

A SURVEY ON THE BASIC INFORMATION AND THE IMPACT OF COVID-19 TOWARDS THE TOURISM SECTOR IN SAMUT SONGKHRAM PROVINCE, THAILAND

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The purpose of this research was to study the basic information and factors of the impact of COVID-19 on the tourism sector in Samut Songkhram Province in order to establish preliminary data for the new normal lifestyle technology development. The quantitative research part was conducted with 210 tourism start-ups and social enterprises in Samut Songkhram Province, using interview forms and questionnaires as research instruments. The data were then processed with Exploratory Factor Analysis (EFA) using Principal Component Analysis (PCA) to obtain the important variables of COVID-19 impact factors affecting the tourism sector in Samut Songkhram province. The results revealed that COVID-19 impacted tourist attractions at the highest level ($\bar{X} = 4.40$ S.D. = 0.50). The major COVID-19 impact factors were also found to have the highest factor loading at 0.736 on tourist attractions. As such, it is necessary for businesses to have a prepared plan to manage the impacts of COVID-19, and there must be guidelines and checklists for infection prevention in accordance with the government standards. This can be done by using technology to reduce direct in-person contact while dealing with business partners for hotels, transportation, and tourist attractions to reduce infection risk according to the standards set by the government.

Keywords: tourism in Samut Songkhram Province, impact of COVID-19, tourist attractions, local tourism

Introduction

The third wave of the COVID-19 outbreak (April 2021-present) has been estimated to delay Thailand's opening plans, leaving the tourism sector still fragile with only 250,000 to 1.2 million visitors, instead of the original expectation of 2 million, and income of 1.2 billion baht.



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However, there were only 35 thousand people visiting Thailand in the first half of the year. Kasikorn Research Center has stated that this might be due to the risk that this third wave might take a longer time to control.

With this wave's high number of new cases and rapid transmission, there is a risk that it will affect plans to open the country to foreign tourists for the rest of the year. In addition, the highly uncertain tourism environment due to the COVID-19 outbreak which will not end in the near term, both domestically and internationally may result in the number of foreign visitors this year being lower than the estimate. It is now estimated that the number of foreign tourists visiting Thailand in 2021 will be about 250,000 to 1.2 million, which is a downward projection from the forecast of 2 million in March 2021.

The third wave of the COVID-19 outbreak is likely to take longer than the previous outbreaks to be contained, due to a higher number of new cases per day when compared with the earlier waves and the emergence of mutated COVID-19 variants which are spreading rapidly. Therefore, this might affect some groups of foreign tourists planning to travel to Thailand during the 4th quarter of this year (Ministry of Tourism & Sport, 2022).

Table 1 - Reduction of estimated number foreign tourists visiting Thailand in 2021
(Source: Ministry of Tourism & Sport, 2022)

	2020	2021 projection as of May 2021	2021 projection as of June 2021	
			Max	Min
Number of foreign tourists, mln	6.7	2.0	2.5	1.2
Expenditure of foreign tourists, bln THB	3.32	2.2	2.5	1.2

Samut Songkhram Province, originally called "Mueang Mae Klong", is a settlement at the mouth of the Mae Klong River covering an area of 416.707 square kilometers (260,442 rai). Most areas of the province are agricultural spaces located on the coastal sandy clay plains.

The major river of the province is Mae Klong River which flows through the area of Bang Khonthi District and Amphawa District to the Gulf of Thailand at its mouth in Mueang Samut Songkhram District. There are 335 canals, large and small, branching from the river and 1,947 irrigation canals connecting to it, allowing convenient water transportation. The area is known for its agriculture and has been given the nickname "The Last Siamese Venice of the East".

The administrative region is divided into 3 districts, namely Mueang Samut Songkhram District, Khonthi District, and Amphawa District. Due to the COVID-19 pandemic, the number of tourists visiting Samut Songkhram has decreased significantly, resulting in reduced income from the province's tourism sector.

