

# Tourist' Satisfaction on Covid-19 Preventive Measures of Floating Market: An Anonymous Floating Market Case Study at Nakhon Pathom, Thailand

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## ABSTRACT

*Floating markets are not only a unique type of market but also sustainable tourist attractions. The literature focuses on both of floating market Covid-19 preventive measures and tourist' satisfaction dimensions. The study is using quantitative research by concentrated on the tourist's satisfaction of an anonymous Floating Market in Nakhon Pathom province. The research concentrated on the floating market Covid-19 preventive measures and the tourists' satisfaction. The visitors certainly got great enjoyment from the floating market and this resulted in overall good experience for them better than most of them expected. The most important of Covid-19 preventive measures factors for the tourists were the provide clear entry, exit routes and screening point, merchants and customers always wear masks and provide hand washing points. The tourism component clearly overshadowed the destination shopping experience. The close proximity of the market to Bangkok contributes to the success of this market and the perceived satisfaction of the tourists.*

**KEYWORDS:** Market; Tourist' satisfaction; Destination tourism; Shopping experience; Covid-19; Preventive measures.

## 1. Introduction

Floating markets have a long history in Thailand, stemming from a time where roads between the frequently flooded rice paddies were rare. Canals called Klongs irrigated the fields and were the natural waterways suitable for the transport of people and cargo. This cargo was often the products of the local farmers and these goods were sold on the way to Bangkok and in Bangkok. Out of these local markets developed in locations where human settlements were and the river widened. Instead of selling on land the goods were sold from the small boats and on the narrow wooden landings and sidewalks. The sidewalks are adjoined by wooden homes and a romantic rural setting developed. This type of architectural context attracted shoppers from the nearby big city Bangkok and out of a farmer market developed a tourist attraction. The floating market became

a shopping destination as well as a place to enjoy local foods and local customs with a special local touch such as the volcano style shrimp boils (hot pan prawns). The floating market is circa 30 km outside of Bangkok located on the banks of on the Nakhon Chai Si river. Not far from Wat Rai Khing and the Phra Pathom Chedi which makes it a unique and convenient tourist destination for Thai locals and foreign visitors alike. These waterfront communities are a unique setting for local farmer markets which are currently in; in our political correct green society of left wing tree huggers, who like to eat organic vegetables and fruits. But floating markets are more than only tourist attractions as described in the 2012 Matini book, they serve a real purpose for the local community to provide income while preserving local culture and traditions while serving domestic and international tourists alike.

Tourism considers as economic driven machine and has been identified as the one hard hit by Covid-19 spreading. The Covid-19 spreading introduction of preventive measures for tourism destination such as floating market which

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focused on sanitary approaches and social distancing methods. Currently, the widespread of Covid-19 is relatively stable, the tourist is starting to travel again. The Covid-19 preventive measures are still imposed at the floating market for customer safety then the study on tourist' satisfaction is really important for floating market adaptation. It is therefore of utmost importance to find out how to best serve the customers and satisfy the tourists and their needs.

## 2. Literature Review

### 2.1. The importance of floating market

There exists a relative rich body of literature on floating markets. The literature concentrates on floating markets in Thailand as they are unique in nature and don't compare with relative small floating markets in other countries like Vietnam, Laos, and Cambodia. The 1994 book "The Floating Markets of Bangkok" by Jan Maguines and photos by Gene Rickney is more a tourist guide book. The academic floating market studies in chronological order start with Thaprasoet, B. (2009) who studied on the cultural tourism by using floating market community engagement. The Thai Office of Tourism and Sport (2010a) conducted a study of the Don Wai floating market and (2010b) Lam Phaya floating respectively. Inkochasan (2011) presented the ecotourism aspect by introducing one of floating market as a case study. Luekveerawattana in 2012 explored the sustainable tourism and the relationship between culture and environment of floating market. Van der Duim, R et al., 2013 wrote a research article on ANT (actor-network theory) which gave a floating market as view point in the three components such as materiality, ordering and multiplicity. Vajirakachorn, T., & Nepal, S. K. (2014) studied on the tourism local based where using Amphawa Floating Market as a case study and give the details of local based tourism which created a heritage and innovation tourism management for floating markets. While Chetanont, S. (2014) recommended the health related relaxational activities for elderly citizens by floating market. If the elderly people come to the floating market, they will have a recreation in the mind. While Batra (2014) demonstrated the need between merchants and customers on the floating market where the customers satisfaction happened by merchants services. Denpaiboon, C. (2015) guided the sustainable tourism destination is the floating market, it is

