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A Review on Critical Success FactEffect of Tourism on Demand of Hotel Room Type and Its Tariff

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Abstract

Tourism industry is one of the major contributors to the national economy and it is closely related to the development of the hotel industry. Improvement of sub sectors accommodation (hotel) is often related to the increase of tourists to Malaysia. The aim of this paper is to analyse the effect of tourism on demand of hotel room type and its tariff. In addition, tourists' behaviours were observed to understand demand of hotel room type because they contribute to the development of hotel industry. Four main factors were chosen as the main factors before choosing a hotel that are price, location, facility and accessibility. These factors were analyse using two methods that are descriptive analysis and multidimensional scalling analysis. The result of this analysis showed that tourist chose 2- star hotels and below as their preferred accommodation. Apart from that, this research further analyse hotel room tariff for the hotel type that was chosen by tourists using simple linear regression. This is useful as a simple guideline for hotel industry.

Keywords: Tourism; hotel room demand; hotel room tariff

Abstrak

Industri pelancongan merupakan salah satu penyumbang kepada ekonomi negara. Industri pelancongan adalah berkait rapat dengan pembangunan industri hotel. Peningkatan penginapan sering berkaitan dengan peningkatan pelancong di Malaysia. Matlamat kajian ini adalah untuk menganalisis kesan pelancongan ke atas permintaan jenis bilik hotel dan tarifnya. Selain itu, tingkah laku pelancong dianalisis untuk memahami permintaan jenis bilik hotel kerana mereka adalah penyumbang kepada industri perhotelan. Empat faktor utama telah dipilih oleh pelancong sebagai faktor utama dalam pemilihan hotel iaitu harga, lokasi, kemudahan dan kemudahsaampaian. Faktor ini dianalisis menggunakan dua kaedah iaitu deskriptif analisis dan *multidimensional scaling* analisis. Hasil analisis telah menunjukkan bahawa pelancong telah memilih penginapan hotel 2 bintang ke bawah. Sehubungan dengan itu, kajian dilanjutkan dengan menghasilkan ramalan tarif sewa bilik hotel menggunakan regresi linear mudah. Ramalan ini merupakan garispanduan mudah yang boleh digunakan dalam industri perhotelan.

Kata kunci: Pelancongan; permintaan bilik hotel; tarif sewa bilik

1.0 INTRODUCTION

The development of the tourism industry is closely related to the development of the hotel industry. Many studies have been carried out in relation to tourism and hotel development. Among them, the vision of hospitality and tourism industry in the 21st century (Holjevac, 2003), the response capacity of international tourist hotel development in Taiwan (Chen, 2011) and changes in the structure of the hotel industry based on tourism in China (Gu, Ryan & Yu, 2012) which clearly showed the impact of tourism on hotel industry.

Tourism is a very important industry in the world as it helps boost the economic development of a country (Holjevac,

2003; Chen, 2011). Tourism is one of the most important economic sectors in Switzerland (Kytzia, 2011). According to Williams and Shaw (2009), tourism and recreation is a dynamic land-use complex in the UK. Great development in tourism and recreation land use has led to deformation and distribution and relationship to other land uses. The hotel is an important requirement for travellers (Holjevac, 2003). The hotel provides well-equipped accommodation with various aspects to gain profit (Wu & Chen, 2012). Kotler and Armstrong (1993) in research by Israeli (2002) described the factors that influence the value of rental property include internal and external factors. Internal factors are the purpose of this market, strategy and business objectives and operational factors. While external

factors are market supply and demand, competition, and environment.

Among the reasons for a country to develop the tourism industry is that it is a source of economic growth by utilising the transport, accommodation, catering, entertainment, retailing and other sectors (Petrevska and Kjosev, 2012). As example, the improvement of sub sectors accommodation is often related to the increase of tourists to Malaysia (Economic Report 2012/2013). According to the Ministry of Tourism and Culture, Malaysia's tourism industry has gained an increase of 8.1 percent to RM65.44 billion compared to RM60.56 billion in tourist receipts in 2012. Meanwhile, tourist arrivals increased by 2.7 percent to 25.7 million compared to 25 million arrivals in 2012. Table 1.1 shows the result of Malaysia's tourist arrivals and tourist receipts revenue from 1998 to 2013.