According to the recent tourism data from the province, 2,074,134 tourists visited Samut Songkhram in 2020, only 1,309,163 people visited the province in 2021, a reduction of 36.88%. Consequently, the province's revenue from tourism went down from 3,081.41 million baht in 2020 to 1,724.45 million baht in 2021, a decline of 44.04%. Therefore, it is essential that all sectors must work together to boost public relations in order to stimulate the

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social economy and tourism of Samut Songkhram Province and to increase the number of tourists (Statistical Office Samutsongkhram, 2020).

The aforementioned reasons led to the need to explore the basic information of tourism in the province in order to develop the new normal technology for tourism entrepreneurs in Samut Songkhram Province and to help them resolve the COVID-19 crisis in the short and long term. The aspects of information explored include (1) COVID-19 impacts on local tourism, (2) COVID-19 impacts on tourist attractions, and (3) COVID-19 impact on local products and souvenirs.

This is also to help tourism entrepreneurs in Samut Songkhram Province to have sufficient self-potential in terms of knowledge, staff, and infrastructure to support the COVID-19 crisis management and post-crisis recovery.

Literature review

Basic Information of Tourism in Samut Songkhram Province

Samut Songkhram Province is a small province close to Bangkok, only an hour away by car. It is a province recommended for those who love cultural tourism and traditional lifestyle. There are several activities to experience in Samut Songkhram, for instance, joining the locals who make a living by growing fruits and vegetables and making coconut sugar. From the literature review on tourist attractions in Samut Songkhram province, it was found that in 2020, there were 2,211,100 visitors, of which 2,188,433 were Thais and 58,677 were foreigners, resulting in the province's tourism income of 3,037.25 million baht.

The number of Thai and foreign tourists visiting Samut Songkhram declined from 2019 because of its close location to Bangkok, which has been greatly affected by the COVID-19 situation. Even with the government support measures, the tourists who came visited the province mainly on weekends and public holidays, and did not spend much during such short periods of time.

Recently, Samut Songkhram province has organized several tourism events and exhibitions to encourage tourists to visit a variety of places throughout the year. This is to stimulate tourism within Samut Songkhram Province according to the tourism calendar which is shown in the following table (Statistical Office Samutsongkhram, 2020).

Impacts of COVID-19 on local tourism, tourist attractions, local products, and souvenirs

In the literature review on the impacts of COVID-19 on local tourism, Mulder, N. (2020) studied the impacts of the COVID-19 outbreak on the tourism sector in Latin America and the Caribbean, as well as their development approach for sustainable recovery after COVID-19. The research found a wide area being affected by COVID-19 as tourism is the main source of income and employment.

It is also a major generator of foreign exchange across Latin America as well as contributing to 42% and 10% of total (goods and services) exports in the Caribbean and in Latin America, respectively. However, the "tourism economy" in Latin America is approximately 2.5 times larger than the tourism sector in the Caribbean.

This suggests that tourism is linked to fields such as agriculture, food, beverages, construction, transportation, recreation industry, and other services, which directly affect the

employment of people in the region. This is because tourism is labor intensive, accounting for 17% of direct employment in the Caribbean and 4% in Latin America.

Nonetheless, some countries (Antigua and Barbuda, St. Lucia, St. Kitts and Nevis, and the Bahamas) also consider indirect employment, which results in more than double the share of direct employment, especially in the Caribbean.

The tourism economy accounts for 35% of jobs in the Caribbean and 10% in Latin America, thus it is a key driver of the cities, especially in the post-COVID-19 recovery. This is because it creates employment opportunities for specialists and professionals and also attracts migrants to the countries in the region, many of whom work more in lower-skilled jobs than the locals.

In the literature review on the impact of COVID-19 on local products and souvenirs, Elango (2020) studied the impact of COVID-19 on tourism and business in Thailand.