very useful for customer visiting destination. Wattanacharoensil, W. & Sakdiyakorn, M., (2015) described that floating market creates the creative tourism business as the floating market offers the new experience for both vendors and customers. Sakdiyakorn, M. & Sivarak, O. (2016) gave the definition of innovation management for floating market as the cultural attractions. Cohen, E. (2016) said that the floating market is the trading centre for vendors and tourists who have cultural exchange during their trading. Thongpanya, T. (2017) said that the floating market changed the way of community life from agriculture business to tourism destination. Takanori, I & Chaweewan, D., (2017) crated the floating market map by using the criteria of location, product, target customers and waterways. This can be considered the landmark paper on floating markets. This paper is a truly rigorous scholarly work of international standard, written by a Japanese researcher with true findings. In one of the most recent studies of Chalernmpat, et al., (2018) explored the broad range of floating market which consists of community identities, cultural tourism architecture and waterfront communities.

### 2.2. The Covid-19 influenced and preventive measures

The widespread of Covid-19 has more influenced on tourism industry which received the negative trends of tourist number declined. In the emerging economic countries received the hard hit of economic slowdown which caused from Covid-19 pandemic as tourism is the fundamental of economic engine (Cambra-Fierro, et al., 2022). During the Covid-19 pandemic, many small and medium size entrepreneurs have developed new business strategies by introducing innovation products and marketing (Weizheng, et al., 2022). Commitment to the Covid-19 preventive practices is a fundamental for virus control, particularly during lack of effective medicine for Covid-19 control. The high risk groups such as students must commit to the Covid-19 preventive measures as they are considered high risk group based on their activities (Haytham Mahmoud, 2022).

## 3. Research Methods

The objective of this research was to searching for the customer's satisfaction of Covid-19 preventive measures from floating market and presents the outcomes for floating market

Covid-19 preventive measures improvement which will creates competitive advantage for the floating market. In this research, we are looking for the answers from our questions such as:

1. What is the important Covid-19 preventive measures variables?
2. How does Covid-19 preventive measures variables work?
3. What is the customers' satisfaction factors from Covid-19 preventive measures?

This research study used the qualitative research method for customers' satisfaction variables identification and final variables which capture from customers' satisfaction were used for questionnaires. The research used the questionnaires as a research instrument

which developed from primary investigator (PI) from qualitative method. Decrop, A. (2004) described the pretested methodology by using the ontologies, methodologies and epistemologies which came from tourists' interview.

This research is focused on 200 tourists who visiting the anonymous floating market on Saturday and Sunday. Generally, the floating market layouts and nature surrounding Bangkok area are similar then this floating market is suitable for a good floating market representative. The percentage, Mean and SD statistics have been used for descriptive statistics and multiple regression analysis has been used for variables relationship analysis.

**Tab. 1. Tourists' demographics**

Tourists' demographics	Count	Percentage
<i>Gender of Tourists</i>		
1.Male	87	43.0
2.Female	113	57.0
Total	200	100.0
<i>Tourists' Age</i>		
1.Less than 20 years	26	13.0
2. Between 21-30 years	47	23.5
3.Between 31-40 years	63	31.5
4.Between 41 –50 years	30	15.5
5.Between 51 –60 years	25	12.5
6 .Over 60 years	9	4.0
Total	200	100.0
<i>Tourists' Education Level</i>		
1.< Bachelor degree	63	31.5
2.Bachelor degree	116	58.0
3.> Bachelor degree	21	10.5
Total	200	100
<i>Tourists' Occupation</i>		
1.The student	42	21.0
2. An Unemployed	32	16.0
3.An Employee	31	15.5
4.The Government service	27	13.5
5.The Stage enprise	35	17.5
6.Self Employed	25	12.5
7.Others	8	4.0
Total	200	100
<i>Tourists' Monthly Income level</i>		
1. Under 500 USD	56	28.0
2.501-833 USD	66	33.0
3.834-1,166 USD	54	27.0
4.1,167-1,500 USD	11	5.5
5.1,501-1,833 USD	4	2.0
6. Over 1,834 USD	9	4.5
Total	200	100.0
<i>Tourists' Place of Residence</i>		
1. Neighbourhood of Floating market	48	24.0
2. Surrounding Bangkok	89	44.5
3. Leaving at Central Thailand	28	14.0
4.Leaving at North Thailand	4	2.0
5.Leaving at Eastern Thailand	11	5.5

