

A Strategic Planning To Develop Medical Travel Industry in Indonesia

Afrizal Firman¹ and Yaw-Yih Wang²

Medical travel industry is one of the fastest growing tourism industries in the world. Unfortunately, in Indonesia, to develop the industry is an extremely complex challenge. Thus, this study aims to map a strategic planning to develop medical travel industry in Indonesia. The research questions of the study are: (1) What are the factors influencing to development of medical travel industry in Indonesia? (2) What strategic planning does Indonesia apply to develop the industry? The study was organized by revealing medical travel growth and its situation in Indonesia and adopting secondary data analysis to gather the data. For the findings and results, authors applied a demand model of medical tourism compared to medical travel situation in Indonesia in order to identify the factors influencing of the industry and also formulated a strategic planning to develop the industry by investigating a Porter's Diamond Theory, SWOT analysis and strategy matching using TOWS matrix. However, the period of study is an absolutely new case due to it has not been researched at previous study.

Keywords: Medical Travel Industry, Factors Influencing, SWOT/TOWS Theory, Porter's Diamond Theory, Strategic planning, Indonesia

1. Introduction

The global healthcare industry is among the most dynamic and rapidly growing industries in the world economy. Many third world countries see healthcare industry as a gold mine and are promoting it aggressively, thus also boosting competition in the sector (Heung et al, 2011; Awadzi & Panda, 2006). In this case, medical travel industry, it now generates US\$60 billion in business annually worldwide (Heung et al, 2011). Over the past decade the industry had grown significantly, with India, Singapore, and Thailand in particular becoming global leaders in drawing patients from around the world (Crooks et al, 2011).

However, in present, medical travel industry is completely becoming complex and important trend in Indonesia. Nonetheless, Indonesia is facing many constrains and challenges to develop the industry. In fact, as the largest archipelago country in the world following by rich of natural resources, diversity of cultures and huge potential of tourism sector (Ministry for economic affairs, 2011), however, its government only spent 1% of its total GDP by 2011 for health sector. Also, medical treatment abroad has been becoming a common practice for certain Indonesians (Arisanti, 2011). However, Indonesia has to face a lot of challenges to develop the industry.

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Based on the above problem, this study seeks to figure two research questions out as following: (1) What are the factors influencing to development of medical travel industry in Indonesia? (2) What strategic planning does Indonesia apply to develop the industry?

The structure of the study follows:

- (1) to describe the medical travel growth and its situation in Indonesia.
- (2) to adopt the model of factors influencing of medical tourism, the Porter's Diamond theory, the SWOT analysis and the TOWS matrix as a conceptual framework.
- (3) to collect the data sources by secondary data method.
- (4) to identify the factors influencing of the industry in Indonesia and formulate the strategic planning to develop the industry in the country.

However, the objective of this study is to identify the factors influencing of the development of medical travel industry in Indonesia and to map a strategic planning to develop it.

2. Literature Review

2.1 Medical Travel Growth

Literally, medical tourism was defined as the practice of travelling to another country with the purpose of obtaining health care (Heung et al, 2011; Smith & Forgione, 2007). The practice of medical tourism depended on successfully informing potential patients about procedure options, treatment facilities, tourism opportunities, travel arrangements, and destination countries (Crooks et al, 2011). Orthopedic, cardiac, and plastic surgeries were among the many procedures performed in medical tourism hospitals that attract international patients (Crooks et al, 2011; Ehrbeck et al, 2008).

A new trend that attracts medical patients to visit abroad was to treat from eastern alternate system of medicine through non-surgical healthcare procedure. This led to the emergence of Yoga, Ayurveda, Homeopathy, Naturopathy, and Meditation as the most demanding choices to perfect physical and mental health with medical treatment. These treatments were expanding aggressively in Malaysia, Thailand and India. The other attractions were knee replacement surgery, laser treatments, weight loss, and genetically engineered babies (Medical Tourism Trend, 2010). Medical travel countries had sought to address this concern through national and international accreditation. For instance, 35 countries had sought accreditation from the Joint Commission International (JCI) (Smith et al, 2011; Chinai & Goswami, 2007).

Furthermore, the industry sector was making a significant contribution to many of the world's economies. It had historically been from lower to higher income countries, with better medical facilities. However, this trend is now reversing (Smith et al, 2011; Lautier, 2008; Horowitz et al, 2007), and most recently "hubs" of medical excellence have developed, which attract people regionally. Thailand was the first country to enter the medical tourism industry and remained the leader in the Asia-Pacific region, attracting 400.000 medical tourists in 2003, and it quickly became a hub for cosmetic surgery. India, Malaysia, and Singapore followed suit, and the four countries together attracted more than 1.4 million medical tourists in 2003 (Heung et al, 2011; Tata, 2007). Malaysia, Thailand, Singapore, and India alone projected to generate more

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than US\$4.4 billion by 2012 (Heung et al, 2011; Singh, 2008). However, in 2010, India, Thailand, Singapore and Malaysia had become preferred destinations with the industry's potentials of accessibility, availability, affordability, and quality.

2.2 Medical Travel Situation in Indonesia

As a country of huge potentials, Indonesia is located between Indian and Pacific Oceans and major east-west trade routes. Unfortunately, it is also located in an area that experiences regular natural disasters, such as earthquakes, tsunamis, floods, severe droughts and volcanic eruptions. In tourism sector, the government figured 7.65 million tourists visited Indonesia with totally revenue US\$8.6 billion in 2011 (Subkhan, 2012). In health sector, Indonesia's healthcare system consists of public and private. The public healthcare system is organized under the Ministry of Health. In 2009, Indonesia had provided 1,371 hospitals and 13,500 clinics from public and private sector.

