

## Interaction of supply and demand in the tourism system

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**Abstract:** Tourism system activities are taken place in the form of interaction between supply and demand. Various services and facilities are involved in supplying tourism products. Settlements, camps, restaurants and food service, various parks, recreation and sports facilities, on the other hand, there are many factors that affects a destination selection by tourists such as economic, social and cultural circumstance. Generally, two groups of factors are effective on the process of activities in this system. The one is legal and governmental structures which is influential in whole tourism process in supply and demand sections. The other effective factor is travelling agents and distribution channel that communicate with tourists. Of course the economic condition in countries is very important in creating movement and investment in tourism. Some experts believe that countries with per capita incomes (GDP) less than three thousand dollars cannot have much movement in tourism system. So they needed foreign investment. This paper attempts to explain the mutual role of supply and demand in tourism.

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### 1. Introduction

Tourism demand necessitates four technical issues: Affecting factors on demand levels, spatial characteristics, the attempts on different types of tourism activities typology, decision making on tourism, affecting factors on demand are shown in Fig1.

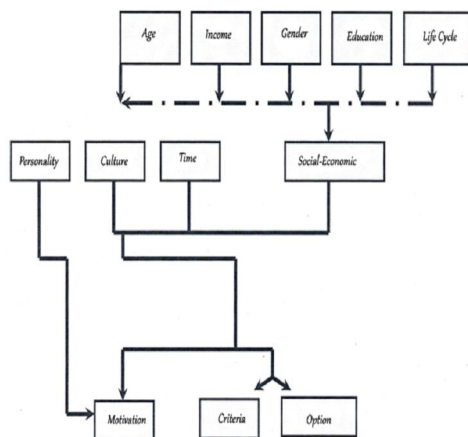


Figure 1: Affecting Factors on Demand

#### 1.1. Life Cycle

The concept of life cycle is based on the primary hypothesis that if people live together and with each other, their life will be transformed and if they will have offspring, their life style will be altered fundamentally, additionally the financial situation and other affairs will not be remained unchanged. Epedman (1995) and Pides (1993) introduced the concept that is known as life cycle of travelling or travel. The hypothesis confirmed that the travel, destinations and routes patterns is likely to change along with people spending life cycle. On the other hand, perman presents the change pattern between

different generations are also provided. (Lumsdon, Les, 2001: 73).

#### 2.1. Age and sex

As the people are in different ages, their values and needs will be different from young people. In some societies, gender is important based on the society expectations of male or female. Hofstede (1985) divided communities into two groups in their research. The groups who advocate men and who are advocators of women. In the first group, men are those with confidence and individualistic, by contrast, women afforded the supportive roles and responsibilities. In the second group, the labor division is not so clear for women but participation and quality of life are taken as the most important one. Thus, Hofstede believes that countries such as Australia, Germany and Japan tend to men more and in contrast tendency toward women are more in Europe northern countries. Although, the general cultural context may seem misleading, provide an interesting analysis especially in times of formulating the global marketing plan (Lumsdon, Les, and 2001: 71).

#### 3.1. Education

It is an important factor because influence the income. Apart from income, educational level affects the type of leisure and travel. It is a determining factor for the activities related to work and leisure. In addition, education and training is a reason of travelling by itself. Research has shown that increasing the level of education may increase the inclination for recreation outside the home. Also, people with higher education prefer to do activities that require skills such as games, concerts, art museums, tennis and golf playing, skiing, reading books and so on.

**Table 1:** The life cycle model

Stages	Characteristics	Tourism behavior
1-The earlier years of childhood	Complete adherence to or guardian, holiday beside the sea and the sand	Seeking recreational places in seacoast or land with entertainment facilities for children
2- Early of adolescence	Influence in decision-making, although they dependent on parents.	Spending the holiday in parks, nightclubs, and special residences for youth, the vacation semi-independent group plans.
3-Youth	Youth, the single people who do not live at home	Holiday based on the time and budget
4- Cooperation stage	Couples who live together in a process and spend very busy life. In this period of time, the lack of time is the most significant barrier for travelling.	They adherent to variety and touring in nature during the holidays
5. The initial phase of family	Including the parents with separated couples. Financial and educational excuses are the key barriers for traveling; these people tend to be family-oriented holiday.	Very interested in factual holidays or visiting VFR during holiday
6-Progress phase of family	Still, the major obstacles relate to education and training. Vacation patterns have disappeared.	Yearly coordinating the vacation program with the offspring programs who are on the verge of reaching to the semi-independent status.
7- Empty house	Children have left the home and the parent or parents have more freedom and leisure time.	In this period of time, the family enjoys the more financial well-being to go to prospecting travels
8- Retirement	By Retiring the men and women, seeking income will be stable, but there is time enough.	Constantly seeking quality, with age, people are looking for a vacation with lesser anxiety. Aging is not a barrier for travelling

