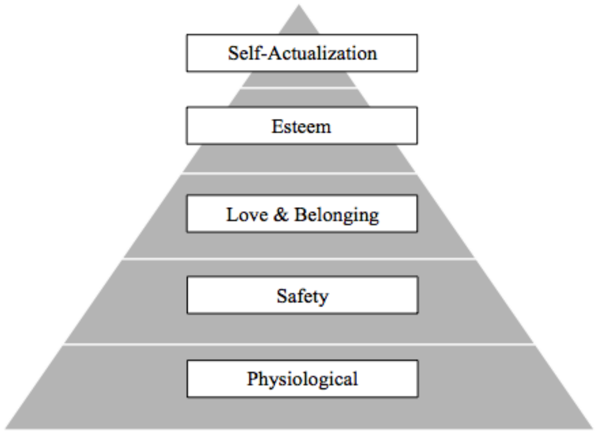

Figure 1. Maslow's Hierarchy of Needs (1943)

Unique to the current COVID-19 pandemic, however, appears to be its concurrence with rapid technological advancements and its communicability necessitating social distancing measures. As Mehta, Saxena, and Purohit (2020) have noted, activities involving direct physical contact have been discouraged — if not entirely disallowed as a result of lockdowns — during the virus outbreak. Accordingly, a majority of consumers resort to online channels such as websites, applications, or social media accounts of brands for researching product information and subsequently making purchases without having to physically visit stores. By way of explanation, individuals are observed to acclimatize with the current situation and utilize technological tools to maintain their lifestyle and attain necessary goods (Ali, 2020; Mehta, Saxena, & Purohit, 2020). In the same direction, it is imperative for businesses to revamp their operations to be in correspondence with this shift; otherwise their viability is critically threatened (Anupam & Deepika, 2020). Especially as this rise in e-commerce demands does not appear to be inextricable with the current crisis, but rather a pacesetter of trends towards other contactless consumption such as streamed media in place of cinemas, drive-throughs instead of sit-ins, and virtual fitness classes as a substitute for the gym, it can be deduced that a 'new normal' consumer culture is imminent post-COVID-19 — if not extant (Arora et al., 2020; Roggeveen & Sethuraman, 2020).

Conclusion

The present study's secondary research has uncovered three main points regarding the understanding of millennials' online consumption amidst a global virus outbreak. Firstly, similar to other countries in the world, the pandemic has contributed to a significant decline in Thailand's overall economic and financial well-being. However, the country has seen a notable growth in online consumption as an accelerated manifestation of technological disruption. Secondly, current evidence suggests that generation Y constitutes a prominent part of this consumer group; particularly owing to the cohort's adept familiarisation with technology. Correspondingly, having delved into the underlying psychological constructs of millennials' documented inclination, the third observation is that hedonic values importantly drive the group's positive attitude and behaviors towards consumption and e-commerce. Altogether, these provide well-grounded guidance for the current investigation's primary research.

Chapter 3: Research Questions

This chapter provides an overarching framework of the present study's research directions; namely with the outlines of determined aims and objectives, guiding questions, as well as initial predictions of outcomes. It is this set of precepts based on which the research methodology is developed in order to ensure primary findings address the query of interest.

Research Aim

Taking into account the significance of the global COVID-19 outbreak on various aspects of a country's position and activities, among the most notable being the shifting trend of consumption towards digitalisation, the aim of the present research is to identify the motivational factors that influence Thai millennials to purchase products and services via online platforms.

Research Objectives

To achieve the aforementioned research aim, 4 main objectives are to be accomplished. The first objective is to determine the behavioral patterns of millennials in their choice of online shopping platform. The second objective emphasises the understanding of the motives and attitudes of millennials in shopping online amidst the COVID-19 pandemic. The third objective is to establish theoretically-guided and empirically-supported findings regarding online platform appeal to a certain target group. Lastly, the fourth objective is to explore different respondent profiles and whether their behavioural patterns vary.

Research Question

Succeeding an exhaustive revision of the extant literature, it has been identified the important ramifications of contextual elements — whether facilitative or unaccommodating of consumption activities — surrounding a particular consumer market. Coupled with profuse corroborations arguing for generation Y's significance as a consumer group given their sizable percentage along with their technological competency, it is deemed imperative to gather evidence-based insights in support of today's unprecedented circumstances. Provided the recognition of Thailand as a developing country but a rapidly growing e-commerce market, the current study focuses on Thai millennials and their online shopping behaviors. Accordingly, the research question and sub-questions are as follows:

What are the implications of the ongoing COVID-19 pandemic on Thai millennials' attitudes and behaviors as consumers within the e-commerce landscape?

Sub-Questions

- How does the COVID-19 pandemic affect the way millennials consumers shop in Thailand?
- Do millennials switch to shop online during the pandemic or still go to physical stores?
- If they choose to shop online, what categories of products will they buy?
- Do situational factors influence millennials to purchase online?
- What are the factors that have significant influence on consumers to shop online during the pandemic – utilitarian or hedonic motivation?

Hypotheses

Based on the findings of previous research regarding the preferences of consumers (millennials) with respect to shopping online motivation, the following hypotheses have been established:

- Hedonic motivation is an important factor driving consumers' online purchases during the pandemic
- Consumers' perceived usefulness is an important factor driving their online purchases during the pandemic

Conclusion

Having established a transparent set of guiding questions and outcome projections, a delineation of how the primary research will be conducted is to follow in alignment with the current section.

Chapter 4: Methodology

To provide an illustration of how the present study will be conducted, the current section outlines the procedures to be undertaken. Subsequent to the identification of frameworks following secondary research, primary research will be conducted through online data collection – the steps of which along with the respondent profile are detailed below. Then, the conceptual framework for the present study is described. Lastly, a layout of the research instrument is presented.

