



EVALUATING THE LEVEL OF KNOWLEDGE MANAGEMENT CAPABILITY IN MEDICAL TOURISM INDUSTRY OF MALAYSIA

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ABSTRACT

The aim of this study was to evaluate the current level of knowledge management capabilities in Medical Tourism industry of Malaysia in compare with desirable level. The study was descriptive. Statistical population were Malaysian Healthcare Travel Council (MHTC) center of Malaysia, Medical Tourism Center of KPJ (Kumpulan Perubatan Johor) and Gleneagles Hospitals. Participants were 200 of managers and employees who were selected using random sampling method. All of them have completed the knowledge management capabilities scale. Data were analyzed by SPSS software and one-sample T-test. The results of the analysis showed that Knowledge Management Capabilities and its dimensions (Lessons Learned, Expertise and Knowledge Documents) have been assessed above the acceptable level (Q_2) in the Medical Tourism industry of Malaysia. But they have been evaluated below desirable level (Q_3) in the Malaysian Health Tourism. Finally, the results show that there are positive and significant relationship between knowledge management capabilities and Lessons Learned, Expertise and Knowledge Documents.

Keywords: knowledge management capability, medical tourism, lessons learned, expertise, knowledge documents.

INTRODUCTION

Knowledge management has attracted the attention of organizations and is applied as a means of getting the goals of the organization. Considering the fact that top managements are advocate of this phenomenon, the necessary infrastructures and requirements to implement it are ready in any organization. According to Shalika *et al.* usually, normal ways to solve problems are taken to save time, effort and to avoid risk. Dead academic resources and also previous old experiences result in the same old solutions [1]. These managerial predictive behaviors may endanger an organization which is in a competitive environment. Over the last decades, there has been an emphasis on value adding activities in organizations. In fact, this issue has made the intangible assets in organizations as a source of competitive advantage. One of these main intangible assets is the knowledge management capabilities [2, 3, 4, 5, 6, 7, 8]. This process is occurring in Malaysia's economy as based on the Vision 2020, Malaysians enterprises are committed to make significant contribution in economic development of Malaysia through knowledge management. Medical Tourism industry is one of the areas which is capable of conducting the KM, and specifically this paper will address the issue of Knowledge Management Capability in medical tourism.

Medical Tourism industry is believed to have significant knowledge elements by nature and KM could offer considerable advantages and benefits if careful planning and appropriate efforts formulated to embark in implementing KM and this is the concern of the paper.

The paper started by definition of Medical Tourism and its current situation in Malaysia which will be followed by literature review of Knowledge Management Capability and Medical Tourism. The

research methodology is discussed next in an independent section and finally the analysis and conclusion took place.

MEDICAL TOURISM AND KNOWLEDGE BASE APPROACH OF MALAYSIAN ECONOMY

From an industry view, Medical Tourism is considered as a new area to be investigated. Other health-related markets such as wellness tourism have been extensively studies; however, there is a lack of investigation on Medical Tourism. Content of the mainstream media, i.e., Internet, newspapers, etc., shows that this type of tourism is growing. As a result, there is a need for conducting an academic research specifically on this issue.

Medical Tourism refers to traveling to other countries for medical treatments. This phenomenon may occur due to low quality or the lack of some particular medical services within the patients' home country or high cost of these services in developed countries. In addition, in some countries, some of medical treatments may be restricted because of religion, culture, or some regulatory factors. Long waiting time for medical services in one's home country may oblige him/her to travel to another country. In 2007, the Medical Industry experienced a growth of 4-6 percent in general travel bookings, and statistics showed 20 to 30 percent increase in the number of medical tourists seeking for healthcare services outside their home country [9].

Malaysia is one of the best countries offering medical expertise and it is becoming an ideal regional healthcare hub because of its highly competitive hospitalization and medical costs in comparison with several developed countries. The majority of patients who seek medical treatment in private hospitals of Malaysia come from Japan, Indonesia, India, China, the United



States, Australia, Korea, Singapore, and European countries (Association of Private Hospital Malaysia). The health tourism of Malaysia combines successfully leisure and health services, aiming at being an invincible combination of a world-famous tourist heaven and a stylish healthcare hub. Medical Tourism has become one of the key sectors of Malaysia, which produces considerable revenue for this country.