Reference: Lumsdon, LA, 2001: 74

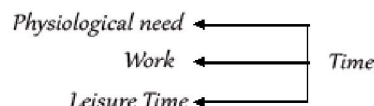
#### 4.1. Revenue

It is clear that income is an important determinant factor in the demand for travel. Not only traveling to a place is costly, but also tourists should pay the costs for services provided in destination. It is difficult to determine the relationship between incomes and travelling, because it is influenced by other economic social variables. In general, higher income, higher education is associated with certain occupations and certain age groups. Travel costs and other expenses are in the competition. Many studies have been conducted to determine the percentage of income is allocated for the recreation. It seems that at lower levels of income and education, approximately 2 percent of income is spent on entertainment. As income increases, the devoted income to the leisure will increase by 5 and 6 percent for all educational levels. Higher costs of recreation (7%) were reported by those who are house-owner, under the forty years and without children. Other studies have shown a positive relationship between income and leisure spending.

#### 5.1. Time

The amount of time available for the trip is an important factor. The time is considered an important factor in selecting the destination where is going to be

visited and the type of activities which is intended to done. Inclination for travelling and financial capacity is not sufficient if the person does have no enough time to travel. All the three factors are necessary for the trip to happen.



**Figure 2:** Time Division

The activities related to meeting the need includes the activities such as eating and sleeping. The time remained after work and meeting the needs is leisure time. By dividing the time into these three, the relationship between them will be clear. Time is absolute, and there is 24 hours in a day, seven days in a week, 52 weeks in a year, and any changes in one of these three will affect other parts unconsciously. And this is important because in tourism study, focus is on the use of leisure time (Mill & Morrison, 1985: 47).

#### 6.1. Culture

Culture can be defined as "a set of beliefs, values, attitudes, habits and behaviors in a community that is transmitted from generation to generation". Considering an imagination which a person has in

mind from himself, a lot of people respond to their needs within the society norms frameworks. For example, it is acceptable that a tourist wants to see verdurous areas, however tourism with the purpose of sex, is despised and rejected. Other cultural aspects which are concerned the research on motivation, are:

- Institutions like the church, the media and the educational system: The body influences the cultural patterns. For example, a percent is that an unscheduled day will devoted to worship.
- Language Speech: Cultural transmission primarily occurs through oral and written texts; on the other hand it includes symbolic gestures such as the way of conflicting, greeting, and ceremonies.... Using ceremonial language instead of non-ceremonial language in tourism industries is important in many cultures.
- Social Habits: This division consists of how divide the daily hours and attitudes about the use of facilities and observing traffic rules and so on.
- Subculture: There are some sub-cultures in many societies that origin from geographical differences (Lumsdon, Les; 2001: 70).

### 7.1. Personality

Personality is defined as a collection of distinct mental characteristics that determine individual's behavior. These certain characteristics may distinct people. Although some authors believe that the personality models have different social characteristics. One of the concepts related to the field is personal visions and indicate the extent of customers tendency to assume themselves beyond their personality. It is argued that professional behavior is often coincided with self-image, for example, men who with enough confidence may select golf or boat club for vacations based on their own taste. However the ambiguity on relationship between different characters and holiday patterns has not been resolved. There are not enough reasons to support this relationship (Lumesdon, Las; 2001: 66)

### 8.1. Motivation

Motivation is a tendency of an individual to reach to satisfaction and happiness. Motivation can appear in various ways, and is a psychology topic. The need hierarchy, was developed and explained by Maslow, is widely used to describe the motivation. This was probably due to its simplicity and application in various sectors. On the other hand, the mentioned theory has helped explaining the consuming behavior in tourism. Mill and Morsion (1992) studied a relationship between psychological, physical and mental needs in terms of their distances to each other and their order of them in each class. They have concluded that there is a close relationship between these levels. Means that when someone wants to answer their superior needs, strives to reach their

inferior needs, too. Mill and Morrisson prefer that Maslow's hierarchy graph is drawn in hive shape instead of a pyramid. On the other hand, they have added two more dimensions on the later stages, the first knowledge and understanding and the second aesthetic (Ferrario, F. (1979)).