Research Philosophy

Given the research question being centered on the attitudes and behaviors of a particular consumer group with the intention to uncover these factors' development — considering the accompanying global pandemic, the present study is guided by the philosophy of pragmatism. With reference to Saunders (2019), pragmatism is a philosophical position that perceives reality as intricate and inconstant: a product of variations in activities and experiences. Accordingly, it holds true the value of contextual particularities; based on which practical solutions can be contributed to guide subsequent actions. With pragmatism's aspirant consolidation of objective and subjective percepts, both fact-based actuality and personalized values are taken into account to complete an unreduced reality.

On that account, the current study identified the urgent question of understanding fresh consumption trends amidst a pandemic health crisis as a problem; to which it aims to ultimately provide a solution. By grasping an important consumer group's underlying motivations and behavioral patterns, it is anticipated that a solution can be reached for relevant practitioners within the e-commerce realm to better influence the market — in turn achieving a competitive commercial and financial standpoint. In a broader sense, the study's primary findings are expected to inform the literature on the role of situational influences and psychological constructs; which is largely lacking in terms of a specific attention on global crises as expansive as the present COVID-19.

Data Collection

In line with the suggestion of Ponto (2015), the present research adopts the data collection method of a quantitative survey. By so doing, it is enabled the exploration of each construct; assessed via several items that definitively conceptualise and frame the pattern of data they are inquiring. While qualitative methods such as interviews or focus groups appealed conducive to richer insights, given their nature of eliciting data unbound by pre-established assumptions (Yates & Leggett, 2016), they were reckoned impractical considering the desired sample size; not to mention potentially problematic implications of face-to-face gatherings while social distancing measures are being encouraged. Thus, data was collected using a questionnaire for millennials (generation Y). However, for other generations, the study captured only whether they used shopping online applications during the pandemic period. Survey items were provided in both English and Thai. To validate the translation, the researcher pre-tested the questionnaire before final data collection. This survey collected information from 200 participants, which was conducted anonymously. In designing the survey and selecting relevant items to achieve the research tool, the items concerning situational influences of the COVID-19 related factors in determining online shopping were adapted from the work of Nguyen et al. (2020) and Koch et al. (2020). The researchers have developed other items assessing respondents' participant profiles. The surveys were distributed as online questionnaires in Google form via email and social media channels to initially known respondents and they were requested to identify additional respondents. Given that this survey uses Thai Baht currency, the conversion rate between THB and EURO is 0.026 at the date of survey distribution.

Respondent Profile

The questionnaire assesses respondents' demographic information; including age range, gender, occupation, education degree, and monthly income. Furthermore, sociodemographic variables, frequency measures related to online shopping, and COVID-19-specific questions were included in the questionnaire.

Factors Influencing Purchases

This study employed utilitarian and hedonic constructs in evaluating the usefulness and hedonic motivation with a 5-point Likert type scale anchored by (1) Strongly disagree to (5) Strongly agree. The items have also been slightly modified and rephrased to provide respondents with clarification of the current study's context — assessing the aspect of customer motivation for online shopping. The present study has also included items from the work of Nguyen et al. (2020), Koch et al. (2020), and Venkatesh et al. (2012).

To measure consumer intention to shop online, three items were adapted from Venkatesh et al. (2012). Situational influences of the COVID-19 were measured with five items from Nguyen et al. (2020). With four items belonging to the utilitarian motivation and three items to the hedonic motivation, the present questionnaire is drawing on a total of 7 items from Koch et al. (2020). Accordingly, the survey consists of 15 items assessing shopping motivation factors. For the objective of assessing different respondent profiles, the items are developed by the researcher. Twenty consumers were invited to participate in a pilot test to confirm the clarity and meanings of the items.

Research Instrument

The majority of the questionnaires in this study are selected and adapted from prior literature in Thai.

There are three parts of the questionnaire (see *Appendix 1*):

- Part 1 is about the personal information of the respondents by using a checklist questionnaire.
- Part 2 is a questionnaire on Thai buyers' behaviour, asking about their shopping behaviour during the COVID-19 pandemic by using a checklist questionnaire.
- Part 3 is Likert scale questions

Chapter 5: Findings and Analysis

In this section, the data obtained from primary research is presented in the manner that corresponds with the data collection tool's 3 main parts of personal information, buyers' online behavior, and factors of situational influences as well as consumption attitude and intentions. The first two parts will be illustrated under sections 1 and 2 for this chapter. In order to provide a comprehensive and in-depth analysis of the findings, however, the third part is further broken down into 4 sections: namely situational influences, utilitarian motivation, hedonic motivation, and behavioral intention. Coupling each of these sections are visual representations of corresponding statistics and complementary findings of previous research.

Section 1: Demographic Profile

As previously mentioned, the present study recruited a total of 200 participants; all of them can be classified as generation Y or individuals born between 1981 to 2000 (Ladhari, Gonthier & Lajante, 2019). With respect to each age range, referring to Figure 2, it can be noted that those 21 to 25 years old occupy the largest proportion of the sample with 37% (n = 74) — followed by 26 to 30 years old with 28.5% (n = 57) and 20.5% (n = 41). It is thus not unexpected to observe that an overwhelming majority of millennial participants' highest educational attainment is a bachelor degree or equivalent (n = 159, 79.5%); given the typical timeline of individuals with these age ranges. Contrastingly, a master's degree or equivalent education has been acquired by only 15% of the sample (n = 30) as the second most prevalent.