As an effort to achieve the above-mentioned objectives, the Malaysian government has established the Malaysia Healthcare Travel Council (MHTC) in 2009. The Council combined the efforts made by important contributors to the healthcare travel industry of Malaysia, within both private and public sector. Their vision is positing the country as a preferred destination for world-class medical services and their mission is promoting the global awareness of Malaysian healthcare facilities and helping the Malaysian healthcare industry to be developed. As stated by Mr. Alhadi, the Assistant Secretary of MHTC, the Council aims at incorporating the collaboration of private and public sectors in formulating strategic plans to develop and promote health tourism services of Malaysia [10]. MHTC is the major organization that controls all health tourism-related matters, facilitating enquiries on promotional programs and policies concerning the development of health tourism, and it is capable of contributing to growth of Malaysia and raising international profile of the country as one that offers high quality medical services. A total of 35 Malaysian private hospitals have been recognized that promote the Medical Tourism. Kuala Lumpur, Melaka, and Penang are three Malaysian cities that are known as main centers offering medical services for foreign patients (Association of Private Hospital Malaysia).

The Association of Private Hospitals of Malaysia (APHM) reported that, in 2008, a total of 374,063 foreign patients, which contributed about RM299 millions revenue, were given medical services in the country. Because of this huge potential revenue and the growing interest in medical services offered by Malaysia healthcare centers, the Malaysian government increases its focus upon the Medical Tourism industry.

In the latest research study, "Booming Medical Tourism in Malaysia", RNCOS' (which is a Business Consulting Service firm) analysts identified and deciphered the market dynamics in important segments to clearly highlight the areas offering promising possibilities for the companies to boost their growth. The market is anticipated to grow at a CAGR (Compound Annual Growth Rate) of 13% during 2013-2017. The robust growth in revenue along with medical tourists is being driven by factors such as cost-effective treatments, skilled medical professionals, and government support.

According to research report, "Malaysia Medical Tourism Outlook 2012", revenue of the Malaysian medical tourism industry is projected to grow at a CAGR of around 21% during 2011-2014. The robust growth in revenue along with medical tourist is being driven by factors, such as cost-effective treatments, skilled medical

professionals, and the government support. Wellness centers are being explored to deliver better, safer, and higher quality care to patients.

As argued by Mr. Alhadi, rival countries such as Singapore, Thailand, and India have become popular for foreign patients. The primary focus of the Council is to make the country internationally popular and famous for its excellence in providing healthcare [10]. In such a competition, the most important point is how to attain CA of this industry? Investigating the KM capabilities on Medical Tourism can help MHTC identify and create additional CA of the industry.

Similar to other competitors, in Malaysia, there is a great effect of marketing on new trends of the Medical Tourism. The Malaysian government has realized the great potential and economic benefits of Medical Tourism; for that reason, the Government is promoting it actively to different countries in order to encourage foreign patients to come to Malaysia for medical treatments, aiming at making the country a Medical Tourism hub within the region. Furthermore, for promoting Medical Tourism, the Government has launched an official website (i.e., www.medicaltourism.com.my) [11]. In addition, for improving the Medical Tourism, the Malaysia Healthcare Travel Council (MHTC) was launched in December 2009 in order to re-structure the healthcare sector in a way to attract more number of foreign patients [12]. Moreover, in a variety of countries, different authorities (for example, Ministry of Tourism, Ministry of Health, Malaysian Association of Tours and Travel Agencies, Association of Private Hospitals of Malaysia, Malaysian External Trade Development Corporation, and Malaysia Airlines) have done several promotional activities for boosting the country image for Malaysia. [13]. These efforts have made Malaysia recently more popular as a medical tourism destination [11].

Malaysia has been appropriately developed as a reliable hub for Medical Tourism; for example, it has attracted 8.5% of the British medical tourists. There are outstanding hospitals, the English language is used widely, and there are numerous staffs that have been highly trained in the United States or the UK. Association for Private Hospitals of Malaysia is known as an active association that attempts for the development of Medical Tourism in Malaysia (Hospital-malaysia.org, 2011-10-29). In Malaysia, there is a national accreditation healthcare scheme (MSQH); however, numerous Malaysian hospitals are on the path to the achievement of international healthcare accreditation. Hospitals like Gleneagles Hospital Kuala Lumpur, Penang Adventist Hospital, and International Specialist Eye Centre are JCI accredited [14]. A medical tourism site (i.e., Myhealthcare.gov.my, Retrieved 2011-10-29) has been launched by the Malaysian Ministry of Health [15].