Table 1.1 Tourist arrivals and receipts to Malaysia

Year	Arrivals	Receipt (RM)
2013	25.72 Million	65.44 Billion
2012	25.03 Million	60.6 Billion
2011	24.71 Million	58.3 Billion
2010	24.58 Million	56.5 Billion
2009	23.65 Million	53.4 Billion
2008	22.05 Million	49.6 Billion
2007	20.97 Million	46.1 Billion
2006	17.55 Million	36.3 Billion
2005	16.43 Million	32.0 Billion
2004	15.70 Million	229.7 Billion
2003	10.58 Million	21.3 Billion
2002	13.29 Million	25.8 Billion
2001	12.78 Million	24.2 Billion
2000	10.22 Million	17.3 Billion
1999	7.93 Million	12.3 Billion
1998	5.56 Million	8.6 Billion

Source: Tourism Malaysia Corporate (2014)

The number of hotels offered are different in type, star rating, size and others. These differences will determine the rental rate for a room offered by the hotel management. Figure 1.1 shows the hotel room tariff based on the star rating in George Town, Penang. Georgetown was chosen as an area of study because it is a historical city with tourist arrival of around 6 million in 2014. Therefore, the management of all sectors in tourism must be efficient.

In addition, Lee (2011) already proved that there are positive relationships between hotel room tariff with tourist arrival in Singapore. Israeli (2002) mentioned that hotel room tariff influenced star rating for hotels. Consequently, this research was conducted to identify the demand of hotel type based on star rating and to forecast the hotel room tariff.
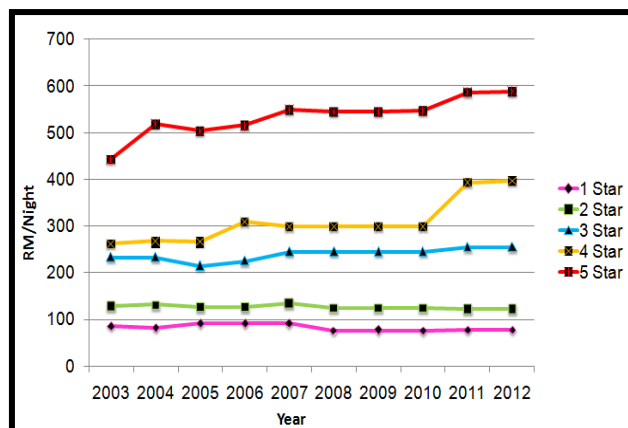
Source: Department of Valuation and Property Services (1997-2008)

Figure 1.1 Hotel Room Tariff Based On Star Rating At George Town, Penang

■2.0 LITERATURE REVIEW

According to the World Tourism Organization (2008) in Dayang *et al.* (2012), tourism is all of the activities involved during the trip. Tourist is a person who migrated outside the home at least overnight for one night (Anand, 2007). Moreover, tourism is defined as an idea, theory or ideology to become a tourist and behavior they do a translation of ideas into practice (Leiper, 1990).

Rosentraub and Joo (2009) use a system of tourist attractions mentioned in Leiper model to support their research related on investment in tourism and economic development.

Leiper is a theoretical model used in tourism. The model consists of five main elements are interlinked. The five elements are the human element (tourists), industrial elements (tourism) and three related elements of geography (Leiper, 1979). Table 2.1 describes in more detail the relevant elements in Leiper's model.