Despite Ministry of Health's National Health Strategic Plan 2010-2014 prioritizing to develop the rural area, the spread of the hospitals was at 75% of total still concentrated in the two main islands, Java and Sumatra. In 2009, there were only 534 out of 1,371 hospitals that were accredited by national standards (government accreditation). Declining public healthcare sector contribution compared to private healthcare sector was larger. In 2011, only 3 private hospitals were labeled by JCI accreditation (Medical Tourism News, 2011).

In fact, despite the revenue increased in Indonesia's tourism sector by 2011, ironically, according to the Health Ministry, Indonesians spend about US\$11.5 billion a year for healthcare abroad. Nur Rasyid Lubis, the deputy director of Adam Malik Hospital in Medan, North Sumatra, said that *"People want quick service that matches the charges, so they go abroad. After all, Malaysia and Singapore are quite close"*. Besides, Indonesian medical tourist, Siaw Kian, said that *"she preferred to obtain healthcare abroad rather near her home in Jambi (Sumatera) since overseas hospitals offered better-fast service and price than the best hospitals in Indonesia"*. Widjil Trionggo, said of his experience consulted with cardiologist at a hospital in Jakarta, *"They (doctors) said they didn't know how many stents they would need to put in my chest"* (Arisanti, 2011).

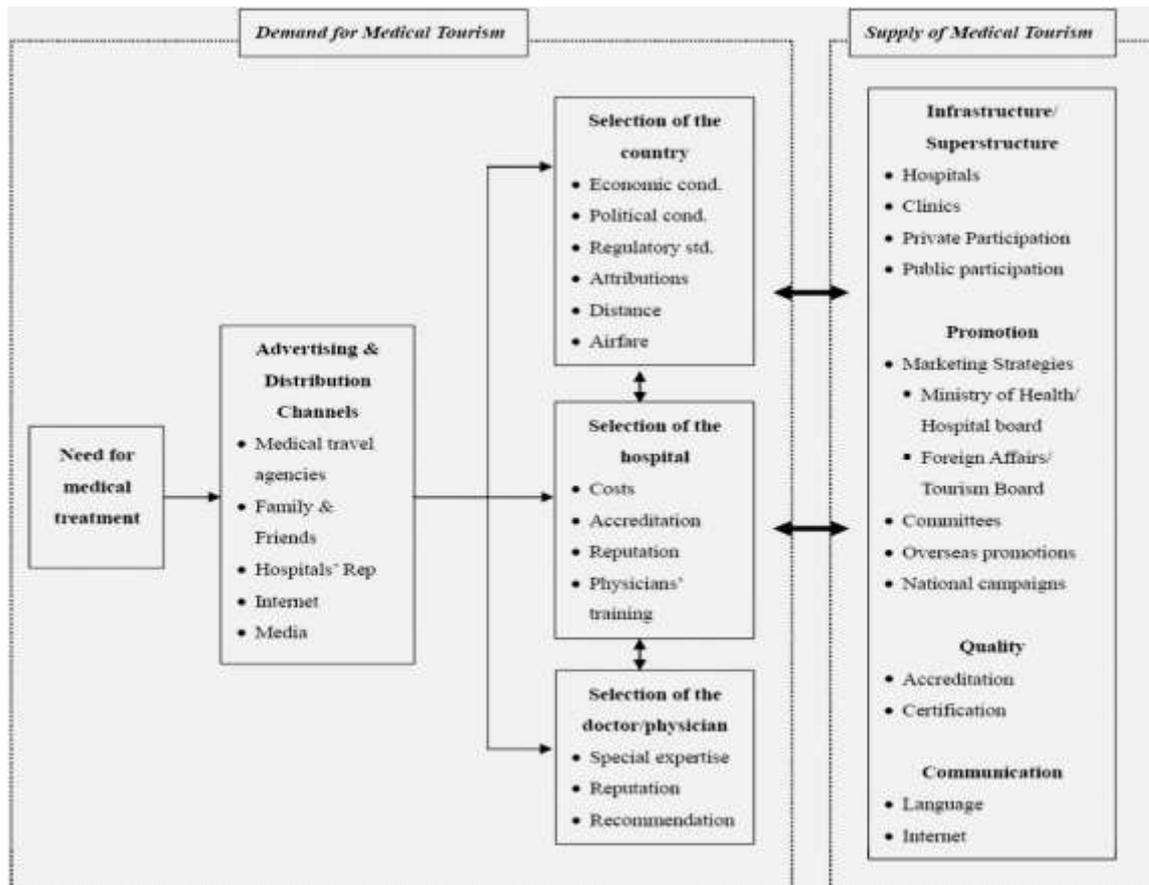
Furthermore, in Malaysia, hospitals have attracted a lot of Indonesians. According to the Frost and Sullivan business research and consulting firm, Malaysian hospitals treated 288,000 Indonesian patients in 2008, up from 221,538 patients in 2007 and 170,414 in 2006. Meanwhile, Singaporean hospitals treated 266,200 Indonesians in 2007, down from 266,500 in 2006 (Arisanti, 2011). However, the number of Indonesian medical tourists visiting Malaysia comprised about 70% and Singapore for treatment amounted to about 65% of the country's total international patients (Business Monitor International, 2010). Moreover, in Indonesia, the health manpower is not wide use in English spoken and the well-known of the human resources' education and the health infrastructures and equipment as well as the government's support are lacks. However, this study shows the challenges both internal and external factors towards Indonesia's medical travel.

2.3 Conceptual Framework

2.3.1 Factors Influencing

According to a supply and demand model of medical tourism (Heung et al, 2011), the concept consists of the factors that affect tourist destination choice and medical treatment options by addressing how well a destination is prepared to meet the demands of these tourists as shown in Figure 1.