The rapid growth of current consumer-oriented health industry has made the quality a vital issue. If a business provides low quality services, it cannot survive. According to Bookman and Bookman, in rich countries, people commonly go to less developed countries since



they can gain access to cheaper but high quality medical care [16]. At the time of planning for a medical travel, patients give a high significance to quality.

Table-1 compares medical tourists that have travelled to Malaysia between 2011 and 2014. (MHTC report, available online at <http://www.mhtc.org.my/en/statistics.aspx> - 2015-07-31).

Table-1. Comparison of healthcare travellers between 2011-2014.

Year	2011	2012	2013	2014
No. of healthcare travellers	641,000	728, 800	881, 000	882, 000

The economic structure of Malaysia is being transformed from a manufacturing-based economy to a knowledge-based one; it is on the path to the accomplishment of the Vision 2020. As a consequence, in Malaysia, every organization must be encouraged to embark on its KM; this is because it provides benefit for the organization, eventually contributing to the overall Malaysian economy [17]. At beginning of the 21st century, economic environment of developed countries was fundamentally shifted from tangible manufactured goods to value added services, which led the organizations to be more and more focused upon Intellectual Capital and KM emerged as a business discipline [2, 3, 4, 5, 6, 7, 8].

In addition, business organizations are currently experiencing several challenges, including globalization, competition, regulation, outsourcing, rapid formation of new knowledge, and progress in technology. Numerous organizations are also worried about retirement of highly skilled and tenured workforces, without an appropriate replacement [18]. The knowledge management addresses these challenges since it helps organizations enhance their competitive advantages through leveraging the already-existing intellectual capital of the organization [19].

As argued by Salleh *et al.*, there is a high competition in Health Tourism Industry. As a result, investigating the influence of KM capability on the Medical Tourism is of a great significance for MHTC to make out the most important players of the industry to improve its strategies and produce commitment from the players [10, 20]. Moreover, the bargaining power of supplier is low; therefore, every hospital must extensively promote its services by means of careful promotional activities. A strategic plan is needed for MHTC in order to support Malaysian hospitals and, simultaneously, show Malaysia as a destination of choice brand [10].

The organizational management field has recently focused upon Knowledge Management Capability [21]. This is principally because managers, in all industries and at all levels, must unlock potentials of their organizational members through removing as far as possible the barriers that exist to acquisition, storage, presentation, and application of knowledge [22]. Such age of high-speed information exchange obliges managers to recognize KMC-related factors in their industry and organization [23].

It has been difficult for scholars to solidify the underlying relationships between individual organizational functions and KMC. Tanriverdi addressed the synergistic

influences of knowledge resource exploitation as an extension of the application of resource-based view (RBV) of the organization, suggesting that appropriate definition across KMC areas extends the benefits across constructs [24].

Tanriverdi focused upon developing multi-business firms and approached operationalization of KMC as the degree of creating, transferring, integrating, and leveraging resources. It was asserted that this application is capable of finding relationship among KMC, IT relatedness, and firm performance across customer, product, and the managerial knowledge sources [24]. Considering KMC from a resource-based view suggests that this has influence on organization's capability of efficiently deploying and building resources [25].

For an efficient organizational management, managers must coordinate those processes that can unlock the members' knowledge [26]. Furthermore, group decision making may be susceptible to group dynamics, biases, and communication barriers; it prohibits the group from making decisions as efficiently as individual members do, who have total knowledge of the group [27, 28]. As discussed by Rico *et al.*, it is important to understand the cognitive mechanism that underlies performance of the team in order to improve the organization's efficiency, and cognitive study should be carried out in the context of organizational environment [26, 29]. In addition, establishing the group processes to acquire, store, present, and apply knowledge for making decisions needs further research since this is an abstract area of study, which is not completely understood [30]. As a result, current literature shows that there is a connection between organizational capability and organizational knowledge [31].

The Medical Tourism success is significantly dependent on gathering, analyzing, and seamlessly exchanging the clinical, billing, and usage information or knowledge across and in mentioned organizational boundaries. Malaysia, which is known as one of the most important countries in tourism industry, attempts to expand and improve the medical Tourism and uses its advantages in the whole economy of the country. As a result, for the Malaysian government, it is very important to make sustainable competitive advantages and enhance the performance quality of the Medical Tourism industry. Though, the Medical Tourism managers have no enough understanding about organizational KMC since the related areas and factors have not been verified. Due to this



condition, organizational knowledge is applied inefficiently.

