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An Exploratory Study of Identifying Critical Success Factors for Customer Preferences in Medical Tourism Supply Chain using MAXQDA 2022

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Medical tourism is one of the significant industries that drives the economies countries and leads other domestic business sectors grow parallelly. Therefore, the purpose of this research is to identify the critical success factors for customer preferences in Thai medical tourism supply chain. Semi-structure interview was chosen to collect data from ten rich experienced practitioners from JCI accredited hospitals in Thailand. Researchers employed qualitative approach based on the interpretivism philosophy to gain current facts of customers' preferences and insights from dynamic phenomenon within medical tourism industry. Researchers employed thematic analysis approach to classify the factors by adopting MAXQDA 2022. MAXQDA 2022 is selected as the efficient qualitative software to rigorously analyze and display the results. The finding from this research provides medical tourism policy makers and its stakeholders build their awareness of 10 critical success factors affecting the growth of Thai medical tourism industry and enable them to take potential actions in advance for potential medical tourists in the future.

CCS CONCEPTS •Applied computing~Operations research~Industry and manufacturing~Supply chain management •General and reference~Document types~Surveys and overviews

Additional Keywords and Phrases: MAXQDA2022, qualitative approach, medical tourism, customer preference, critical success factors, medical tourism supply chain, Thailand

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1 INTRODUCTION

The rapid evolution of medical tourism industry deserves research attention from scholars and practitioners due to the growing economies countries and leads relevant domestic business sectors generating the revenue parallelly [1, 2]. To date, there is limited empirical research investigating critical success factors for customers' preferences in Thai medical tourism. Therefore, the purpose of this research is to identify the critical success factors for customer preferences in Thai medical tourism industry. The reminder of this paper is organized as follows. In section 2, medical tourism industry understanding, and customer preferences are explained through comprehensive literature review. Then, the research methodology is discussed in section 3. Data analysis and findings are presented in section 4. Finally, conclusion and research direction are drawn in section 5.

2 LITERATURE REVIEW

This section provides the literature review relevant to a medical tourism industry background, customer preferences affecting the potential customers and the critical success factor for Medical tourism supply chain.

2.1 Medical tourism supply chain in Thailand

To date, there have been still no consensus of the exact definition of medical tourism [3-5]. But generally, medical tourism is defined as itself industry as the healthcare service providers offering medical treatments to the international patients or medical tourists [6], [7], [8]. Medical tourism industry has grown rapidly since 2000s based on the global industry competition especially within Asia region such as Thailand, South Korea, Malaysia, Singapore per se [3, 9]. Accordingly, the exact choice of destination from medical tourists are reluctant during the midst of global COVID-19 pandemic but international healthcare communities [8] agree that the amount of medical tourists will return as normal level mainly based on affordable price with high quality. Thailand as a destination for medical tourism deserves research attention for academics and practitioners [10], [11], [1]. Thailand is dominated as a popular medical tourism destination with 40 million people in 2019 and reaching 3.4 THB trillion in revenue [12]. Thailand also has the highest number of 66 JCI accredited hospitals (Joint commission international accreditation) across Asia region[13]. Supply Chain Management (SCM) has influential in business process from the starting point from suppliers through intermediary until the end point of customer consumption [14], [15]. SCM has generated the benefits and created the competitive advantages for firms such as demand planning, cost reduction, product management service quality management, valued chain management and so forth [15]. In regards to the integration of business in medical tourism industry, all related players; such as healthcare service providers, medical facilitators, policy makers, government, transport, hotel, tour operator, catering, tourist attraction managers per se; would shed lights on the challenging and opportunities on medical tourism targeted destination to generate the revenue and attract foreign investors to Thai property market [14]. Therefore, all players in medical tourism industry or the integration of key business in medical tourism defined as medical tourism supply chain. To understand the customer preferences and identify the critical success factors affecting the potential medical tourists, all players and stakeholders would take the consideration about the chain complexity and relationship of each critical success factor.

2.2 Customer preferences affecting decision-making

Numerous scholars have stressed the critical importance of customer preferences in medical tourism industry affecting customer satisfaction [2, 14, 16, 17]. The literature offers various customer preferences affecting their decision making to be the potential medical tourists, the top popular preferences are described in Table 1.