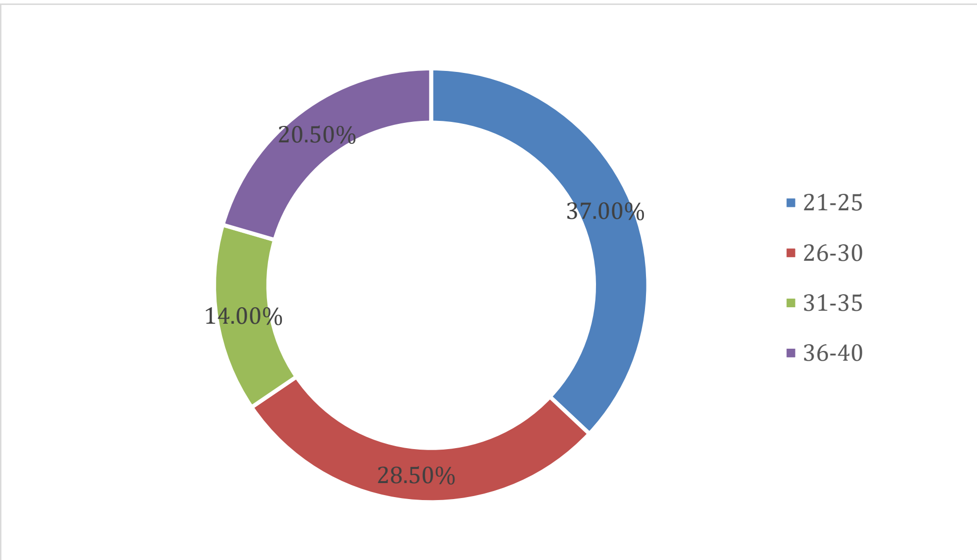

Figure 2. Age Distribution

Among all participants, females are of the predominant gender with 61.5% (*n* = 123) whereas their counterparts were documented at 38.5% (*n* = 77). While these figures do not reflect a proportionate representation of each gender, the present study implemented a simple random sampling absent of male/female segmentation specifications as the research question does not concern the gender variable.

With respect to participants' occupation, it is observed that most identify themselves as company employees (*n* = 127, 63.5%). Of these 127 participants, a monthly income of THB 15,001 to THB 30,000 — equivalent to approximately €390 to €780 — is documented to be the most prevalent range (*n* = 71, 55.9%). This is a trend also detected among other occupations; with the remaining 73 participants predominantly receiving €390 to €780 per month. Other occupations frequently reported were government officers/civil servants (*n* = 37, 18.5%) and business owners (*n* = 18, 9.0%). Among these, the same pattern of €390 to €780 monthly wage was also found (*n* = 28, 50.9%). Overall, it can be noted that the examined population achieves higher-than-the-national-average monthly income; as updated data from the Bank of Thailand (2021b) has revealed a figure of THB 14,386 or €374.04. The source also revealed a mean monthly wage of THB 23,054 or €599.4 for those with a bachelor's degree. Correspondingly, a majority of the current study's segment with equivalent higher education attainment reports to be receiving €390 to €780 per month (*n* = 93, 58.5%); thus it can be concluded that the sample's income is well within the representative range. On a related note, with a specific consideration of millennial participants, an analysis revealed that the typical demographic profile (*n* = 22) is female company employees with a bachelor's degree and receives a monthly income of €390 to €780.

All in all, a summary of the participants' demographic factors is presented in *Table 1*.

Sociodemographic Variable	Description	Frequency	Percentage
Gender	Male	77	38.5%
	Female	123	61.5%
Age	21-25	74	37.0%
	26-30	57	28.5%
	31-35	28	14.0%
	36-40	41	20.5%
Education	Lower secondary	-	-
	Upper secondary	2	1.0%
	Post-secondary non-tertiary	9	4.5%
	Bachelor's degree or equivalent	159	79.5%
	Master's degree or equivalent	30	15.0%
	Doctoral degree or equivalent	-	-
Occupation	Government officer/civil servant	37	18.5%
	Company employee	127	63.5%
	Business owner	18	9.0%
	Student	3	1.5%
	Others	15	7.5%
Monthly Income	Less than THB 15,000	23	11.5%
	THB 15,001 - THB 30,000	106	53.0%
	THB 30,001 - THB 45,000	32	16.0%
	THB 45,001 - THB 60,000	27	13.5%
	More than THB 60,000	12	6.0%

Table 1. Demographic Variables

Section 2: Buyers' Online Behavior

A majority of participants (n = 159, 79.5%) indicated Shopee as the platform of choice. Lazada, although the second most used e-commerce channel, was selected for 15.5% of participants (n = 31) (see *Figure 3*). This reflected the observation from secondary research; wherein Shopee is documented as the dominating platform in Southeast Asian countries (Kaur, 2021). In Thailand, specifically, statistics also showed Shopee with a higher average number of visitors per month than Lazada (Statista, 2020b).