Table 2.1 Element in Leiper's Model

Element	Explanation
Tourist	Tourist is the actor in this theory. Tourism is travel experiences and entertainment which is very important in their lives.
Tourism Industry	It is the businesses and organizations that help in promoting tourism revenue. For example, in the transportation, accommodation, and so on.
Geography	Categorized into three: 1) The area of origin of tourists 2) The tourist destination 3) The stops

Source: Warn (2001)

Leiper model is an attempt to look at tourism as a form of operating system that has a structure consisting of several components that interact with each other (Mason, 2003). By using this model, the existence of a fundamental system of travel (Figure 2.1) can be explained detail to understand tourism system. This model can be used as a framework for interdisciplinary studies of tourism (Leiper, 1990).
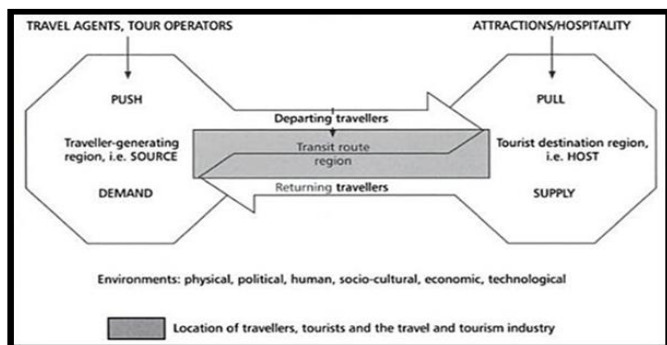
Source: Leiper (1990)

Figure 2.1 Basic system of tourism

Hotel is one of the types of accommodations that are often associated with tourism such as in the study of Chou *et al.* (2008) on the model selection of the location for the International Tourist Hotels and Sharpley (2000) which examined the impact of the accommodation sector (hotels) on the development of tourism. Furthermore, demand for hotel industry by a traveler because it provides accommodation services, food and other services including laundry, swimming pools and conference facilities (Chen & Soo, 2007). In fact, the hotel industry can be used as indicators of the development of tourism in the country.

There are 10 factors that can influence customers in the decision making to stay at a particular hotel. Ingram (1996) stated the factors include:

- Customers' perceptions based on past experiences, travelling frequency, culture.
- Purpose of visit (business, pleasure).
- Account settlement (company, agent voucher, personal payment).
- Method of travel (rail, air, car, coach etc.).
- Location of hotel.
- Booking source (secretary, travel agent, personal choice).
- Lead time between booking and room occupation.
- Knowledge of a particular hotel (personal recommendation, guides, hotel branding and marketing).
- Existing quality grading.
- Published prices and agreed terms.

Apart from that, we can summarise to eight factors on selection of hotels such price, location, facility, accessibility, food, popularity, design and others. These factors were used as a guideline to know the demand of hotel type.

■3.0 METHODOLOGY

In order to get the information for our research purpose that is to analyse the effect of tourism on demand of hotel type and its tariff, we gathered information from our respondents through questionnaires. For this purpose, questionnaires were distributed among tourist in George Town, Penang. 100 tourists were selected to get responses for analysis. The questionnaires contain two sections:

- General Background
- Tourism And Hotel Industry

General background section is about demographic where it is comprises of age, gender, origin, education, employment status and monthly income of the respondents. Tourism and hotel industry section comprises of travel to Penang, hotel industry, expenditure and priority level on selection of hotel. Priority level on selection of hotel were discussed in detail to know the demand of hotel type.

Five point likert scale is used to measure these responses regarding to their priority level on selection hotel where one is not significant while five is very significant. Data was collected from respondent with random sampling techniques. The target population of this research was tourist arrival at centre of George Town, Penang. A survey instrument in the form of close ended questionnaire was developed for the purpose of collection of data. The respondents were 51 percent male and 49 percent female where 73 percent international tourists and 27 percent domestic tourists.

Likert scalling were analyze using two methods that are descriptive analysis and multidimensional scalling analysis. Descriptive analysis showed the result of priority index for each factor in location, facility and accessibility. In addition, multidimensional scalling analysis were used to categorized the priority index in two category that are very significant and not significant. The result from this analysis were showed the important factor on selection of hotel. So that we can detect the demand of hotel type from tourist.

Simple linear regression were used as a forecasting technique for hotel room tariff. The actual tariff for 11 years were used to forecast the trend of 11 years later using the regression equation.