Table 1: Customer preferences in medical tourism from literature review

Customer preferences	Author (s)	Customer preferences	Author (s)
Cost	[4, 6, 9, 18, 19]	Tourism benefits	[5, 10, 14, 17]
Proximity/destination	[6, 10, 16, 20]	Accommodations	[7, 9, 11, 21, 22]
climates	[2, 7, 21, 23]	Visa requirement	[10, 12, 14, 24]
International accreditation	[1, 22, 25]	Safety	[1, 2, 5, 17, 20]
Professionalism	[9, 18, 22, 23]	Insurance coverage	[5, 17, 19]

Researchers adopted a broad view of customer preferences in Thai medical tourism to establish generic understanding and conduct the empirical study with the targeted research participants. However, there are other customer preferences to incorporate in Thai medical tourism, researchers chose ten factors (see Table1) representing Thailand and comprehensive literature review [3, 10-12, 17, 19].

2.3 Critical success factors

The critical success factor (CSF) was originated from [26] in 1980 which defined as “ the limited number of areas in which results, if they are satisfactory, will ensure successful competitive performance for the organization”. [27] also identified CSF as “the areas that must be critically taken care if institutions are to succeed”. Researchers chose to rely on the definition of [26] study based on their number of cited by several studies [28, 29]. In this study, researchers aim to identify the critical success factors for customer preferences in medical tourism industry based on the healthcare service providers perspective. The focal unit in medical tourism is the healthcare service provider. Therefore, after considering about aforementioned customer preferences, researchers intended to conduct deep understanding and gain insights in order to highlight the match between demand and supply sides. The result of this study expects to raise awareness to healthcare service providers considering their strengths and competitive advantages to the opportunities to attract the potential medical tourist in the future.

The vast majority of the work in medical tourism area has contributed to fill the knowledge gap in literature [4], [22] and most studies are quantitative approach [18], [23]. However, the novelty of this study is based on the empirical investigation of critical success factors for customers' preferences in medical tourism industry from experienced JCI healthcare service providers, Thailand. Additionally, we adopt the rigorous qualitative analysis software as MAXQDA 2022 to present the findings.

3 RESEARCH METHODOLOGY

This research aims to identify the critical success factors for customers' preferences from the healthcare service providers' perspective. This study adopts interpretivism to conduct people's interactions of the phenomenon and understand the individual viewpoints and opinions of each group [30], [31]. Interpretivism theoretical

perspective is appropriate for this study to gain a deep understanding and obtain the viewpoints through healthcare service providers' interaction [30]. Researchers, therefore, employed qualitative approach based on the interpretivism philosophy which provides the perspective of getting current facts of customers' preferences and insights from dynamic phenomenon within medical tourism industry.

3.1 Data collection

The semi-structure interview was selected to collect empirical data from high experience healthcare service practitioners. This study is an exploratory study which uncovers comprehensive information from Thai medical tourism industry. The interview protocol was developed based on the objectives of this study, existing literature review related to medical tourism and service supply chain management, and feedback from three academics in pilot study. All findings from pilot study were brought to edit and alter an interview protocol before using in an empirical stage. In the empirical stage, the researchers utilized an interview protocol to conduct primary data including four sections such as interviewee information, company profiles, current business situations in their hospitals, and potential critical success factors affecting customers' preferences. In order to gain insights and essential collected data, purposive sampling was chosen to ascertain the targeted respondents [32]. The inclusion criteria for selecting respondents were: 1) they have more than 5 years of working experience; 2) the selected targeted respondents must work in any type of medical tourism industry; 3) they used to have front-line experience of delivering service to customers; and 4) all healthcare service providers must meet accredited JCI standards (Joint commission International Accreditation) to ensure that hospital has always provided the commitment to improve patients' care and medical quality [25]. Thus, researchers recruited the amount of ten potential respondents from various 66 JCI accredited hospitals across Thailand [13]. The interview protocol was allocated 2 weeks in advance before conducting data and all interviews ranged between 30-60 minutes/session.