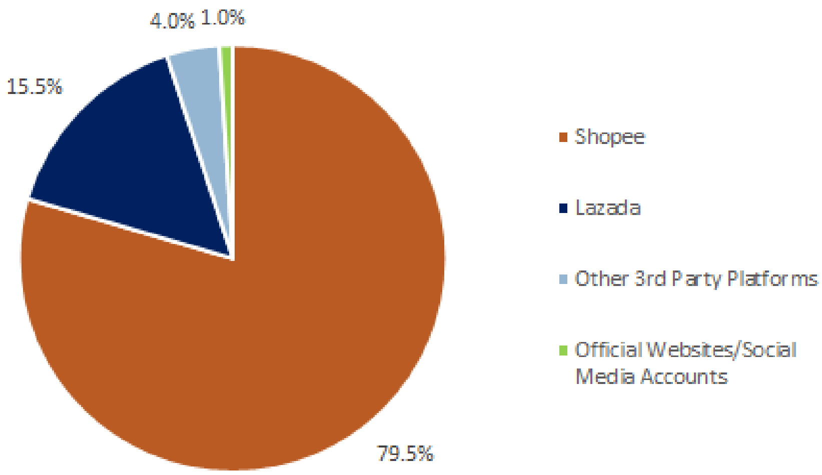

Figure 3. Users' Selection of Platform

Regarding the frequency of online shopping via mobile applications, most participants reported that they engage in such activities 1-2 times per month (n = 98, 49.0%) and some of them shopped 3-4 times per month (n = 65, 32.5%) (see *Table 2*). For each shopping experience, participants tended to spend no less than THB 300 to THB 500 or approximately €7.8 to €13 (n =52, 26.0%). The second most recorded spending range is THB 500 to THB 900 or €13 to €23.4 (n = 35, 17.5%); followed by a maximum of THB 300 (€7.8) per a single purchase (n = 33, 16.5%) (see *Figure 4*). A closer examination of this latter group reveals that a majority of them (n =11, 33.3%) have less than THB 15,000 (€390) monthly income and tend to shop online 1-2 times monthly. Compared to a sub-category of participants (n =23, 11.5%) with a spending range that exceeds THB 1,500 (€39) per a single purchase, their monthly income goes beyond THB 30,000 (€780) and up to more than THB 60,000 (€1,680). Their reported online shopping per month is mostly 3-4 times (n = 10, 43.5%). The speculation, therefore, is that consumers with lower income tended to spend less on online consumption with a restricted frequency compared to those with higher income. This is surmised to be in line with an analysis explained by Bangkok Post; which stated that lower-income groups are expected to have a delayed recovery in spending given the restrictions and financial challenges linked to the pandemic (Kuentak, 2021).

Frequency of Online Shopping (Per Month)	**Frequency of Responses**	**Percentage**
1-2 times	98	49.0%
3-4 times	65	32.5%
5-6 times	18	9.0%
More than 6 times	19	9.5%

Table 2. Frequency of Online Shopping

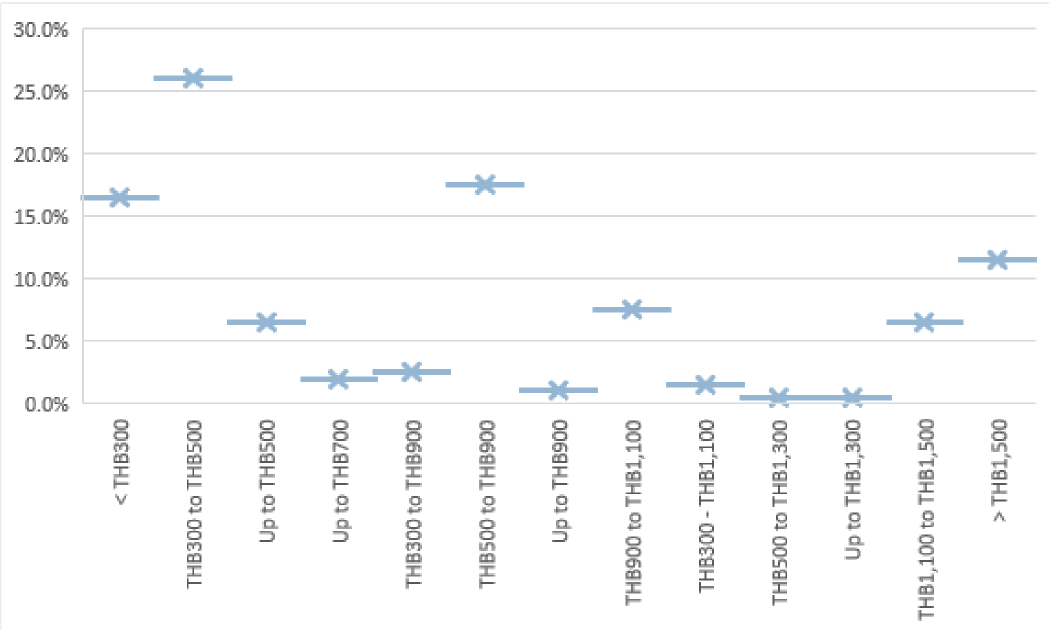

Figure 4. Users' Approximate Spending per Session

Regardless of income range, however, a trend observed to be similar across all participants is the category of products typically purchased. As illustrated in *Table 3,* beauty and essential items — such as cosmetics, clothes, groceries, and baby products — were the most frequently bought via e-commerce platforms. Among higher-income participants, however, it can be perceived that in addition to essentials, products such as gadgets, computer-related equipment, and other electronic devices were commonly purchased. For lower-income participants, electronics were of less importance than cosmetics and apparel.

This is an interesting trend as, although essential products are evidently prioritized, those with less financial capacity appear to be spending more on items considered non-crucial than those with higher spending power. According to a survey data reported by the Bangkok Post (2021b), Thai consumers are significantly spending more on not only essentials, but also electronic devices, appliances, and gadgets as these have particularly increased in importance. In addition to the notability of electronics in facilitating working conditions, it was also reported that beauty products are being purchased popularly. While there is yet to be any empirically-based explanation for this among Thai consumers, research in other markets revealed that the action of shopping for cosmetics and fashion items itself notably enhances emotions and mood (Bargh, 2021); which could thereby shed light on these shoppers' motives.

Income Range	**#1 Top Spending Categories**	%	**#2 Top Spending Categories**	%	**#3 Top Spending Categories**	%
Less than THB 15,000	Beauty and Essentials	47.8%	Beauty, Electronics, Essentials, and Leisure/Travel	8.7%	Electronics	8.7%
THB 15,001 - **THB 30,000**	Beauty and Essentials	29.2%	Beauty	16.0%	Electronics	10.4%
THB 30,001 - **THB 45,000**	Beauty and Essentials	21.9%	Electronics and Essentials	9.4%	Beauty, Essentials, and Leisure/Travel	9.4%
THB 45,001 - **THB 60,000**	Beauty and Essentials	18.5%	Electronics and Essentials	11.1%	Beauty, Electronics, and Essentials	7.4%
More than THB 60,000	Beauty and Essentials	25.0%	Electronics and Essentials	16.7%	-	-

Table 3. Top Spending Categories by Income Range

Referring to *Figure 5,* it was found that a significant portion of participants (*n* = 132, 66.0%) used payment channels that are of the financial service provider directly only — including mobile banking applications, credit cards, or debit cards. Some participants utilize a combination of these 1st party channels and 3rd party payment systems such as digital wallets (*n* = 22, 11.0%) and some use a combination of 1st party channels and cash (*n* = 19, 9.5%). Based on this observation, it can be surmised that the examined millennials are principally comfortable with trusting online consumption platforms and e-payment systems; provided their familiarity and expertise with technologies as Lee and colleagues (2017), among other scholars, have noted.