He explained that in addition to the significant impact on public health, the COVID-19 pandemic, which quickly spread across the world in a matter of weeks, has also severely affected one of the cornerstones of the global economy, the tourism industry. This is due to curfews and travel restrictions enforced by many countries to avoid the spread of the virus, and as a result, worldwide travel was almost completely halted in June 2020.

While passenger airlines have been experiencing unprecedented declines, other sectors in the tourism industry are experiencing a major setback from the closures of food and retail outlets selling souvenirs to tourists.

It was predicted that by 2021, revenue from souvenirs around world would shrink by more than 447.4 billion US dollars. As a result, tourism and travel operators' profits would be approximately 34.7% lower than in 2020. In addition, operator profits for 2021 were estimated to be significantly lower than \$712 billion.

Overall, the global travel and tourism industry is projected to lose 100.8 million jobs globally by 2022 due to the COVID-19 pandemic. The Tourism Authority of Thailand (TAT) stated that the number of foreign tourists could drop by 60%, from 39 million in 2019 to 16 million in 2020 April. The TAT Governor added that Thailand's tourism will not get better until effective vaccines are available which might take a year. TAT estimated that foreign tourism revenue will fall to 1 trillion baht, down from 1.9 trillion baht in 2019.

Research methodology

A Survey is a mixed-method study. It combined quantitative research conducted with tourism start-ups and social enterprise in Samut Songkhram province (Statistical Office Samut Songkhram, 2020) with qualitative research using focus group interviews which were held with stakeholders in the tourism sector of Samut Songkhram Province who are involved in the new normal lifestyle technology development. The research procedure is as follows:

Determination of population and sample

The population used in this study was made up of 210 tourism start-ups and social enterprises in Samut Songkhram Province (Statistical Office Samut Songkhram, 2020).

The data explored include (1) basic information on tourism in Samut Songkhram Province and the (2) impact of COVID-19 on the tourism sector in Samut Songkhram Province.

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The sample group was selected using cluster random sampling, which is random sampling from a scattered population, causing difficulty in framing the population, or a population where groupings are naturally formed geographically (Ribeiro et al., 2018).

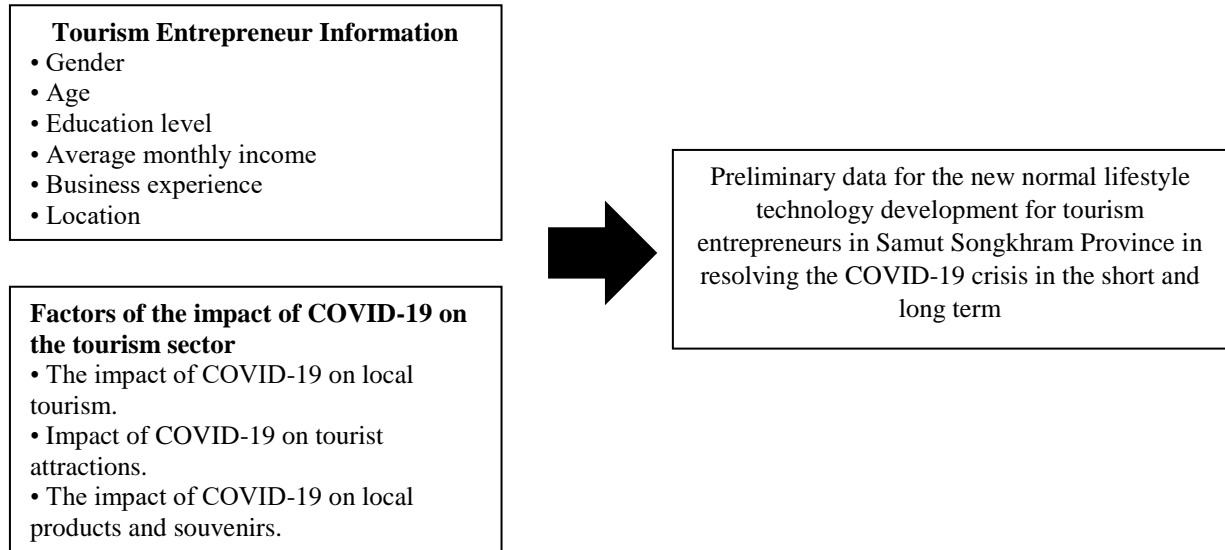


Figure 1 - Research Conceptual Framework
(made by the author)