KNOWLEDGE MANAGEMENT CAPABILITY

KM capability is an organization's potential for processing knowledge within the earlier-described life cycle. This is achieved through particular activities based on the knowledge type. In recently-conducted manufacturing research, the capability factors include Expertise [32, 33, 34], Lessons Learned [32, 33, 34, 35], Knowledge Documents [33, 34]. The analysis of the way KMC is formed helps business managers to target those factors that need to be improved for particular knowledge types, knowledge management processes, and overall strategic knowledge management. The assessment of KM has been a difficult task since the KMC model has been only recently understood in manufacturing industry; however, it has not been tested in other situations [36, 22]. The difficulty of assessment is because of the knowledge complexity, different existing definitions, and nature of categorization of the role of knowledge in success of organizations [23]. In Medical Tourism, the evaluation mechanism of KMC should be tested so that the managers can get more understanding of the concept.

The present study aims at filling the gap of evaluation of the organizational KMC through transferring the factors reported in existing literature to the Medical Tourism industry. The surface differences that exist among industries (e.g., values, culture, and goals) might have effect on the degree to which KMC is evidenced by the present research.

KNOWLEDGE MANAGEMENT CAPABILITY FACTORS AND ELEMENTS

Table-2 presents all factors and elements of KMC each of which will be completely described.

Table-2. Knowledge management capability element and process relationship.

KMC factor	Process stage	Specific element
Lessons Learned [32, 33, 34, 35]	Acquire Store Present Apply	Capture Repository Taxonomy Usage
Expertise [32, 33, 34]	Acquire Store Present Apply	Profile and Register Repository Taxonomy Access
Knowledge Documents [33, 34]	Acquire Store Present Apply	Categorization Repository Search and Retrieval Reference and Use

According to Drucker, the most important objective of the organizational knowledge is goal achievement. This kind of management is done in a generic process of acquisition, storage, presentation, and

application [37]. Thus, KMC can be defined as potential of an organization to make use of this knowledge process efficiently for KM [33].

There are three different factors in KMC, namely expertise, lessons learned, knowledge documents [22]. In turn, each factor comprises a set of four elements that are specific to that factor's characteristics. This section differentiates these factors and elements: in addition, it discusses the exclusive attributes of associated knowledge. Sometimes, the lessons learned are known as "internal benchmarking" or "best-known methods" [38]. This knowledge is principally obtained at the time of completing a task or during or immediately after reflection and collaboration. Such lessons might be considered particular to a special event; however, when events are repeated, the collection of lessons learned can be formed to demonstrate an organizational task evolution. For instance, a firm with recurring manufacture of seasonal goods can make use of the lessons learned in each production cycle iteration. Likewise, the lessons learned can be acquired, stored, presented, and applied in a systematic way.

DEFINITION OF VARIABLES

We hypothesize that KMC factors and areas exist in Medical Tourism organizations, and that organizational culture affects the knowledge management process. The KMC construct for this study has four areas: Lessons Learned, Expertise, and Knowledge Documents. These areas and the associated KPs are further defined as follows:

Lessons learned. Lessons Learned are specific and useful knowledge gained in the process of completing a project or a task, learned from past successes and failures and can be generated during sessions designed to discuss results from previous organizational tasks [33]. The Lessons Learned KPs are capture, repository, taxonomy, and usage. The knowledge type is predominantly tacit, because it is developed through the shared experiences of members who comprise the organization. Lessons Learned are gained from experience and case studies of previously applied concepts and courses of action. Within lessons learned the knowledge is balanced between tacit and explicit. That is, a combined approach must be taken in the tallying of knowledge during a review session. These sessions are typically referred to as hot-washes, internal benchmarking, or post-mortems [22]. A session including the members involved in the task and perhaps those who are in positions of authority or who have a specific perspective on the issue would be involved to glean new knowledge for future use.

Thus, it is important for organizational members to understand the characteristics of this type of knowledge, that it is both tacit and explicit and collectively formed from judgments and observations after task completion. This understanding, coupled with deliberate actions to harness knowledge from this area, will likely improve overall KMC in the firm.



Expertise. Expertise is knowledge available within the minds of organizational members, and hence, experts are individuals who have expertise to share. Expertise is made up of the factors of Expert Profiling and Registration, Repository, Taxonomy, and Access [33]. The second KMC area, expertise, is composed largely of tacit knowledge. This knowledge area encompasses all the knowledge that is available from education and experience in the minds of the organizational members [39]. A different cycle of internal processes is required to manage and employ this knowledge. Expertise is described as knowledge gained through experience and education. This KMC area is generally regarded to contain almost exclusively tacit knowledge. For this reason, it must be treated differently than lessons learned or knowledge documents [22]. As described by Nonaka, management of tacit knowledge requires a different approach, and because this knowledge is found among the organizational members, its factors vary from those in other KMC areas [40].