Figure 1: A supply and demand model of medical tourism



Source: Heung et al, 2011

2.3.2 Theories for a Strategic Planning Analysis

In Porter's theory, he analyzed why particular industries flourish and decline in particular locations and how competitive advantages help nation achieve international success in particular industry (Porter, 1990). As a 'Diamond Theory', shown in figure 2, it comprises four determinants of national competitiveness and two variables. The four determinants are '*Productive factors*' which defined as the situation in a country regarding production factors, like skilled labor, infrastructure etc. It is relevant for competition in particular industries and supports the basic factors such as natural resources, demographics and so on; '*Demand Conditions*' described the state of home demand for products and services produced in a country in order to create innovation and quality; '*Related and Supporting Industries*' defined as the existence or non-existence of internationally competitive supplying industries and supporting industries such as investment in advanced factors; whilst '*Firm Strategy, Structure and Rivalry*' explained as the conditions in a country that determine how

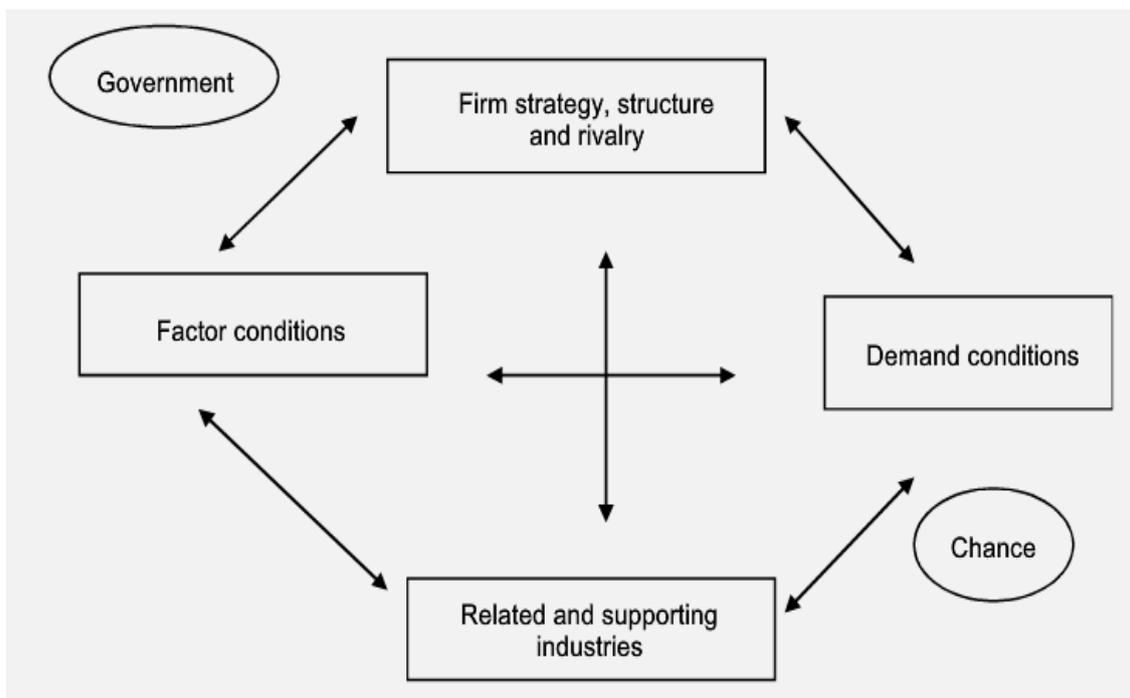
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companies are established, managed, and organized, and that determine the characteristics of domestic competition.

The two variables are 'Government' which it can consider the policies that they should follow to established national advantages and develop a strong competitive position globally such as government's regulation can alter home demand conditions and government investment in education can change productive factor, besides, 'Chance' described as major innovation that can reshape industry structure. Nonetheless, authors applied a revised Porter's Diamond model comprises five determinants without the "Chance" variable (see Fig. 3) (Wang & Hong, 2011; Chen & Tarn, 1997). As reasons, five forces analysis is more suitable for examining industries with steady performance and desire for expansion (Wang & Hong, 2011).

Theoretically, the Diamond model also can be incorporated with SWOT analysis (Wang & Hong, 2011). So, that is why, authors are adopting together the diamond model and the SWOT analysis to this study. According to Pearce and Robinson (2005), SWOT analysis is a methodology for making sound strategy formulation. Thus, strategies are formulated through correspondence analysis of the internal strengths and weaknesses with the external opportunities and threats in the TOWS matrix (Wang & Hong, 2011; Weihrich, 1982).