3.2 Data analysis

The empirical data collected through semi-structured interviews were analyzed using thematic analysis by qualitative software MAXQDA 2022 [33]. Researchers basically followed the thematic analysis process; including six steps; 1) familiarizing with collected data, 2) coding initial features, 3) searching relevant themes, 4) reviewing themes, 5) defining themes and 6) extracting and reporting results; based on [34], [35], [36] studies which mainly provided the critical steps of data transformation into the data interpretation. According to The General Data Protection Regulations (GDPR), a European Union law to protect user directive, researchers deliberately anonymized all personal information and replaced data directive as codes of number. All collected data, thereby, was refined and validated before importing through MAXQDA software to analysis [37]. To sum up, the justification of selecting thematic analysis approach is flexible to view and collect the healthcare practitioners' insights. Additionally, MAXQDA 2022 was selected as the efficient qualitative software to rigorously analyze the qualitative research and visualize results [38].

4 DATA ANALYSIS & FINDINGS

This section follows the thematic analysis based on [32], [36], [39] studies. [35] & [40] suggested that the code initiation step should arrange collected data into first- and second-order. The first round of raw data categorized as the descriptive code. Then, all quotes in descriptive code group were allocated to the second-order codes or interpretive codes. MAXQDA 2022 software was adopted in this stage in order to ensure the qualitative

results and track back and forth of raw data. The findings show its visualization through The Code Matrix Browser (CMB), which represents descriptive codes have been assign to each collected data files. The matrix illustrates the generic overview of how many codes have been assigned in the specific collected data [37].

The Code Matrix Browser interface consists of two main sections; 1) Documents or collected data files are listed in the column 2) Code shows in the row. The square symbols at the conjunction points mean the amount of code counting. The size of the square symbols represents the assigned codes in documents. The bigger square symbol, the more documents were assigned frequency for these codes.

The findings in this study are consistent with the previous research as mentioned in section 2.2 highlighting the results from the experts' opinion. Noted that, our findings are not generalizable beyond study sample because all collected data were conducted on the midst of COVID-19 pandemic. This means that results may vary after this point of analysis and time period in the future. The Figure 1 displays that healthcare service providers confirmed the customer preferences supporting the literature review. The most mentioned customer preference is 'convenience'. This preference refers to transportation, consultation booking and reservation system. The second preferences are 'affordable price' and 'reputation' and 'professionalism'. Customers or medical tourists also prioritize the medical treatment cost compared to their home country, the advancement of medical devices in some cases such as hip replacement, plastic surgeries and dental treatment. The least important customer preference is 'insurance coverage'. In general, medical tourists make decisions to obtain treatments across borders because the treatment cost is lower than insurance cost in their home country.

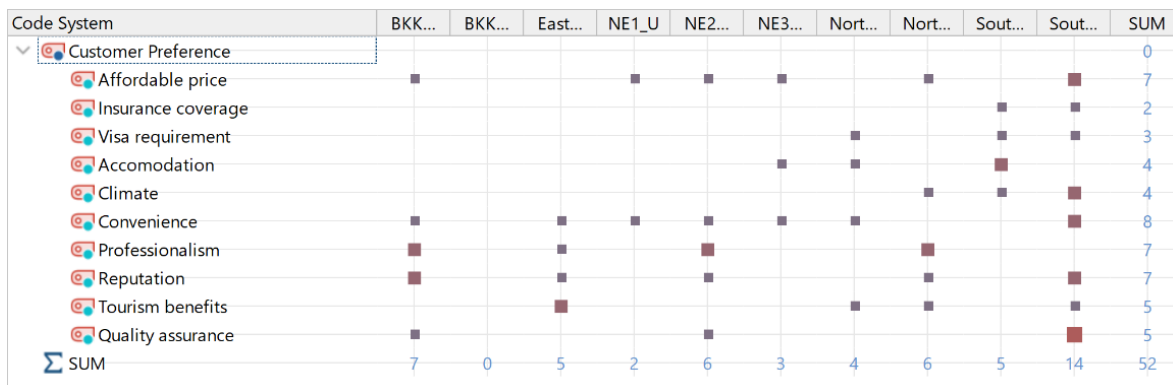


Figure 1: The customer preference results visualized from MAXQDA 2022

The Figure 2 demonstrates the ten critical success factors (CSFs) finding from healthcare service providers judgement such as JCI accreditation, medical facilitator, collaboration with local stakeholders, consultant accessibility, service readiness, cost consideration, courtesy service, languages interpretation, advertisement and short waiting time. The most important CSF is 'collaboration with local stakeholders'. In order to support the smooth customer journey, healthcare service providers need to incorporate with local stakeholders including accommodation, shopping mall, airlines, interpreter and so forth. The second mentioned CSF is 'advertisement'. This critical factor is highlighted from almost all healthcare service providers.