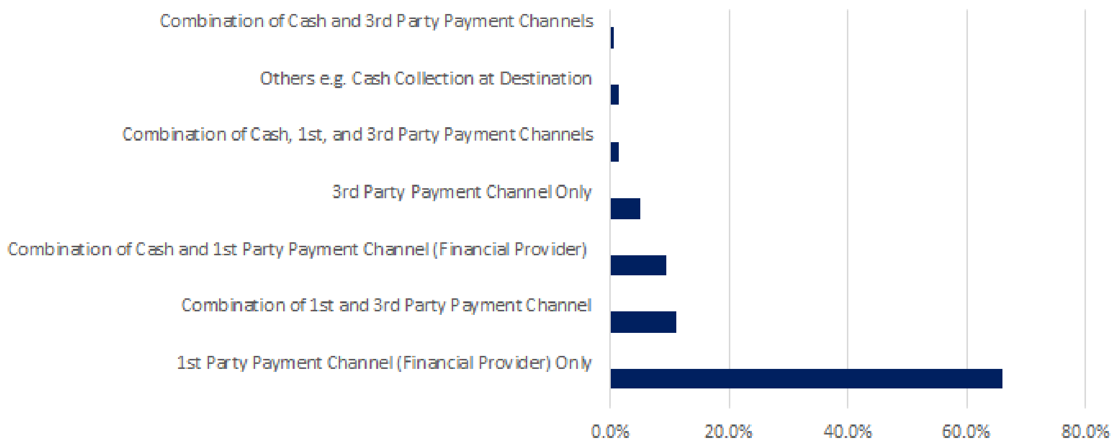

Figure 5. Users' Usual Payment Method

Section 3: Implications of COVID-19 For Online Consumption Motivation and Intention

In understanding participants' perspective regarding the ongoing pandemic, it was revealed that a majority of millennials agree that many physical stores have shut down during the COVID-19 (*n* = 153, 80.1%) and the visitation of stores that maintained regular operations is perceived to be associated with significant health risks (*n* = 146, 76.4%). This is in agreement with the examined evidence; demonstrating that consumers undergo a process of adaptation in their behaviors in order to attain goods whilst protecting themselves physically from the virus (Mehta, Saxena, & Purohit, 2020).

With regards to online stores' acclimatization to the situation, it was generally agreed that the stores proffer increased sales promotions (*n* = 130, 68.1%). The stores were also observed to be extending their product portfolios more; albeit this was acknowledged among a slightly less proportion of participants (*n* = 120, 62.8%). Moreover, while most of the participants conceded that online shopping has become a trend during the pandemic (*n* = 129, 67.5%), some also explicitly stated that this had not been the case (*n* = 17, 8.9%). Nevertheless, it is evident that not only do the general consumers habituate to the circumstances but providers are also recognizing the need to adapt in order to sustain their operations; a notion previously put forth by Anupam and Deepika (2020). Moreover, the trend observed herewith certainly corresponds to secondary data manifested in the manner of purchase rates and developments in Thailand. An illustration is the e-commerce sector's 81% year-over-year growth rate in 2020 (Leesa-Nguansuk, 2021).

With respect to participating millennials' motivation behind online consumption, it has been identified that utilitarian motivation played a more substantial role than hedonic motivation. To elaborate, a higher average agreement score of 4.1 had been found among utilitarian motivation items whereas an average agreement score of 3.6 had been observed for hedonic motivation statements. A more in-depth investigation into the functioning of utilitarian motivation unveils that online platforms' provision of ease in shopping is the most significant driver, with an average agreement score of 4.5; closely followed by perceived usefulness with a mean score of 4.4. Interestingly, however, the factor that online shopping facilitates the efficiency of purchases was least agreed upon ($\mu = 3.5$). Overall, the finding that utilitarian motivation trumps hedonic motivation for the studied millennials refutes previous research asserting the contrary (Alam et al., 2020; Calvo-Porral & Pesqueira-Sanchez, 2019). This might have been explained by the present study's incorporation of the pandemic's impact; thus orientating participants' decisions based on the consideration of situational constraints.

A further qualitative assessment reveals that participants' experience with online shopping during the pandemic is generally positive; partly owing to the competitiveness of e-commerce providers — thus benefiting them as consumers in receiving lower-priced offers and fast deliveries as a result of their competitive strategies. Moreover, as the virus spread is still ongoing impeding visitations of physical stores, online shopping is unarguably an easier and more convenient alternative. To quote the input of one respondent,

"With the current COVID-19 situation, it has become more challenging and difficult to go shopping. Buying products online is obviously a better choice; more accommodating to the present circumstances. The products ordered are delivered right at my doorstep and the platforms offer warranties for the products, not to mention how easy and convenient it is to make payments by merely using my phone."

While the online option seems to aptly satisfy its utilitarian purposes, particular concerns have also been noted; especially pertaining to the discrepancy between expectations and actual products received. According to one of the participants,

"One concern is regarding the quality of the products and counterfeit items. There is a high possibility that the products received are not in line with expectations or they might be fake — especially during promotional periods where buyers are more easily attracted to and distracted by discounts."

However, some participants argued that the product quality can be ensured by a process of careful selection; inspecting the standards of the products and choosing stores with credibility. In any case, the participants seem to understand the trade-offs involved in online consumption.

Among the hedonic-related motives, the satisfaction that arises from engaging in online consumption activities was identified as the most impactful factor with an average agreement score of 3.8; followed by enjoyment ($\mu = 3.6$) and entertainment ($\mu = 3.5$).

Regarding behavioral intentions, it was found that participants typically intend to continue shopping online ($\mu = 4.1$) and will try to shop online during the current situation ($\mu = 4.0$). A smaller proportion of millennials expressed their intention to shop online frequently ($\mu = 3.6$).