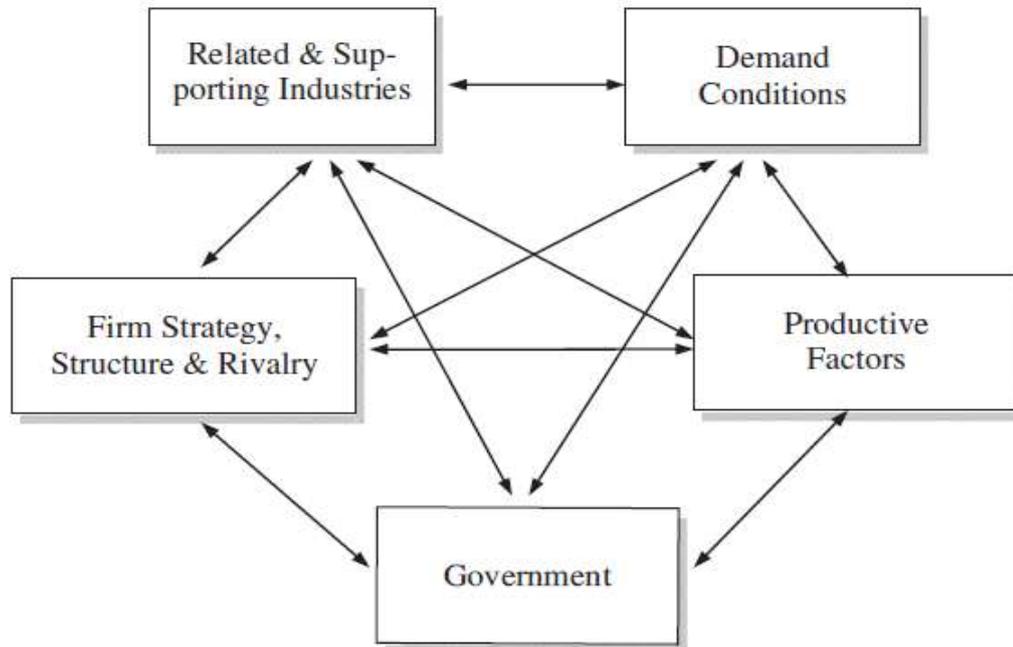
Figure 2: Porter's diamond of competitive advantage.



Source: Porter, 1990

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Figure 3: Revised Diamond model with five determinants



Source: Porter, 1998

3. Methodology

The research structures were conducted according to the following steps:

- (1) The literature was reviewed in relation to medical travel growth, medical travel situation in Indonesia, the model of influencing factors of medical tourism, Porter Diamond's theory, and SWOT analysis/TOWS matrix.
- (2) The study was designed based on the research objective and the literature review.
- (3) Data analysis.
- (4) Data interpretation, summarizing the findings, and drawing conclusions and suggestions.

A qualitative research method used in this study was to gather the data sources through a secondary data analysis included academic papers, books, websites, and research reports by research institution. The research hypotheses are (1) to identify the factors influencing of the development of medical travel industry in Indonesia will be analyzed by the concept of a supply and demand model of medical tourism (Heung et al, 2011); (2) to map a strategic planning to develop medical travel industry in Indonesia will be analyzed by the integrated Diamond model and SWOT analysis (Wang & Hong, 2011).

Furthermore, the analysis steps of the study are: (1) to identify the factors influencing to development of medical travel industry in Indonesia from the data acquired which investigated the comparison to demand model of medical tourism and its situation in Indonesia; (2) to identify the comparative advantages of nation analysis of the industry; (3) to investigate the SWOT analysis of the industry; and (4) to map a strategic planning to develop the industry in Indonesia by formulating the TOWS

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correlation and matching and its results are linked and integrated between Diamond model and SWOT.

4. Findings and Results

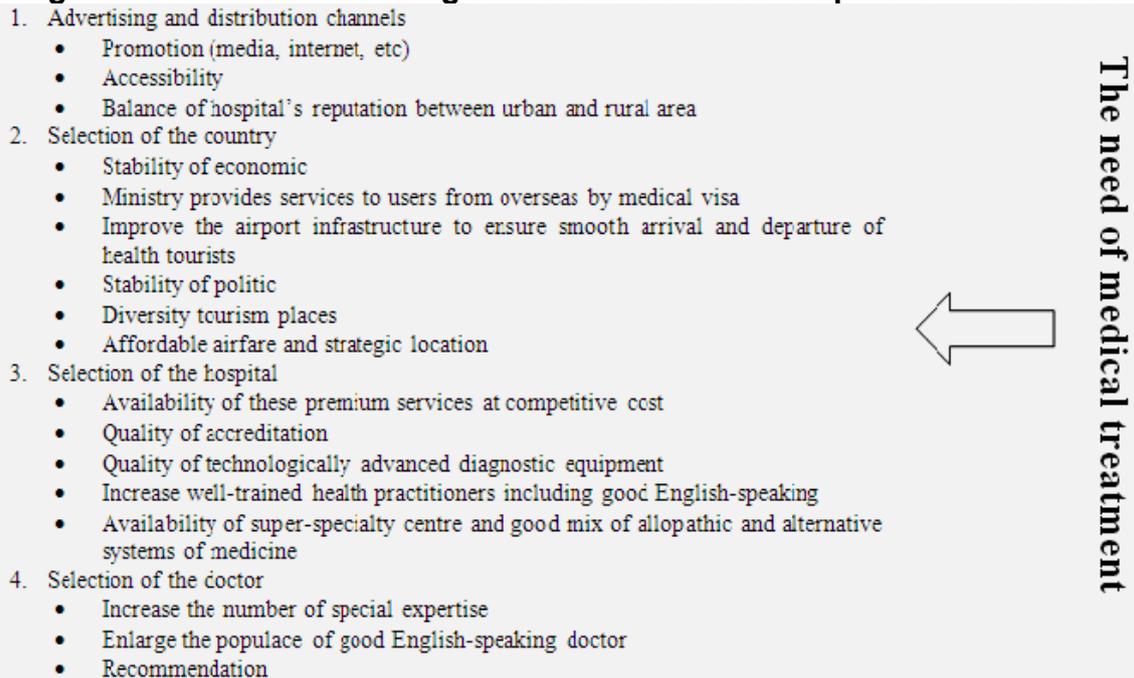
4.1 Factors Influencing Analysis

In order to identify the factors influencing of medical travel development in Indonesia, authors compared the model of factors influencing of medical tourism which is a supply and demand model of medical tourism (Heung et al, 2011) to medical travel industry situation in Indonesia. The results revealed that the concept of demand model of medical tourism is relevant to medical travel situation in Indonesia as shown in Table 1 and conclude the factors influencing as illustrated in Figure 4.