6. Leaving at Western Thailand	12	6.0
Total	200	100
<i>Tourists' Frequency of Visits</i>		
1. Visiting the first time	30	15.0
2. Visiting the second times	37	18.5
3. Third times	38	19.0
4. More than three times	95	47.5
Total	200	100

Source: Author

Table 1 shows the female are the tourists' majority (57%) and they are under 40 years old with a below and university undergraduate degree. The majority occupation of the participants in the research were employed and earned fewer than 833 USD/month. Only a small percentage made over 1,834 USD. It shows that mostly lower-income customers come to this market which provides them on the variety of product prices. The vast majority of the tourists came from Bangkok, followed by visitors from the immediate surrounding area of the floating market fewer visitors came from other parts of Thailand. In the floating market, international tourists were also present but the foreign tourists were not surveyed at this time as it is very difficult for foreign tourist come to Thailand at this time, it will be the subject of another study.

The sample was surveyed by either first-time tourists or more than one-time visitors who are visiting the floating market during the research

was done. The majority of visitors came more than three times to the market and can be considered repeat customers. It can be assumed that their mean purpose for coming to the market was food and commodity products shopping and can be considered destination shoppers rather than tourists in the context of this research.

## 4. The Research Findings

### 4.1. Floating market covid-19 preventive measures

Table 2 shows the tourists displayed a high preference for provide clear entry, exit routes and screening point (3.81), merchants and customers always wear masks (3.79), panel and market areas have been clean every day (3.78), social distancing is fully coordinated (3.63), provide hand washing points (3.47), provide the lidded waste containers this was found to rank lower on the survey (3.44) was the lowest of all the items surveyed.

**Tab. 2. Floating market Covid-19 preventive measures**

Floating Market Covid-19 Preventive Measures	Mean	S.D.	Results	Rank
1. Provide clear entry, exit routes and screening point	3.81	.792	High	1
2. Merchants and customers always wear masks	3.79	.885	High	2
3. Panel and market areas have been clean every day	3.78	.874	High	3
4. Social distancing is fully coordinated	3.63	.864	High	4
5. Provide hand washing points	3.47	.961	High	5
6. Provide the lidded waste containers	3.44	.954	High	6
Total	3.65	0.73	High	

Source: Author

### 4.2. Tourist and satisfaction

Table 3 shows the tourists looked mainly for enjoyment from the floating market (4.02) by a good experience from the floating market (4.00) only a few (3.90) felt it was better than expected. The questions of the tourists need to be benchmarked in a follow-up study to this first study of the market and the tourist

satisfaction dimension. Overall these appear to be very vague answers and more probing will be required in a follow-up study to find the true motives and reasons for satisfaction with the market and the particular items. The follow-up study may be a qualitative study asking for the perceptions of the tourists in open-ended questions and interviews.

**Tab. 3. Tourist satisfaction**

Tourist's Satisfaction	Mean	S.D.	Results	Rank
1. Get enjoyment from floating market	4.02	.630	High	1
2. Get a good experience from floating market	4.00	.723	High	2
3. Better than expected	3.90	.753	High	3
Total	3.97	.630	High	

Source: Author

**4.3. Regression analysis - tourist satisfaction**

The regression analysis of six Covid-19 preventive measures (independent variables) has been analysed as the results in Table 4, reflecting the questions asked of the respondents:

1. Provide clear entry, exit routes and

screening point (I<sub>1</sub>)