Knowledge documents. While expertise is largely tacit knowledge, the next KMC area to be investigated is almost entirely explicit. Knowledge documents are those text based reports, which may be published, that the organization can readily access to garner insight into an area important to that firm [22]. These documents may be internal or external to the organization. Knowledge documents are comprised of the factors of Categorization, Repository, Search and Retrieval, and Reference and Use [33].

METHODOLOGY

This study is a descriptive survey. The study population consisted of Malaysian Healthcare Tourism Council (MHTC), Medical Tourism Center of KPJ and Gleneagles hospitals in Malaysia which 200 people from managers and staffs has been selected as sample size of the study using a random sampling method. The research instruments were distributed in the target organization which were completed and returned by the respondents. The number of 70 respondent were from MHTC and the rest were from KPJ and Gleneagles Hospital 70 and 60 respectively. Table 3 shows the sample distribution according to work experience.

Table-3. Distribution of respondents based on years of work experience.

Work experience	Frequency	Percent
1-5 Year	79	39.5
6-10 Year	55	27.5
11-15 Year	23	11.5
16-20 Year	36	18.0
Over 20 Year	7	3.5
Total	200	100

MEASUREMENT TOOLS

The data were collected by the modified questionnaire of knowledge management capabilities assessment derived by Kulkarni and Freeze which consist of 75 items and has been rated using 5 point-Likert scale from Not at all (1) to a great extent (5). The variables of the instrument are Lessons Learned, Expertise and Knowledge Documents [41]. The Cronbach's alpha was used to test reliability of the study. The validity of the instrument and its variables in order to Cronbach's alpha is obtained 0.858, 0.952, 0.945 and 0.965 for knowledge management capabilities, Lessons Learned, Expertise and Knowledge Documents respectively.

In order to measure the gap between existing knowledge management capabilities, Knowledge documents, Expertise and lessons learned with the ideal situation, the one-sample t-test was used. In the other words, the target was to measure this gap to provide appropriate solutions in order to remove the gap between the existing level and the desirable level. It will leads to the better use of Knowledge Management Capabilities in the medical tourism industry to improve organizational performance.

This study aimed to compare the current level of knowledge management capabilities, lessons learned, knowledge documents and expertise with the acceptable and desirable levels which one sample t-test was used for this purpose. Q_2 has been used for the comparison between the Means of variables and acceptable level. To compare the mean of variables with desirable level, Q_3 is used.

Q_2 is the data that 50 percent of findings are smaller than it and 50 percent of the findings are larger than it.

Q_3 is the data which 75 percent of the findings are smaller than it and 25 percent of findings are larger than it.

DATA ANALYSIS

A. EXISTING LEVEL OF KNOWLEDGE MANAGEMENT CAPABILITY IN MEDICAL TOURISM OF MALAYSIA

Based on the findings of the study illustrated in Tables 4 and 5, the overall Mean of knowledge management capability and its dimensions (Lessons Learned, Expertise and Knowledge Documents) is significantly lower than the desirable level (Q_3) regarding the obtained T-value and degree of freedom ($df = 199$). This results reveals that the respondents of the study have determined the level of knowledge management capabilities of medical tourism in Malaysia to be lower than be desirable level (Q_3). Based on T-value and degree of freedom ($df = 199$), it is also clear that knowledge management capabilities and its dimensions (Lessons Learned, Expertise and Knowledge Documents) have been evaluated above the acceptable level (Q_2). Therefore it can be conclude that the existing level of knowledge management capability in medical tourism industry of Malaysia is moderate.

**Table-4.** The comparison of the Mean of KMC and its dimensions with acceptable level (Q_2).

Variables	N	Mean	test value	Std	T	df	Sig
KMC	200	3.4584	3	.88648	11.129	199	0.001
LL		3.4746		.70667	7.313		0.001
Ex		3.6147		.70540	9.498		0.001
KD		3.5159		.65556	12.323		0.001

Table-5. The comparison of the Mean of KMC and its dimensions with desirable level (Q_3).