■4.0 ANALYSIS AND DISCUSSION

There are eight factors that were prepared in survey question to 100 respondents among tourist arrival in Penang. The result from this survey were analyze using descriptive analysis for likert scalling (Table 4.1) and multidimensional scalling (Figure 4.1) find that four factors that are very significant before choosing hotel are price, location, facility and accessibility. In likert scalling for the factor that are very significant rank as one while not significant is eight. Very significant factor got mean 2.06 until 4.18.

Table 4.1 Descriptive analysis for likert scalling

Factor	Position	Sum	Mean	Priority Index
Price	1	206	2.06	Very Significant
Location	2	220	2.20	
Facility	3	331	3.31	
Accessibility	4	418	4.18	
Food	5	432	4.32	Not Significant
Popularity	6	500	5.00	
Design	7	581	5.81	
Other	8	692	6.92	

Source: Researcher (2014)
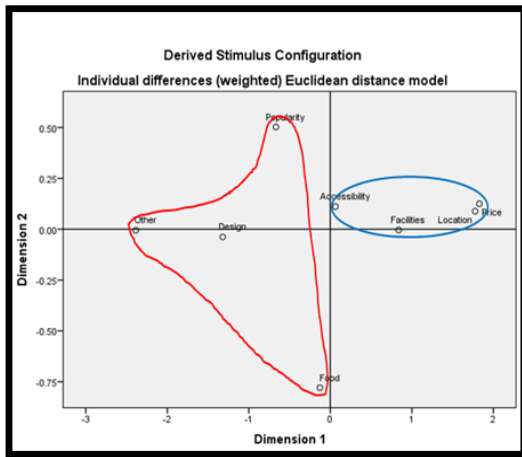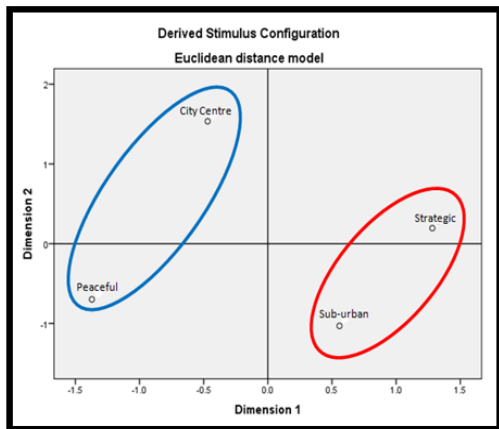
Source: Researcher (2014)

Figure 4.1 Multidimensional scalling analysis

From the result of factor, some items that determine detail about each factor were examine and analyze. There are 4 factors for location were analyze using descriptive analysis for likert scalling to know the priority index of each factor such in Table 4.2. From this analysis, city centre got first position with mean 3.75 and 75 percent. Figure 4.2 showed the result from the multidimensional scalling analysis. The blue circle represent very significant factor while red circle is not significant factor.

Table 4.2 Descriptive analysis for likert scalling of location

Factor	Position	Sum	Mean	Percent	Priority Index
Located in the **city centre**	1	375	3.75	75.00	Very Significant
Located in a **peaceful** location – away from noise and air pollution	2	346	3.46	69.20	Significant
Easy to find the hotel with the help of billboard– s**trategic** / marketing aspects are good	3	345	3.45	69.00	Significant
Located in **sub-urban** area	4	279	2.79	55.80	Not Significant

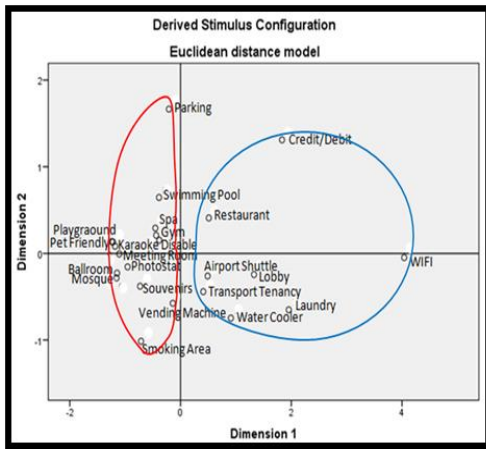*Source:* Researcher (2014)

Source: Researcher (2014)

Figure 4.2 Multidimensional scalling analysis of location

The same analysis technique were used to identify the priority of facility factor. There are 23 factors that can be used to categorize star rating as mention in Table 4.3. The multi dimensional scalling result as Figure 4.3 showed eight factors that are very significant in facility. They are wifi availability, laundry service, credit/debit card acceptance, lobby, water cooler, restaurant, airport shuttle and also transport tenancy.