Interim Conclusions

Findings based on the investigated millennials revealed several central trends concerning online consumption. Firstly, it can be observed that millennial shoppers engage in online shopping with a frequency and volume that correlate to their level of income. Secondly, the types of products that appear to be commonly purchased among these consumers are beauty and essential products. Taking into account participants' level of income, it was found that higher-income millennials tend to also buy gadgets and electronics. Lastly, utilitarian motivation appears to have driven the examined millennials toward consumption more than did hedonic motivation. All in all, these patterns in consumer characteristics and behaviors denote meaningful implications necessitating further exploration in juxtaposition with a wider, more global context.

****Remark**: Respondents' quotes have been translated from Thai*

Chapter 6: Discussion

Following an understanding of the current study's primary findings and their association — or lack thereof — with the secondary findings explored, there emerged three crucial themes deemed to be telling of potential, if not ongoing, characteristics of the online consumption landscape. In the order to be discussed, these pertain to how COVID-19 has accelerated technological acceptance and integration, altered consumption behaviors, and finally the outlook of consumerism during and post-pandemic as dominated by millennials. In order to set the present study in a broad and almost universal viewpoint, the discussion will extend these themes' connotations beyond online shopping in Thailand.

Technological Integration as Accelerated by COVID-19

It is unarguable that COVID-19's threat on the lives of the public has enforced an acceleration towards technological utilization. As the current study's results have revealed, the general consumers avoid visiting physical stores and resort to online platforms instead; given concerns for possible contamination of COVID-19. This, as has been illustrated, has caused a rocketing increase in the use of online channels for consumption (Eastspring Investments, 2020). Especially given that the phenomenon had been observed quite evidently in Thailand, a country previously lagging behind others in digitalization, the role of COVID-19 and its endangering implications is irrefutable. In Japan, the same trend has been recognized among consumers — such that a majority of shoppers have expanded their share of wallet for online consumption and, correspondingly, either decreased that of offline consumption or relinquished the behavior entirely. Those whose previous consumption preference had predominantly been offline also reported to shift online provided the virus' threat(Watanabe & Omori, 2020). Another interesting case is that of Taiwan — wherein researchers Chang and Meyerhoefer (2021) explored specifically in terms of agri-food online consumption and identified a correlation between an increased number of COVID-19 cases and online sales of fresh produce, frozen foods, and a diverse range of consumable products. With respect to other countries, it is needless to say that the reshaping in consumer attitude as well as behaviors and adaptation towards e-commerce have occurred in a hastened manner; with the characterizations and manifestation of these trends being more or less similar across the globe (Alaimo, Fiore, & Galati, 2020; Pham, Do Thi, & Ha Le, 2020; Sayyida, Hartini, Gunawan, & Husin, 2021; Sharma & Jhamb, 2020).

Moreover, the accelerated shift to digitalization is far from being a phenomenon limited to the realm of online consumption. Among the most evident changes is a majority of corporates' permanent switch to a remote working policy. According to Mercer — an international HR consultancy firm and leading expert in talent management insights — it can be anticipated that full-time remote employees will account for approximately 20% of the workforce post-pandemic. In turn, it is foreseen that companies will expend more efforts and resources to transform into technology-enabled offices — with infrastructures that permit the efficient monitoring of employee productivity and streamlined virtual communications. For those returning to the physical workspace, technology will also play a crucial role in the developments of health monitoring systems and assurance of cyber security; which had not been as recognized prior to the pandemic (Shellenback & Polovina, 2020). In addition, the pandemic instigated a transformation of operational designs to more efficiently embrace and utilize technology — such as organizations and media channels' communication via social platforms, automation of standardized procedures, and less dependence on face-to-face interactions (Foss, 2020). For example, the healthcare industry has been observed to adopt artificial intelligence and data analytics to provide tele-medicine services for diagnosis, consultation, and prescriptions for patients with non-critical as well as critical health conditions (Brem, Viardot, & Nylund, 2021; Ting, Carin, Dzau, & Wong, 2020; Wu & Street, 2020). The field of education has also been notably reshaped by COVID-19's influence; with educational institutions all over the world adopting ICT integrated learning (Ali, 2020). As researched by UNICEF, among countries with students' limited access to digital platforms, other mediums such as radios or televisions have been employed; alternatively, take-home materials have been provided for distance learning (Dreesen et al., 2020).

Accordingly, the rapid and sudden increase in the implementation of electronic consumption channels, teleworking policies, and other digital and efficiency-centered practices does not only signify consequential advancements in technologies, but also implicates the outlook of sustainable practices, among others. One particular aspect of this is the significant reduction of energy consumption and carbon footprints; one notable instance pertains to the 14% reduction of environmental impact, expectantly owing to the reduced need for vehicle use and transportation among remote workers (Kylili et al., 2020). For online stores, while expended energy on packaging and delivery systems can be a disadvantage in comparison with the operation of physical stores, less explicit outcomes such as the efficient management of product volumes and of cost-effective manpower can be notably beneficial (Pålsson, Pettersson, & Hiselius, 2017).

This fact notwithstanding, it needs to be noted the large gap in accessibility, proficiency, and availability of technological infrastructure and digital methods which do not only derail effective advancements, but suggest social issues concerning digital inequality as well (Nguyen, Gruber, Fuchs, Marler, Hunsaker, & Hargittai, 2020); an aspect also embedded and will be explored further in the themes to follow.