Table 1: The comparison to demand model of medical tourism and medical travel situation in Indonesia

Demand model of medical tourism	Medical travel situation in Indonesia
The need of medical treatment:	
Advertising and distribution channels	
<ul style="list-style-type: none"> - Medical travel agencies - Family and friends - Hospital's reputation - Internet - Media 	<ul style="list-style-type: none"> - Lack of promotion - Lack of accessibility - Imbalance of hospital's reputation between urban and rural area
Selection of the country	
<ul style="list-style-type: none"> - Economic condition - Politic condition - Regulation - Attribution - Distance - Airfare 	<ul style="list-style-type: none"> - Lack of financial - Lack of supporting to medical travel need and regulation from government - The stability of politic - Infrastructure - Diversity tourism places - Affordable airfare and strategic location
Selection of the hospital	
<ul style="list-style-type: none"> - Costs - Accreditation - Reputation - Physicians training 	<ul style="list-style-type: none"> - Dilemma between cost and quality - Lack of accreditation - Shortage of facilities and super-specialty health centre - Shortage of healthcare professional training in private and public sectors
Selection of the doctor	
<ul style="list-style-type: none"> - Special expertise - Reputation - Recommendation 	<ul style="list-style-type: none"> - Limit of special expertise - Lack of reputation of communication (English spoken) - Recommendation

Figure 4: Factors influencing of medical travel development in Indonesia



4.2 Competitive Advantages of Nation Analysis

The competitive advantages of nation on medical travel industry in Indonesia as shown in Table 2 are 33 results. It was analyzed and summed up from the data collected and fitted into definition of Diamond model for the subsequent SWOT analysis (Wang & Hong, 2011).

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Table 2: The competitive advantages of nation on medical travel industry in Indonesia

CAoN aspects	Advantages	Disadvantages
Productive factor	<ul style="list-style-type: none"> • Major east-west trade routes • Largest archipelago in the world • Rich of natural resources and culture • Huge of tourism places, visitors and revenue • Indonesia's GDP is the largest in South East Asia 	<ul style="list-style-type: none"> • Lack of international accreditations • Lack of health delivery services, facilities and accessibility • English spoken is a barrier • Lack of promotion • Shortage of healthcare professional training in private and public sectors • Lack of specialty health centre
Demand	<ul style="list-style-type: none"> • Quality of hospital accreditation and reputation • Quality of health delivery services, accessibility, facilities and competitive cost • Well-trained health professional • Availability of specialty health centre • Promotion • Strong demand of export market to health sector 	<ul style="list-style-type: none"> • Increased demand for medical treatment abroad for Indonesians
Related and supporting industries	<ul style="list-style-type: none"> • Collaboration among ministry to ministry, ministry to private, and nation to nation • Empower health infrastructure provided • Private hospitals are larger and rapidly growing 	<ul style="list-style-type: none"> • Imbalance of human resources and infrastructure in urban and rural areas • Declining public healthcare • A growing population and a higher incidence of non-communicable diseases • Indonesia is located in an area of the world that experiences regular natural disasters, such as earthquakes, tsunamis, floods, severe droughts and volcanic eruptions
Firm strategy, structure and rivalry	<ul style="list-style-type: none"> • Significant market and strategic location between Indian and Pacific Oceans • Huge potential to develop the hospitals connectivity more accessible and affordable 	<ul style="list-style-type: none"> • Competitive cost and quality among medical travel countries
Government	<ul style="list-style-type: none"> • National Health Strategic Plan 2010-2014, Ministry prioritizes to develop the rural areas • Establish a department to 	<ul style="list-style-type: none"> • Lack of financial • Lack of supporting medical tourism

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	support medical travel • Allows investment in health sector	
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4.3 SWOT Analysis

The analysis results shown in Table 2 are further divided into internal and external factors situated to the medical travel industry in Indonesia. Then, these factors are assigned to the four quadrants of SWOT scheme: Strength (S): internal/favorable factors; Weakness (W): internal/unfavorable factors; Opportunity (O): external/favorable factors; and Threat (T): external/unfavorable factors as shown in Table 3.

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Table 3: SWOT analysis of medical travel development in Indonesia

	Internal factors	External factors
Favorable factors	<p>Strengths (S)</p> <p>S1: Major east-west trade routes</p> <p>S2: Largest archipelago in the world</p> <p>S3: Rich of natural resources and culture</p> <p>S4: Huge of tourism places, visitors and revenue</p> <p>S5: Indonesia's GDP is the largest in South East Asia</p> <p>S6: Private hospitals are larger and rapidly growing</p> <p>S7: Significant market and strategic location between Indian and Pacific Oceans</p>	<p>Opportunities (O)</p> <p>O1: Demand of hospital accreditation and reputation</p> <p>O2: Demand of quality of health delivery services, accessibility, facilities and competitive cost</p> <p>O3: Demand of well-trained health professional</p> <p>O4: Demand of availability of specialty health centre</p> <p>O5: Demand of promotion</p> <p>O6: Strong demand of export market to health sector</p> <p>O7: Collaboration among ministry to ministry, ministry to private, and nation to nation</p> <p>O8: Empower health infrastructure provided</p> <p>O9: Potential to develop the hospitals connectivity more accessible and affordable</p> <p>O10: National Health Strategic Plan 2010-2014, Ministry prioritizes to develop the rural areas</p> <p>O11: Establish a department to support medical travel industry</p> <p>O12: Allows investment in health sector</p>
Unfavorable factors	<p>Weaknesses (W)</p> <p>W1: Lack of international accreditations</p> <p>W2: Lack of health delivery services, facilities and accessibility</p> <p>W3: English spoken is a barrier</p> <p>W4: Lack of promotion</p> <p>W5: Shortage of healthcare professional training in private and public sectors</p> <p>W6: Lack of specialty health centre</p> <p>W7: Imbalance of human resources and infrastructures in urban and rural areas</p> <p>W8: Declining public healthcare</p> <p>W9: Lack of financial</p> <p>W10: Lack of supporting medical tourism</p>	<p>Threats (T)</p> <p>T1: A growing population and a higher incidence of non-communicable diseases</p> <p>T2: Indonesia is located in an area of the world that experiences regular natural disasters, such as earthquakes, tsunamis, floods, severe droughts and volcanic eruptions</p> <p>T3: Competitive cost and quality among medical travel countries</p> <p>T4: Increased demand for medical treatment abroad for Indonesians</p>