2. Merchants and customers always wear masks (I<sub>2</sub>)
3. Panel and market areas have been clean every day (I<sub>3</sub>)
4. Social distancing is fully coordinated (I<sub>4</sub>)
5. Provide hand washing points (I<sub>5</sub>)
6. Provide the lidded waste containers (I<sub>6</sub>)

**Tab. 4. Regression analysis of floating market Covid-19 preventive measures variables**

Covid-19 preventive measures variables	I <sub>1</sub>	I <sub>2</sub>	I <sub>3</sub>	I <sub>4</sub>	I <sub>5</sub>	I <sub>6</sub>
I <sub>1</sub>	-	.614**	.657**	.137	.608**	.626**
I <sub>2</sub>	-	-	.750**	.261**	.495**	.507**
I <sub>3</sub>	-	-	-	.196**	.571**	.588**
I <sub>4</sub>	-	-	-	-	.150*	.229**
I <sub>5</sub>	-	-	-	-	-	.767**
I <sub>6</sub>	-	-	-	-	-	-

\*P < 0.05

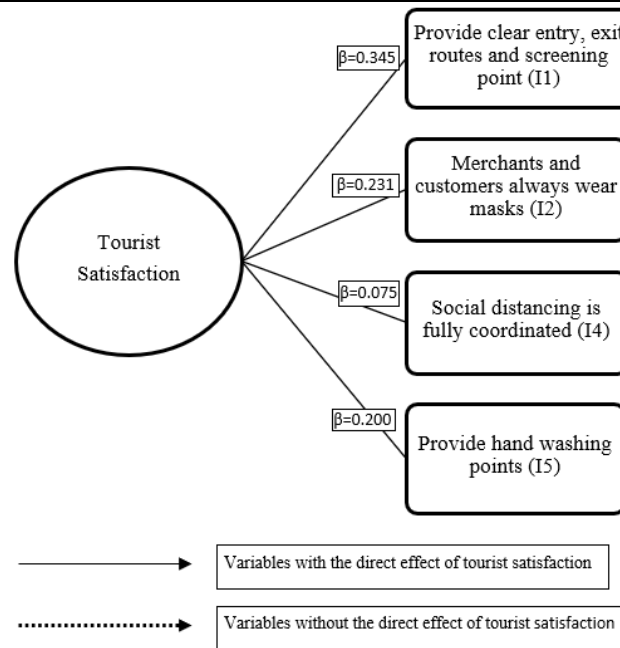
**Tab. 5. Multiple regression equations between floating market Covid-19 preventive measures and tourist's satisfaction**

Floating market Covid-19 preventive measures	Standard regression coefficients (Beta)	t	p-value
1. Provide clear entry, exit routes and screening point (I <sub>1</sub> )	.345	4.658	.000*
2. Merchants and customers always wear masks (I <sub>2</sub> )	.231	3.344	.001*
3. Social distancing is fully coordinated (I <sub>4</sub> )	.075	1.383	.168
4. Provide hand washing points (I <sub>5</sub> )	.200	2.983	.003*
R <sup>2</sup> = 0.467      Adj R <sup>2</sup> = 0.456			
F = 42.638      Sig = 0.000			

Source: Author

Table 5 shows the multiple regression analysis between floating market Covid-19 preventive measures and tourist's satisfaction. The independent variables, provide clear entry, exit routes and screening point, merchants and customers always wear masks and provide hand washing points have positive impact on tourist's satisfaction statistically significant at 0.05 level. However, the social distancing is

fully coordinated variable is not had impact on tourist's satisfaction. It means when provide clear entry, exit routes and screening point, merchants and customers always wear masks and provide hand washing points one standard has been changed, will make tourist's satisfaction variable changed at the same direction 0.345, 0.231 and 0.200 respectively.



**Fig. 1. Multiple regression equations between Floating Market Covid-19 preventive measures and Tourist's Satisfaction**

From Figure 1, provide clear entry, exit routes and screening point, merchants and customers always wear masks, and provide hand washing points have direct effect on tourists' satisfaction which has Standard Regression Coefficients at 0.345, 0.321 and 0.200 respectively. However, social distancing is fully coordinated has indirect effect on tourists' satisfaction which has Standard Regression Coefficients at 0.075.