Table 4.3 Descriptive analysis for likert scalling of facility

Factor	Position	Sum	Mean	Percent	Priority Index
Internet / **Wi-Fi**	1	442	4.42	88.40	Very Significant
Cards accepted (**credit / debit card**) for payment	2	338	3.38	67.60	Significant
Laundry services	3	326	3.26	65.20	Average Significant
Facility waiting area in **lobby**	4	304	3.04	60.80	Average Significant
Water cooler machine provided	5	297	2.97	59.40	Average Significant
Cafeteria or **restaurant** in hotel	6	284	2.84	56.80	Average Significant
Transport tenancy offered by hotel like rented car, motorcycle and so on	7	269	2.69	53.80	Less Significant
Airport shuttle	8	265	2.65	53.00	Less Significant
Parking facilities	9	255	2.55	51.00	Less Significant
Vending machine provided	10	248	2.48	49.60	Less Significant
Swimming pool in hotel	11	241	2.41	48.20	Less Significant
Facilities for **disabled** guests	12	233	2.33	46.60	Less Significant
Gymnasium and recreation centre in hotel	13	228	2.28	45.60	Less Significant
Spa and health centre in hotel	14	215	2.15	43.00	Not Significant
Smoking area	15	207	2.07	41.40	Not Significant
Mosque	16	200	2.00	40.00	Not Significant
Souvenirs shop available	17	198	1.98	39.60	Not Significant
Photostat machine facilities	18	191	1.91	38.20	Not Significant
Pet friendly	19	188	1.88	37.60	Not Significant
Conference space, **meeting room** and so on	20	184	1.84	36.80	Not Significant
Children **playground**	21	182	1.82	36.40	Not Significant
Karaoke room	22	180	1.8000	36.00	Not Significant
Ballroom	23	175	1.7500	35.00	Not Significant

Source: Researcher (2014)
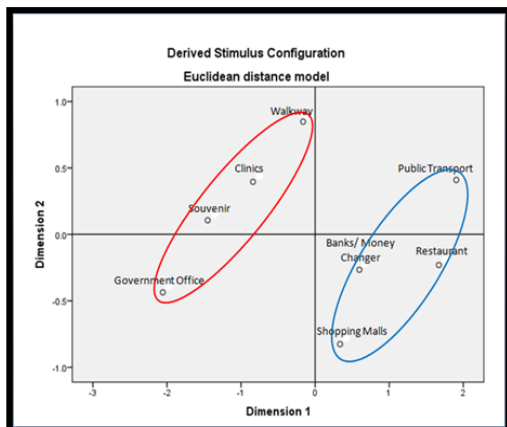
Source: Researcher (2014)

Figure 4.3 Multidimensional scalling analysis of facility

While in accessibility, there are eight factors where public transport have the highest percent with 80.2 percent such Table 4.4. The main significant item for choosing hotel are its easy to get public transport, close to restaurant, close to bank/money changer and also near to shopping malls as showed in Figure 4.4.