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4.4 Correspondence Analysis and TOWS Matrix

The study applied correspondence analysis using the TOWS matrix in order to correlate the relationship between SWOT factors and conduct a strategy formulation (Wang & Hong, 2011; Weihrich, 1982). Then, these correlated factors can be formulated appropriate matching strategies. Hence, the results are shown in Table 4. There are four types of matching strategy using TOWS matrix, namely SO, WO, ST and WT. The internal factors (S and W) that related under same competitive advantages of nation aspects are further formed into factor groups, such as (S1 to S7), or (W1 to W10). Internal factors are actively corresponded with the external factors (O and T) so as to indicate many highly correlated factors. Forming factor groups can help reduce complexity in correspondence analysis and facilitates more subsequent formulating of integrated strategies. By using the TOWS matrix as shown in Table 5, finally, the 25 results are correlated between SWOT factors and formed to the competitive advantages of nation.

Table 4: Correspondence analysis using TOWS matrix

SWOT	Strengths (S)							Weaknesses (W)											
	SW	S1	S2	S3	S4	S5	S6	S7	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10	
	OT	(P)	(P)	(P)	(P)	(P)	(R)	(F)	(P)	(P)	(P)	(P)	(P)	(P)	(R)	(R)	(G)	(G)	
Opportunities (O)	O1	O	▲	O	▲	O	▲	O	▲	▲	▲	▲	▲	O	O	O	O	▲	
	O2	O	▲	O	▲	O	▲	O	O	▲	O	▲	O	▲	O	O		▲	
	O3	O	▲	O	▲	O	▲	O	O	▲	▲	▲	▲	▲	▲	O	O	▲	
	O4	O	▲	▲	▲	O	▲	▲	O	O	O	▲	▲	▲	O	O		▲	
	O5	O	▲	▲	▲	▲	▲	▲	O	O	O	▲	▲	▲	O	O	O	▲	
	O6		▲	O	O	O	▲	▲	O	▲	O	O	O	O	O	O	O		O
	O7	O	▲	▲	O	O	▲	▲	▲	▲	▲	▲	▲	▲	O	▲	▲	▲	
	O8	O	▲	O	▲	▲	▲	▲	▲	▲	O	O	O	O	▲	O	▲	▲	
	O9	O	▲	O	▲	O	O	▲	O	▲	O	O	O	O	O	O	O	O	
	O10	O	▲	O	▲	▲	O	O	O	▲	O	O	O	O	▲	O	O	O	
	O11	O	▲	O	▲	▲	O	▲	▲	▲	▲	▲	▲	▲	▲	▲	O	▲	
	O12	O	▲	O	O	O	O	▲	▲	▲	▲	▲	▲	▲	O	O	▲	O	
Threats (T)	T1	O	▲	O	O	O	O	O	O	▲	O	O	O	▲	O	O	O	O	
	T2	O	▲	O	O	O	O	O	O	▲	O	O	O	▲	O	O	O	O	
	T3	O	O	O	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	O	▲	▲	▲	
	T4	O	O	O	O	O	O	O	▲	▲	O	O	▲	▲	O	O	O	▲	

Note:

1. P= Production factor, R= Related and supporting industries, F= Firm strategy, structure and rivalry, D= Demand factor, G= Government
2. '▲' denotes high correlation and 'O' denotes no/low correlation

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Table 5: Correlation between SWOT factors and formed to the competitive advantages of nation