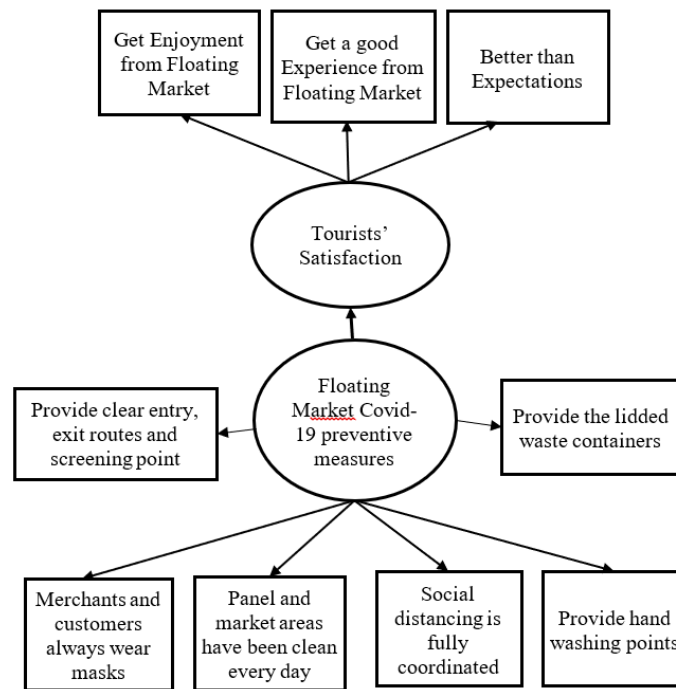
### 5. Conclusions

There are a number of conclusions to be reached from this study in terms of tourist satisfaction with the floating market Covid-19 preventive measures. The tourists are most interested in the clear entry, exit routes and screening point of the market followed by the merchants and customers always wear masks and the panel and market areas have been clean every day. The lidded waste containers providing came after this only ranked lower on the Covid-19 preventive measures. The tourists stated that they got great enjoyment out of the floating market which was overall a good experience and better than they expected. The question that comes to mind is what did the tourists expect from the floating market, what is their comparison? What is defined as a good experience? A good experience compared to shopping at other floating markets or at the local supermarket or department store? What were their expectations at the outset how many floating markets have they visited before? The

tourists are interested in the clear entry, exit routes and screening point of the floating market, does that mean they like this particular market so much as it shows the good responsibility for both merchants and customers who are having activities at the floating market. This is in contradiction with the finding of the study that the lidded waste containers ranked very low as the floating market does not have a good design and location for waste containers. This market is certainly naturally grown in comparison with other markets like the floating market in Pattaya which is a manmade lake with canals as side arms and poor water circulation and a build environment that comes closer to a movie backdrop than to the real build environment. The regression analysis confirmed the close relationship between tourist satisfaction and the independent variables, clear entry, exit routes and screening point providing, merchants and customers always wear masks and social distancing is fully coordinated. This means the clear entry, exit routes and screening point providing of the market ranks high with the visitors, even higher than the social distancing is fully coordinated. It is clear that tourists are concerning about the clear entry, exit routes and screening point in our study as it will reduce their shopping time and build their confident on floating market customer temperature screening. The tourists certainly got enjoyment from the floating market and it resulted in a good experience for them better

than they expected. It is hoped that these findings can be generalized after being tested at

other markets to develop the following model that was developed by the researcher.



**Fig. 2. Research conceptual framework**

**6. Recommendations**

As this research was done in the small sample and only one anonymous floating market. It will be clear to replicate this conceptual framework study across floating market in Thailand, particularly floating market around Bangkok area. More suggestion is to do a research after the Covid-19 declare as endemic disease to see how customers impressions may vary from this study and the floating market will apply new Covid-19 preventive approaches of their disease prevention. We could also expand this study and introduce new variables that focus on the gaps in the current study especially the full vaccinated tourists. There is also a need for a good academic book on floating markets in Thailand which concentrated on Covid-19 pandemic situation. The current literature is either scientific articles or tourist guide books to the various floating markets in Thailand. There is not one comprehensive book on Thai floating markets under Covid-19 situation which considered as a crisis management.

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