Table 2 - Numbers of population and samples (tourism start-ups and social enterprises in Samut Songkhram Province)
(made by the author)

Tourism start-ups and social enterprises in Samut Songkhram Province	Number of population	Number of samples	Percentage
1. Muang District	153	74	35.32
2. Amphawa District	213	102	49.18
3. Bang Khon Tee District	71	34	16.39
Total	437	210	100

Research instruments

A questionnaire was used as the research instrument in this study. The researcher started with reviewing related literature, concepts, and theories to define a practical definition and determine the structure of the variables to be studied.

A questionnaire was then created based on the practical definition and developed questions that have been tried and adjusted to suit the research objectives in exploring the basic information of tourism entrepreneurs and the impact of COVID-19 on the tourism sector in Samut Songkhram Province.

The measuring tool used was based on the work of Mulder (2020) and the issues explored include (1) the impact of COVID-19 on local tourism, (2) the impact of COVID-19

on tourist attractions, and (3) the impact of COVID-19 on local products and souvenirs. The Five-point Likert-type Scale was used to measure the impact of COVID-19 on the tourism sector in 15 multi-item scale questions.

An example of the questions is “do you think your business has been affected by the COVID-19 pandemic as it impacts the number of tourists visiting tourist attractions in the area?”. The questionnaire was then submitted to 5 experts in innovation and technology affecting the potential of tourism entrepreneurs in Samut Songkhram Province.

The experts were to evaluate the content of the questionnaire, including the aspects of content validity, questionnaire comprehensiveness, appropriateness, and linguistic clarity. The content validity analysis of the entire questionnaire was found to be 70% or higher, or with the IOCs between 0.70–1.00. As for reliability, the calculated confidence value for the questionnaire is 0.843.

Data Collection

The researcher studied and collected data from both qualitative and quantitative data as follows:

Qualitative data

Qualitative data were collected to confirm the survey results. Focus group interviews were held with stakeholders in the new normal lifestyle technology development in the tourism sector of Samut Songkhram Province.

The 15 participants include (1) 5 executives involved the new normal lifestyle technology development, (2) 5 start-up entrepreneurs, and (3) 5 social enterprise entrepreneurs.

Based on the Delphi Method: Techniques and Applications by (Turoff & Linstone, 2002), these interviews aimed to explore basic information on tourism in order to develop the new normal technology for tourism entrepreneurs in Samut Songkhram Province and to help them resolve the COVID-19 crisis in the short and long term.

Quantitative data

Quantitative data were collected using a questionnaire created from the literature review in Part 1. The questionnaire was given to 210 tourism start-ups and social enterprises in Samut Songkhram Province (Samut Songkhram Provincial Office of Tourism and Sports, 2020), covering questions on (1) basic information on tourism in Samut Songkhram Province and the impact of COVID-19 on the tourism sector in Samut Songkhram Province.

The sample group was selected using cluster random sampling, which is random sampling from a scattered population, causing difficulty in framing the population, or a population where groupings are naturally formed geographically (Ribeiro et al., 2018).

The overall characteristic of each cluster is being generally homogenous, yet there are differences or diversity in its entirety, in order to reduce the error in population's parameter estimation.

Data analysis

The aforementioned data were used in analysing the levels of opinion regarding the impact of COVID-19 on the tourism sector in Samut Songkhram Province, in which descriptive statistics such as mean and standard deviation were used.

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The data were then processed with Exploratory Factor Analysis (EFA) using Principal Component Analysis (PCA) to obtain the important variables of COVID-19 impact factors affecting the tourism sector in Samut Songkhram province.

In this, an advanced statistical method, Exploratory Factor Analysis, was used for the Factor Analysis.