Table 4.4 Descriptive analysis for likert scalling of accessibility

| Factor	Position	Sum	Mean	Percent	Priority Index
Easy to get **public transport**	1	401	4.01	80.20	Very Significant
Close to **restaurants**	2	400	4.00	80.00	Very Significant
Close to **banks / money changers**	3	336	3.36	67.20	Significant
Close to shopping **malls**	4	322	3.22	64.40	Average Significant
Walkway provided	5	311	3.11	62.20	Average Significant
Close to health centres / hospitals / **clinics**	6	275	2.75	55.00	Less Significant
Close to **sales centre** for souvenir	7	262	2.62	52.40	Less Significant
Close to **government offices**	8	206	2.06	41.20	Not Significant

Source: Researcher (2014)

Source: Researcher (2014)
**Figure 4.4** Multidimensional scalling analysis of accessibility

Figure 4.5 summarize three important factors with their detail factor that are very significant and the characteristics of hotel type regarding to the guideline for star rating prepared by Ministry Of Housing And Local Government (2008). The result showed that tourist arrival in George Town really need the accommodation with star rating less than two star regarding to the location, facility and accessibility factor.
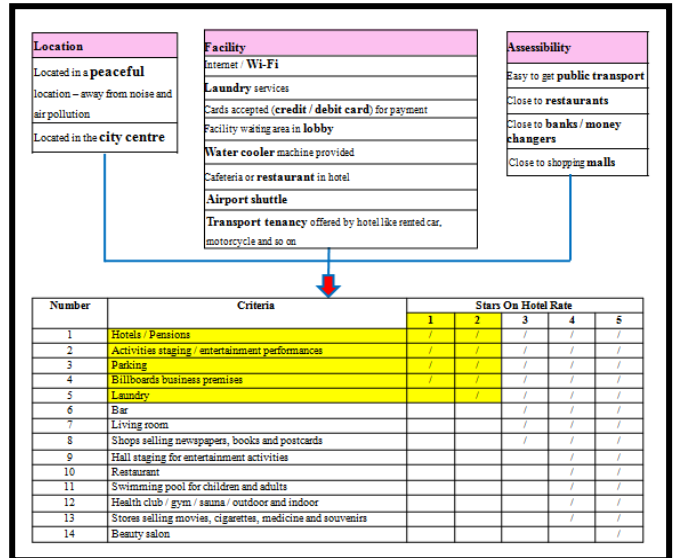
Source: Researcher (2014)

Figure 4.5 Result of hotel type

Result from the demand of hotel type, one hotel with 1 star rate were choosed at George Town centre as sampling for forecasting of hotel room tariff. Forecasting were analyze using simple linear regression. In the Figure 4.6, time period zero until 11 is the actual data that were used to get the regression equation for forecasting another 11 years later.
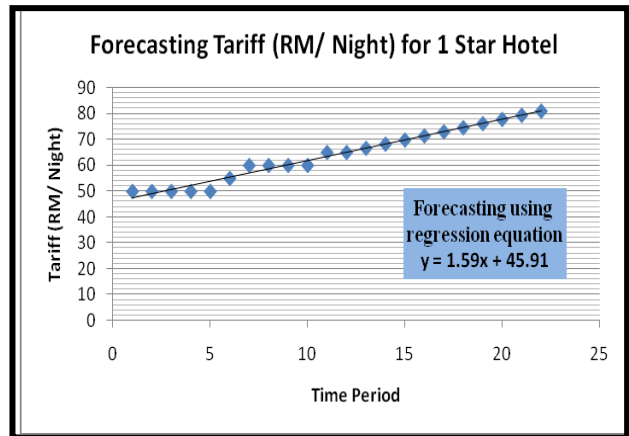
Source: Researcher (2014)

Figure 4.6 Forecasting of hotel room tariff for 1 star hotel

The forecasting for 11 years later showed that the tariff of hotel room still in the demand of tourist at George Town. Regarding to the survey carried out, tourist were spend below RM100 per night for their accommodation at hotel.

■5.0 LIMITATIONS AND FUTURE DIRECTIONS

Majority of respondent are backpackers tourist. Therefore, a further research should be examined in other types of tourist for more concrete results. Further research should also effort to achieve a larger population sample size.

■6.0 CONCLUSION

This study provide some course of action to understand demand of hotel room factor. The factor identified will monitor demand on rating of hotel. The results of this research will provide an analysis of the forecasting hotel room tariff regarding to the star rate. This will ensure that hotelier, developer, government and other agencies can make rational decision in development of hotel with good practice in hotel management. The performance of hotel industry can serve as one of the leading indicators of the level of development of tourism in a country.

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