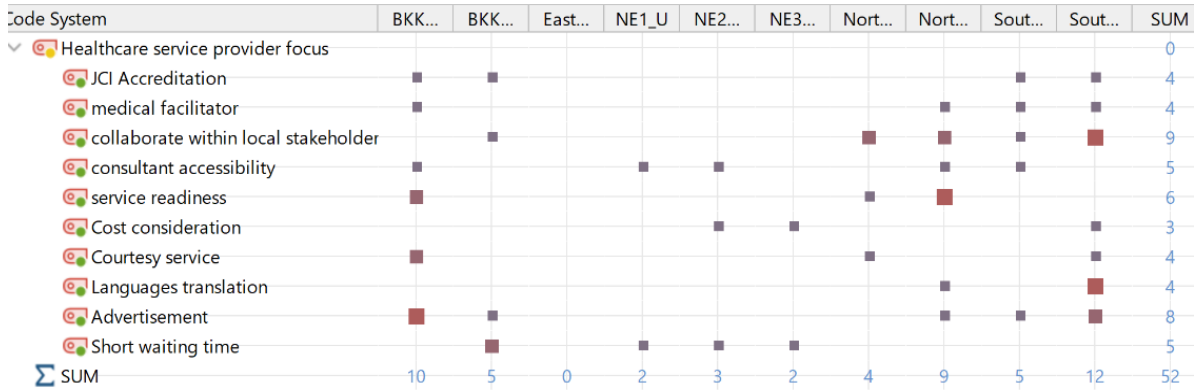


Figure 2: The critical success factors from healthcare service providers displayed from MAXQDA 2022

The second mentioned CSF is 'advertisement'. This critical factor is highlighted from almost all healthcare service providers. The advertisement for each targeted group is also having the different platform to communicate e.g. Chinese medical tourists perceived advertisement from Weibo [41] (Chinese microblogging website as the biggest social media platform) and Australian basically contact directly to the hospital especially about the tele-consultation before travelling to Thailand. Therefore, all critical success factors for Thai medical tourism industry are shown in Table 2.

Table 2: The critical success factors in Thai medical tourism from healthcare service providers

Critical success factors	References
Collaboration with local stakeholders	[9, 10, 14]
Advertisement	[11, 12, 16]
Service readiness	[1, 2, 18]
Short waiting time	[17, 19, 25]
Consultant accessibility	[2, 10, 14]
International accreditation	[13, 25]
Medical facilitators	[5, 13, 20]
Language interpretation	[4, 14, 18]
Courtesy service	[3, 6, 19]
Cost consideration	[3, 10, 20]

5 CONCLUSION

To sum up, considering the deep insights and knowledge of medical tourism industry is essential for scholars and practitioners. To achieve the purpose of this study is to identify the critical success factors for customer preference in medical tourism. The novelty of this study is based on an empirical study had been conducted through the semi-structure interview with ten rich experienced practitioners in JCI accredited hospital, Thailand. In addition, we adopted the rigorous qualitative analysis software as MAXQDA 2022 to visualize the findings.

The main results from empirical evidence indicated that 8 critical success factors from practitioners' views should be accounted for medical tourism including 1) collaboration with local stakeholders 2) Advertisement 3) Service readiness 4) Short waiting time 5) Consultant accessibility 6) International accreditation 7) Medical facilitators 8) Language interpretation 9) Courtesy service and 10) Cost consideration.

Nevertheless, this research has its limitations. the empirical study was conducted in a limited number of potential respondents due to COVID-19 pandemic disruption. Because of this, quantitative approach still opens for future research to validate the larger sampling. The driving research direction shows that the systematic review and comparative case study analysis for medical tourism in other countries context is still required to fulfill the existing knowledge. Lastly, the future research may implement the hybrid methods to illustrate the different critical success factors in each region.

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