Variables	N	Mean	Test value	Std	t	df	Sig
KMC	200	3.4584	4	.88648	8.640	199	0.001
LL		3.4746		.70667	10.515		0.001
Ex		3.6147		.70540	7.725		0.001
KDs		3.5159		.65556	10.444		0.001

B. THE RELATIONSHIP BETWEEN KMC AND LESSONS LEARNED, EXPERTISE, KNOWLEDGE DOCUMENTS

The results obtained from Table-6 shows that there are a positive and significant relationship between KMC and Lessons Learned ($r = 0.661$, $p < .001$). It is also

clear that Expertise has significant and positive relationship with KMC ($r = 0.571$, $p < .001$). Finally, knowledge management capability has positive and significant relationship with Knowledge Documents ($r = 0.339$, $p < .001$).

Table-6. The results of Pearson correlation coefficient for the variables of the study.

Variables		Lessons learned	Expertise	Knowledge documents
KMC	Pearson correlation	0.661**	0.571**	0.339**
	Sig	0.001	0.001	0.001
	N	200		

**, Correlation is significant at the 0.01 level (2-tailed).

CONCLUSIONS

The success of medical tourism depends critically on the collection, analysis and seamless exchange of clinical, billing, and utilization information or knowledge within and across the above organizational boundaries. Malaysia as a leading country of tourism industry is also keen to develop its medical tourism in world class to gain from its advantages to the country's economy. Therefore, it is crucial for Malaysian government to build up a sustainable competitive advantages and better performance for its medical tourism industry. However, the managers of medical tourism organizations do not have an adequate understanding of organizational KMC because associated factors and areas have not been verified. This lack of understanding leads to inefficient application of organizational knowledge, which is argued to be the most important strategic resource.

First objective of the study was to assess the level of Knowledge Management Capabilities, Lessons Learned, Knowledge Documents and Expertise from the perspective of employees and managers in Medical Tourism Industry. The second objective of the research was to find out the relationship between Knowledge Management Capabilities with Lessons Learned, Knowledge Documents and Expertise.

The initial results of this study indicate that the overall Mean of knowledge management capability and its dimensions (Lessons Learned, Expertise and Knowledge Documents) is significantly lower than the desirable level (Q_3). This finding is consistent with some results of the research of Mc Carthy Nowadays, communities are increasingly moving towards to be knowledge-based [42, 43], therefore, it can be said that the implementation and dynamic management of knowledge is essential to



organizational performance and decision-making. On the other hand the purpose of the purpose of knowledge management is to maximize the effectiveness and efficiency of organizational knowledge from the assets and knowledge of their continuous renewal. Since the purpose and functions of medical tourism centers are development of service and community in health sections, so to improve their effectiveness they require the use of processes and knowledge management capabilities. According to the respondents to achieve the desirable level of knowledge management capabilities, Medical Tourism industry should communicate more with Expertise and provide appropriate tools and facilities for the transfer of knowledge through the Lessons Learned and existing Knowledge Documents. Another finding shows that the overall mean of knowledge management capabilities and the means of its dimensions (Lessons Learned, Expertise and Knowledge Documents) are above the acceptable level (Q_2). This finding is consistent with results of the research of Nicolas and Cerdn [44].

In addition, other research suggests that there are positive and significant correlation between knowledge management capabilities and Lessons Learned, Expertise and Knowledge Documents. Expertise support, using the experiences and Lessons Learned and effectively manage the Knowledge Documents are the key areas among the factors contributing to the promotion of knowledge management and the use of its capabilities in the organization. So it is obvious that there should be significant relationship between the knowledge management capabilities and its dimensions as Expertise, Lessons Learned and Knowledge Documents.

The first limitation of study was problems with sampling method occur and a completely random sample is difficult to achieve. The sampling frame used in this study, MHTC, KPJ and Gleneagles Hospital, though considered the best medical tourism organization in medical tourism context, still possesses weaknesses. Next, practical implications suggested in the study were based on theoretical and empirical findings requiring a holistic and comprehensive approach. It is difficult and sometimes impossible for management to undertake the whole task at one time due to limited resources of businesses, especially in a developing country like Malaysia. Though the relative importance of individual capabilities was discussed, future research is necessary to explore the model further to determine if there is an optimal level of capabilities.

Eventually, future research can be vectored to assign specific focus to the organic nature of medical tourism organizations, and how this structure and philosophy impacts KMC. Further research into organizational culture, structure, use of facilitators, promotion methods may also be necessary to encompass the scope of the implications. Further validation of the knowledge capabilities can be achieved through having analysed all four KMC factors identified in this study. Other knowledge capabilities may exist and can be tested in the future to increase an organization's understanding of their strategic assets.

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