How A Global Pandemic Has Impacted Consumption Behaviors

As has been demonstrated in the preceding sections showcasing the present study's findings, the recent COVID-19 outbreak has fundamentally changed the lifestyles of individuals and operations of businesses alike. In addition to the more apparent substitutions of bricks-and-mortar for online stores and face-to-face interactions for virtual communication, the examination of underlying trains of thoughts and behavioral patterns exhibited by the typical shopper has uncovered meaningful and potentially permanent conducts. In the same line as the current study's survey and interview results, consumers amidst the COVID-19 crisis are observed to have been motivated by the online platforms' perceived usefulness; more so than hedonic motivation. This was illustrated by the study of

Salem and Nor (2020) wherein utilitarian drivers were identified as the most impactful factors for online shopping. The researchers also determined the perceived lack of alternatives — given the restrictions for traveling to public spaces and the risks associated. Accordingly, it could perhaps be explained the contrast of results between the present study's finding that consumers are more motivated by e-commerce's practicality with Alam et al. (2020) and Calvo-Porral and Pesqueira-Sanchez (2019)'s research arguing for the opposite; such that the conditions of the pandemic might have been the drive in increasing utilitarian motivation's importance. On a related point, researchers Veeragandham, Patnaik, Tiruvaipati and Guruprasad (2020) discerned that the pandemic had prompted consumers' increased consideration of product costs — such that they seek items with reasonable price and satisfactory quality. Similar trends have also been documented during the 2007-2008 Great Recession; thus making the case for a global crisis-induced economic decline's significant and lasting impact on spending attitude and behaviors. With reference to McKinsey and Company, a prominent research and consultancy firm, increased cost awareness as compelled by the recession has permanently contributed to the preference and superiority of lower-priced brands (Bohlen, Carlotti, & Mihas, 2009).

Corresponding to the present study's findings, Veeragandham and colleagues (2020) also discovered that purchases of essential products denoted a comparable significance as electronics or clothes. This appears to be particularly interesting, as it would be presumed that the prioritization of items that serve humans' basic needs would supersede that of apparels, gadgets, and other electronic devices in a time of life-threatening crisis. Upon a closer investigation of Veeragandham et al. (2020), it was found that a significant majority of examined participants had been millennial consumers who are either students or self-employed. In addition, the study had been conducted online. A possible explanation, therefore, is that these groups are considered "superior" in the digital inequality spectrum — as their proficiency with and access to technology had not been limited. Particularly taking into consideration the current study's same nature of data collection along with participants' similar levels of financial security — a monthly income range of €390 to €780 versus Veeragandham et al. (2020)'s minimum of €585, it can be understood that the interpretation of these online consumption behaviors during COVID-19 is somewhat limited to a particular population. On that account, it can be inferred that millennials — provided their sizable market and attachment with technology — constitute a domineering force for consumerism; as has been made strikingly clearer amidst this pandemic along with its requisite for technological adaptation and integration.

Towards A New Era of Consumerism: Understanding Millennials

Millennials, based on the current findings from secondary and primary research, are argued to be the most dominant consumer group. As implied previously, this fact is not unbeknownst to the 21st century scholars — referring to the work of SivaKumar and Gunasekaran (2017), Winograd and Hais (2014), and many others; however it had become more evident during the pandemic when technological proficiency becomes a necessity. Now, more rapidly and pressing than ever, this particular consumer group will shape the direction of varying industries, from frozen food to automotive; owing to both their digital expertise and developed spending power — the latter, naturally, corresponds to the stages and career progresses in their lives (CB Insights, 2021). According to McKinsey and Company (2020), while the preceding generation X and younger generation Z also yield important implications for the outlook of the e-commerce landscape, their significance is effectively overruled by millennials. The trends that have been observed and are foreseen to manifest as future important 4 main pillars of consumerism have been propelled by millennials, namely: 1) Innovation — the ability to foster collaborative creativity and induce excitement, 2) Price — the proposition of economic value and personalized cost-efficiency, 3) Values — the brand and products' offering of key consumer-oriented values, and 4) Activism — the embracing of social and environmental solutions (Ha & Angus, 2021). Therefore, it can be seen the centric value of millennials as a dominant consumer segment; the engagement and loyalty of which are deemed to be pivotal to businesses' success.

Interim Conclusions

The three themes discussed are far from encompassing all meaningful implications that arose from the current study; albeit an insightful capture of the findings, extended to the exploration of their meanings in contexts beyond Thailand's e-commerce landscape. Essentially, it can be understood of technology and millennials' central role in today's realm of consumerism — a development not foreign to the global consumption market, but has been accelerated by its urgent necessity among the public, resulting from COVID-19. To supplement the understanding of the topic, the ensuing chapter will scrutinize the contributions as well as strengths and limitations of the present research study; along with provide suggestions for subsequent investigations.

Chapter 7: Conclusions and Recommendations

Having explored how millennial consumers in Thailand engage in online consumption — taking into account the ongoing global virus outbreak threatening physical and financial well-being and reshaping humans' way of life, it can be concluded that the present study has accomplished its initial aim of identifying factors that drive the mentioned population towards online shopping. In turn, the investigation not only unveiled the significance of utilitarian motivation amidst this unprecedented crisis, but also permitted the understanding of the interactions between individual factors e.g. financial security and technological proficiency, situational factors e.g. conditions restricting physical store visits, and consumption attitudes and behaviors. In a broader context, the findings of this study provides implications on a global pandemic's impact on the day-to-day activities of the public, technology's role in the adaptation process, along with the outlook of a consumerism world post-crisis.

Theoretical Contribution and Practical Implications

All in all, the present study contributed to the advancements of both theoretical and practical understanding on topics relevant to consumption, technology, and cohort effects, to name a few. Perhaps the most distinct theoretical contribution is to the framework of consumer values concerning hedonic and utilitarian aspects; which has been extensively studied in the context of predicting consumption behaviors (Alam et al., 2020; Calvo-Porral & Pesqueira-Sanchez, 2019). Not in spite of, but specifically because the current findings revealed a trend of utilitarian motivation exerting more impact than hedonic values for millennial consumers — in opposition with past research, this study refines the framework by substantiating how the incorporation of an external factor influences a shift in the values' dynamics. At the least, such a conclusion can feasibly be applied to other situational considerations as consequential and universally-experienced as the COVID-19 outbreak. Further extending the insights gained from this investigation, it can be surmised that the established hierarchy of needs (Maslow, 1943) has not only been validated given its relevance in the modern economy — such that an economically developed society can still ascend and descend in the prioritized needs as an effect of fluctuating conditions, but also necessitates an 'acculturation' to the present technology-dominated milieu and incorporating or revising the presence of technology as more or less an essential, basic aspect of humans' needs.