Research results

The results of the opinion level analysis regarding the impact of COVID-19 on the tourism sector in Samut Songkhram Province, which was conducted using descriptive statistics, revealed that the respondents' opinion on the impact of COVID-19 on tourist attractions was at the highest level ($\bar{X}= 4.40$ S.D. = 0.50) (Tab. 3).

The opinions on the impact of COVID-19 on tourist attractions are listed, from the item with the highest mean to the lowest, as follows:

(1) The respondents felt that COVID-19 has had an impact on tourism businesses in Samut Songkhram province, requiring them to prepare a COVID-19 prevention plan which must include checklists and guidelines for infection prevention according to government standards ($\bar{X}= 4.49$ S.D. = 0.66).

(2) The impact of COVID-19 requires businesses to adopt technology to reduce direct in-person contact while dealing with business partners for hotels, transportation, and tourist attractions, in order to reduce infection risk according to the standards set by the government ($\bar{X}= 4.41$ S.D.=0.77).

(3) The impact of COVID-19 requires businesses to develop staff healthcare guidelines with periodic health checks according to the standards set by the government, while measures must be taken according to the recommendations of the World Health Organization in case a staff member is infected ($\bar{X}= 4.39$ S.D.= 0.70).

(4) The impact of COVID-19 requires businesses to provide sufficient standardized personal protective equipment (PPE) such as masks, face shields, etc. ($\bar{X}=4.37$ S.D.= 0.73).

(5) The impact of COVID-19 requires businesses to provide safe operation alternatives such as advance ticket sales, limited entry period for each group, etc. ($\bar{X}= 4.33$ S.D. = 0.71).

As for the Exploratory Factor Analysis (EFA) of the impact of COVID-19 on the tourism sector in Samut Songkhram, the factor (2) of the impact of COVID-19 on tourist attractions was found to have factor loading between 0.503 to 0.736, with an eigen value of 2.217 and a percent of variance at 14.777. This indicates that all 5 variables together were best in describing the factors. These factors are listed in accordance with their factor loading, from highest to lowest as follows:

(1) The impact of COVID-19 requires businesses to adopt technology to reduce direct in-person contact while dealing with business partners for hotels, transportation, and tourist attractions, in order to reduce infection risk according to the standards set by the government.

(2) The impact of COVID-19 requires businesses to provide sufficient standardized personal protective equipment (PPE) such as masks, face shields, etc.

(3) The impact of COVID-19 requires businesses to develop staff healthcare guidelines with periodic health checks according to the standards set by the government, while measures must be taken according to the recommendations of the World Health Organization in case a staff member is infected.

(4) The impact of COVID-19 requires businesses to provide safe operation alternatives such as advance ticket sales, limited entry period for each group, etc.

(5) The impact of COVID-19 requires tourism businesses in Samut Songkhram province to prepare a COVID-19 prevention plan which must include checklists and guidelines for infection prevention according to government standards. All these factors accounted for the percent of variance at 14.777.

Table 3 - Results of opinion level analysis regarding the impact of COVID-19 on the tourism sector in Samut Songkhram Province as demonstrated using descriptive statistics
(made by the author)

The impact of COVID-19 on the tourism sector in Samut Songkhram Province	Opinion level		
	\bar{X}	SD	Interpretation
The impact of COVID-19 on tourist attractions	4.40	0.50	Highest
1. The impact of COVID-19 requires tourism business in Samut Songkhram province to prepare a COVID-19 prevention plan which must include checklists and guidelines for infection prevention according to government standards	4.49	0.66	Highest
2. The impact of COVID-19 requires businesses to adopt technology to reduce direct in-person contact while dealing with business partners for hotels, transportation, and tourist attractions, in order to reduce infection risk according to the standards set by the government	4.39	0.70	Highest
3. The impact of COVID-19 requires businesses to provide sufficient standardized personal protective equipment (PPE) such as masks, face shields, etc.	4.37	0.73	Highest
4. The impact of COVID-19 requires businesses to adopt technology to reduce direct in-person contact while dealing with business partners for hotels, transportation, and tourist attractions, in order to reduce infection risk according to the standards set by the government	4.41	0.77	Highest
5. The impact of COVID-19 requires businesses to provide safe operation alternatives such as advance ticket sales, limited entry period for each group, etc.	4.33	0.71	Highest