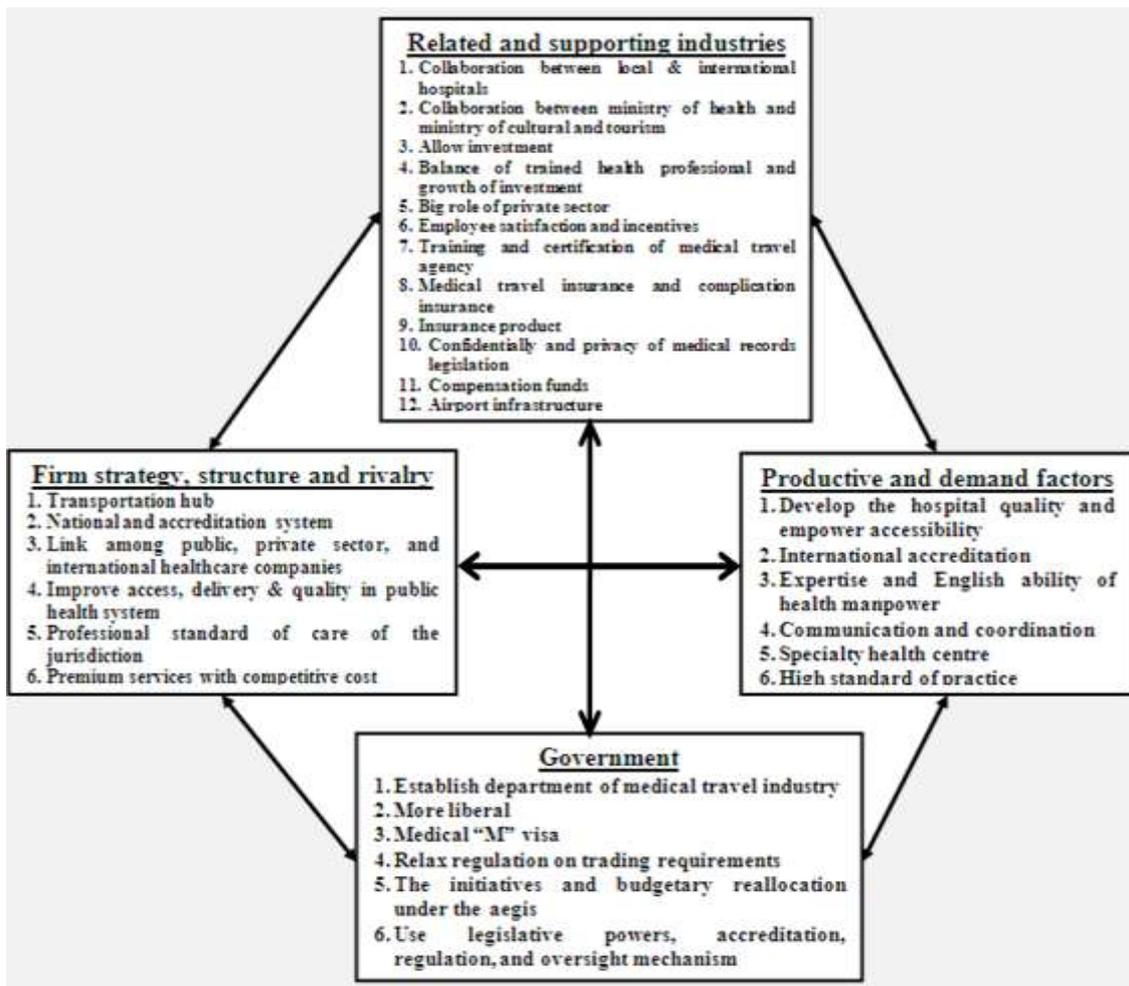
	Strengths (S)	Weaknesses (W)
Opportunities (O)	SO1: (S2,O1 to O12) Productive factors SO2: (S3,O4,O5) Productive factors SO3: (S4,O1 to O5) Productive factors SO4: (S4,O8 to O11) Productive factors SO5: (S5,O10,O11) Productive factors SO6: (S6,O1 to O8) Related and supporting industries SO7: (S7,O4 to O9) Firm strategy, structure and rivalry SO8: (S7,O11,O12) Firm, strategy, structure and rivalry	WO1: (W1 to W5,O1) Productive factors WO2: (W1,O7,O8) Productive factors WO3: (W1 to W6,O11) Productive factors WO4: (W2,O2,O3) Productive factors WO5: (W2,O6 to O10) Productive factors WO6: (W3 to W6,O7) Productive factors WO7: (W4 to W6,O3 to O5) Productive factors WO8: (W7,W8,O11) Related and supporting industries WO9: (W9,W10,O7,O8) Government WO10: (W10,O1 to O5) Government
Threats (T)	ST1: (S2,T1,T2) Productive factors ST2: (S4,S5,T3) Productive factors	WT1: (W1,T3,T4) Productive factors WT2: (W2,T1 to T4) Productive factors WT3: (W3 to W5,T3) Productive factors WT4: (W6,T1 to T4) Productive factors WT5: (W9,W10,T3) Government

4.5 Strategy planning for Medical Travel Industry in Indonesia

The results of correlation between SWOT factors and its formed to the competitive advantages of nation listed in Table 5 can be linked and integrated into a driving strategy (Wang & Hong, 2011; Sepehr & Amir, 2008). Based on the Porter (1990) proposed that developing robust competitive advantages, key factors and strategies should be linked so as to complement each other. Finally, the approach of incorporated of formulating integrated between Diamond model and SWOT analysis yields 30 strategies planning to develop medical travel industry in Indonesia as illustrated in Figure 5 and listed below.

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Figure 5: A strategic planning to develop medical travel industry in Indonesia



A. Productive and demand factors

(Driven by SO1, SO2, SO3, SO4, SO5, related to ST1, ST2)

(Driven by WO1, WO2, WO4, WO7, related to WT1, WT3)

1. Public and private health sectors should focus on developing the hospital quality in interesting tourism places in Indonesia such as Bali island and empowering the accessibility on delivering healthcare services such as timely, professional health delivery services, and low cost.
2. Obtain the 'international accreditation' standards from Joint Commission International (JCI) for hospitals by providing the quality of healthcare delivery services and health facilities such as medical and surgical devices and technologically advanced equipment to help the healthcare service more efficiently and effectively.
3. Educate the health manpower to maintain expertise including English ability by training/education.
4. Empower communication and coordination both in internal hospital among physicians, nursing, midwives and staff and external hospital among healthcare professional, customer/patients, governments, and partnership hospitals.
5. The drawback of specialty health centre for modern system and alternative system of medicine, public and private hospitals must provide many treatments to attract local and international patients such as:

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- Orthopedic surgery (hip replacement, knee replacement, resurfacing, joint surgery)
 - Cardiac/cardiology (by-pass, valve replacement)
 - Dentistry (cosmetic, reconstruction)
 - Plastic/cosmetic surgery (breast, face, liposuction)
 - Bariatric surgery (gastric by-pass, gastric banding)
 - IVF/reproduction system (IVF, gender reassignment)
 - Organ and tissue transplantation
 - Eye surgery
 - Laser treatments
 - Weight loss
 - Genetically engineered babies
 - Diagnostics and check up
 - Yoga, ayurveda, homeopathy, naturopathy, and meditation as the most demanding choices to perfect physical and mental health.
6. Ensure the medical tourists receiving competent care abroad as well as proper follow-up care upon their return, medical tourism industries must be held to high standards of practice.