Above theoretical values, the present study also yielded pragmatic suggestions to the knowledge and management of the contemporary consumption-heavy society. With the consolidated insights presented, practitioners — be it specific to trading and commercial operations (e.g. retailers, service providers, or any marketing efforts) or other user-centric undertakings (e.g. internal technology integration initiatives or program developments) — can strategize their communication or value proposition tailored to the specific characteristics and needs of the targeted segment. Especially as the study centered on a rapidly growing market of millennials in Southeast Asia, the results can be built upon actual practices' applications.

Strengths and Limitations

As aforementioned, the present study focused on a topic in consideration of a time and place fairly unprecedented by others; thus the design of a hybrid approach — integrating both quantitative and qualitative data collection methods — capitalizes on tools validated by past research while allowing fresh ideas and perspectives to be put forward. However, this also poses a shortcoming with respect to the resources and efforts allocated to each process of data accumulation and analysis; with the saturation and depth of insights being compromised for efficiency and comprehensiveness while ensuring respondents' attentiveness. Hence, the survey had been designed to capture all aspects of the research questions and ensure against participants' flawed responses (e.g. not given deliberate thought as the number of questions discouraged their energy to do so) or withdrawal from the study entirely.

Recommendations

In the hopes of creating and optimizing relevant conceptual frameworks, upon which future investigations and practices can be developed, it is suggested that subsequent research on similar topics address the present study's limitations as well as undertake a creative viewpoint to enhance the validity and reliability of their empirical efforts. More specifically, a comparative approach to research would corroborate a well-grounded conclusion; for example, a representative sample of both millennials and non-millennials would permit differential or analogous results that will enhance the clarity and strength of the reasoning. Another interesting outlook would pertain to a cross cultural scrutiny; as the manifestation of attitude and values would presumably be in different manners for varying cultural orientations. In addition, exploring the aspects of participants' identity — personal as well as collective — would definitely add multifarious values centering around the psyche of consumers, in addition to their motivation and attitude. Finally, as technology plays almost a central role in contemporary societies, it would be valuable to incorporate individuals' appraisal of what technology means to them and their interactions with technology; which would ultimately put the findings into the context of a technology-immersed age and provide an understanding of how the definition of technology has shifted among current consumers. This has also been illustrated by the present and past research wherein electronic goods are given a comparable priority with essential products. Building around this speculation, it is believed that future investigations would bring about penetrative and novel insights to the field.

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Appendix: Questionnaire

Part 1: Personal Information

Gender: ◯ Male ◯ Female

Age: ◯ 21-25 ◯ 25-30 ◯ 31-35 ◯ 36-40

Education Degree: ◯ Lower secondary education

◯ Upper secondary education

◯ Post-secondary non-tertiary education

◯ Bachelor degree or equivalent

◯ Master degree or equivalent

◯ Doctoral or equivalent level

Occupation: ◯ Government officer/ civil servant

◯ Company employee

◯ Business owner

◯ Student

◯ Other_______

Monthly Income : ◯ Less than THB 15,000

◯ THB 15,001 - THB 30,000

◯ THB 30,001 - THB 45,000

◯ THB 45,001 - THB 60,000

◯ More than THB 60,000

Part 2: Buyers' Online Behavior

1. During the COVID-19 pandemic (from March 2020 until now), have you used mobile apps for shopping online?

◯ Yes ◯ No

2. What shopping online application that you use most?

◯ Shopee ◯ Lazada ◯ JD-Central

◯ Kaidee ◯ AliExpress ◯ Other_______

3. How often do you use mobile apps for online shopping? (per month)

◯ Less than 1 time ◯ 1-2 times ◯ 3-4 times

◯ 5 -6 times ◯ more than 6 times

4. Select an approximate amount you would spend on a single online purchase:

◯ Less than ฿300 ◯ ฿300-500

◯ ฿ 501-700 ◯ ฿701-900

◯ ฿901-1,100 ◯ ฿1,101-1,300

◯ ฿1,301-1,500 ◯ More than ฿1,500

5. What is your usual method of payment when shopping online?

◯ Mobile Banking ◯ Credit Card ◯ Cash

◯ Digital wallet ◯ Other_______

6. What do you buy when you shop online? (Multiple Choice Question)

◯ Groceries ◯ Cosmetic ◯ Books/CDs

◯ Clothes ◯ Furniture ◯ Electric gadgets

◯ Computer products ◯ Toys ◯ Cinema ticket

◯ Airplane/ Railway ticket ◯ other_______

Part: 3 Please Select Your Level of Agreement to The Following Questions.

Strongly Disagree = 1 Disagree = 2 Neither Agree nor Disagree = 3 Agree = 4 Strongly Agree = 5

Question	1	2	3	4	5
Situational influences					
1. Many physical stores close during the COVID-19 pandemic					
2. There are significant health risks associated with visiting physical stores during the COVID-19 pandemic					
3. Online stores offer more sales promotions during the COVID-19 pandemic					
4. Online stores extend their product portfolio during the COVID-19 pandemic					
5. During the COVID-19 pandemic, online shopping is a trend					
Utilitarian motivation					
1. Shopping online is currently a useful way to purchase					
2. The online purchase currently makes shopping easier					
3. Online shopping currently allows me to purchase more efficiently					
4. My choices for online shopping are currently being improved					
Hedonic motivation					
1. During the current situation, I enjoy shopping online					
2. During the current situation, I am satisfied with online shopping					
3. During the current situation, shopping online is entertaining					
Behavioral intention					
1. I intend to continue shopping online in the future					
2. I will try to shop online during the current situation					
3. I plan to continue to shop online frequently					

1. What is your experience as a millennial shopper in Thailand being across a last fifteen-month? (during the COVID-19 pandemic)

____

2. Do you have any additional feedback or information you would like to share?

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