Conclusion

The analysis results revealed that the impact of COVID-19 on tourist attractions was viewed to be at the highest level ($\bar{X} = 4.40$, S.D. = 0.50) and the highest factor loading was 0.736. Therefore, it is necessary for businesses to develop a COVID-19 prevention plan which must include checklists and guidelines for infection prevention according to government standards.

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This can be done by using technology to reduce direct in-person contact while dealing with business partners for hotels, transportation, and tourist attractions, in order to reduce infection risk according to the standards set by the government.

They should also stipulate staff healthcare guidelines and ensure periodic health checks according to the standards set by the government, while measures must be taken according to the recommendations of the World Health Organization in case a staff member is infected. Lastly, businesses must provide sufficient standardized personal protective equipment (PPE) such as masks, face shields, etc.

Table 4 - Factor loading for COVID-19 impact on tourist attractions
(made by the author)

Variable	Description of the variables of the COVID-19 impact on tourist attractions	Factor loading
1	The impact of COVID-19 requires tourism businesses in Samut Songkhram province to prepare a COVID-19 prevention plan which must include checklists and guidelines for infection prevention according to government standards.	0.503
2	The impact of COVID-19 requires businesses to develop staff healthcare guidelines with periodic health checks according to the standards set by the government, while measures must be taken according to the recommendations of the World Health Organization in case a staff member is infected.	0.614
3	The impact of COVID-19 requires businesses to provide sufficient standardized personal protective equipment (PPE) such as masks, face shields, etc.	0.619
4	The impact of COVID-19 requires businesses to adopt technology to reduce direct in-person contact while dealing with business partners for hotels, transportation, and tourist attractions, in order to reduce infection risk according to the standards set by the government.	0.736
5	The impact of COVID-19 requires businesses to provide safe operation alternatives such as advance ticket sales, limited entry period for each group, etc.	0.512
Eigen value		2.217
Percent of variance		14.777

This is in line with Rastati (2020) who conducted the study “Virtual Tour: Tourism in the Time of Corona” in Indonesia. According to the study, since the emergence of COVID-19 in Indonesia in early March 2020, visits to the country's tourist attractions have changed, and many people have been faced with delayed activities, flight cancellations, and tourist attraction closures.

Large-scale Social Restrictions (Pembatasan Sosial Berskala Besar: PSBB) lasting for months prevented people from travelling.

However, during the COVID-19 pandemic, there were at least dozens of local tour platforms offering virtual tours via Zoom and Google Meet, for instance, Jakarta Good Guide and TelusuRI.

The results revealed that while virtual tours were found to cause a loss of real-world travelling experiences, they provided more public health safety.

However, unstable internet connections were also found to be a weakness of this system. Although virtual tours might not be able to replace traditional travel, they are another option for travel lovers to enjoy some relaxing experiences during the COVID-19 restricted travelling period.

This also corresponds with McBride et al. (2020), who explored the survival of souvenir retailers in the wake of the COVID-19 pandemic. It was noted that major holiday seasons, such as Christmas, are usually considered the prime times of the year when large sums of money are spent on family meals and gift exchanges, and visitors usually buy gifts or souvenirs to take part in these special seasons as well.

However, because people have been practicing social distancing to protect themselves from the rapidly spreading COVID-19 pandemic, they were found to shop for souvenirs and gifts more online.

Thus, it was necessary for retail businesses to develop online marketing techniques, as well as partnerships with logistic operators as the shipping process can be a source of increased costs resulting in a higher price of goods and souvenirs when compared to the same period in the previous year.

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