B. *Related and supporting industries*

(Driven by WO9, related to SO6)

(Drive by WO8 and WO5)

(Driven by WO6)

(Driven by WO10 WO3, related to WT5)

1. Collaboration between Indonesia hospitals and foreign hospitals/healthcare companies is to help improving healthcare service facilities and introduce superior management techniques and information systems.
2. Collaboration between ministry of health and ministry of culture and tourism is to explore and promote the cultural-tourism potential and health system in order to attract tourists and increase economic growth.
3. Allow foreign investors to invest the hospital infrastructures.
4. In order to support medical travel development, the hospitals which located in strategic locations must consider the balance of trained health professional and the growth of investment.
5. Private sector has a huge role to increase number of super-specialty centers offering services to medical tourists and investments to improve healthcare infrastructure and technologies, and provision of expensive and specialized services.
6. Public sector has to resolve issues related to employee dissatisfaction and provide better incentives to retain staff by improving working conditions and facilities and providing opportunities for professional development.
7. Representatives of medical travel agencies should have to undergo training and certification.
8. Medical travel insurance and medical complications insurance should be included in the health care plans of patients travelling for care.
9. Insurance products should be used to reduce financial risks patients face if they receive negligent care and are harmed while receiving treatment at international health care facilities.
10. Using teleconferencing, international Tele-radiology and international communication of medical records will need to conform confidentially and

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privacy of medical records legislation in both source and destination nations.

11. Compensation funds should be established to compensate clients stranded abroad when medical travel industries cease operating or when customers fail to receive other contracted services.
12. Improve the airport infrastructure to ensure smooth arrive and depart for medical tourist.

C. Firm strategy, structure and rivalry

(Driven by SO7)

(Driven by SO8, related WO3)

1. Develop the hospitals nearby transportation hub such as airport and main roads in order to select and promote the market more accessible and affordable.
2. To create the competitive of nations, Indonesia needs to develop and implement a system of national and international accreditation and licensing for both public and private sector health facilities.
3. Establish link between public and private sectors even with international healthcare companies in order to help augment financial capacity of the public health sector, to improve the overall availability and quality of services for the public at large, and to reduce the disparity in standards and working conditions between the two segments. The linkages could be established through professional exchanges; cooperation in training; use of facilities; telemedicine; sharing of information and research; and providing complementary or specialized treatments.
4. Indonesia potentially has opportunity to become a global health destination and being a rival of medical travel countries if it is provided by medical travel which can be utilized to improve the access, delivery, and quality of services in the public health system.
5. Medical travel industries should be responsible for ensuring that their customers receive treatment that falls within the professional standard of care of the jurisdiction within which medical travel agencies are located.
6. Availability of the premium services with competitive cost.

D. Government

(Driven by WO9 and WO10, related to WT5)

1. Establish a department which specially handles medical travel industry.
2. Become more liberal on developing relationship among other countries for increasing competitive advantages of the industry.
3. Located in strategic and major trade market in ASEAN region and between Pacific and Indian Oceans, the government should promotes medical travel industry and attracts medical tourists by issuing the medical 'M' visa for medical tourism and establishing media, national and international fair, and cooperation with other countries.
4. Relax regulation on trading requirements to support supply chain in business innovation in health sector.
5. The government will have to undertake initiatives to improve the infrastructure, quality and efficiency of the public health sector. The initiatives and budgetary reallocation under the aegis is a step in the right direction.
6. Government ministries need to use legislative powers, accreditation, regulation, and oversight mechanisms to impose standards on local

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business that arrange medical procedures at international health care facilities.

5 Conclusion and Suggestion

The exploration of this study has been identified the factors influencing of medical travel development in Indonesia through investigating the relevant of comparison to demand model of medical tourism and the industry situation in Indonesia. The result shown that the factors influencing were factor of advertising and distribution channel, factor of country selection, factor of hospital selection, and factor of physician selection which are also the need of medical treatment. Furthermore, the aim of study also formulated a strategic planning to develop medical travel industry in Indonesia by analyzing a Diamond model and a SWOT theory. Then, its analysis finding was formulated by correlating and matching through TOWS matrix with resulting 25 results. After that, the TOWS matrix's results have been linked and integrated between Diamond model and SWOT analysis into a driving strategy. Finally, there are 30 strategies planning to develop medical travel industry in Indonesia categorized by productive and demand factors, related and supporting industries, firm strategy, structure, and rivalry, and government.

This paper purpose utilizes the theory of Diamond model, SWOT analysis, and TOWS matrix by the case study of Indonesia's medical travel industry. It can be shown detail by the factors influencing and the strategic planning for improvement and further development. By using a qualitative research and secondary data method in the research, the lack of data sources became constraint for authors to analyze, identify, and investigate the research by combining with quantitative research somehow. However, the quantitative research could also be adopted into further research by using an integration of SWOT-Analytic Hierarchy Process (SWOT-AHP) model to analyze the significant/critical factors of medical travel development and to formulate the strongly strategic planning to develop the industry from the data gathered through primary and secondary data methods. However, the integrated SWOT-AHP method is not only to be used at medical travel industry but also at any sectorial industries such as transportation, trading, forestry, etc.

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