### 9.1. Supply

The most important element in tourism is the supply in destinations which includes different sections of providing tourism product. Destination can be considered as a center of service and facilities that are planned for tourists needs. However, tourism destination is defined as the geographical area that includes tourists' movement centrality and its effect.

In fact, the destination includes all aspects of tourism. Demand, transportation, supply, and marketing namely it is a place in where all attractions and facilities required for tourists can be found (Cooper et al, 1998, 102). The concept of destination should be treated with caution, because all part of the country or city, or region may not be suitable for spending holidays, so can be called as a destination. What is important is an equipped purlieu with a full range of services to offer. The location of this purlieu is in the second degree of importance. Indeed, in this case, the destination is as same as the purlieu. (Dos Weil, Roger; 2000: 71). Change and transition in the destination is related to the following factors:

- Rate of development
- Availability
- Government
- Market procedure
- Competing destinations (Cooper et al, 1993, 114)

Although destinations do not imply a part of the tourist industry, they are the centrality point for the tourism activity in a region. Tourism destinations are the external aspects of international tourism industry which profited from its positive social and economic, but they are places for its environmental and social-cultural negative impacts. Also, it is the destination and its mental vision that can attract tourists in the first place (Ray, 1998: 25). The position of a specific location (destination) in the public mind is a mean for its introduction and considered as a scale for its evaluation. Some specific places or activities presented completely different features from the country in where they are located, but in other cases, countries general features are dominant. The general feature is completely a mental and general imagination namely it is a sub-characteristics of a place, its nature and people view on it, if general features are positive, people will visit there and otherwise they avoid going there. The general appearance has been created for several years. Historic production, cultural effective factors and also legends and epics are general appearances. Product position is

also affected by internal and external political attitudes. (DOS rails, Roger, 2000: 72).Tourism destination consists of different parts and sections which meet the tourists` needs or help the activity procedures of other parts.

Due to the importance of attractions, transport and residence, each of them will be described in following.

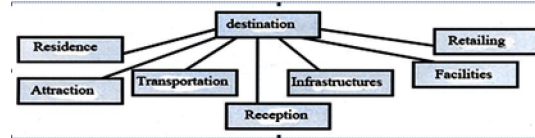


Figure 3: Status of tourism destinations

10.1. Attractions

Tourist attractions can be classified in different ways. These classifications are resulted from different people attitudes who divided tourism attractions based on their own attitudes and viewpoints. Gun believes that all the part and element in tourism system are divided into supply and demand; accordingly the supply includes internal and international markets and local inhabitants who use the attraction, facilities and tourism services, supply involves the attractions, activities, residence establishments, and other tourism facilities and services (Gun, 2002, 15).

Table 2: demand and supply system in tourism based on Gun`s view

Supply factors	Demand factors
*attractions and activities	* Tourism International Markets
* Residences	*Tourism Domestic Markets
* Other facilities and tourism services	* Tourism Domestic Markets
*transportation * Other Infrastructure * Organizational elements	* Exploiting the tourism attractions, facilities and services by local residents

According to Inskeep, the resources and attractions include: Natural resources and attractions, historical and cultural resources and attractions, man-made resources and attractions and special (Inskeep, 1991, 74) with knowledge of the fact that whenever tourism resources accompany with tourism facilities, may convert to the attractions (Zargham, 2002, 15). Tourist attractions are divided into three major categories by the World Tourism Organization: 1 - natural attractions, 2 - Cultural - Historic Attractions 3 - special attractions

11.1. Transportation

Tourism as a social and economic activity is related significantly to transportation. So that if transportation resulting from tourism activities is taken away, actually the nature of these activities will be distorted. Tourism attractions and facilities as the

place for supplying services create demand for tourism trips to benefit from these services (Javaheri, 2007, 4). Transportation system consists of a complex set of relationships between demand for travelling, the place for service providing and the nets for connecting the service provider places.

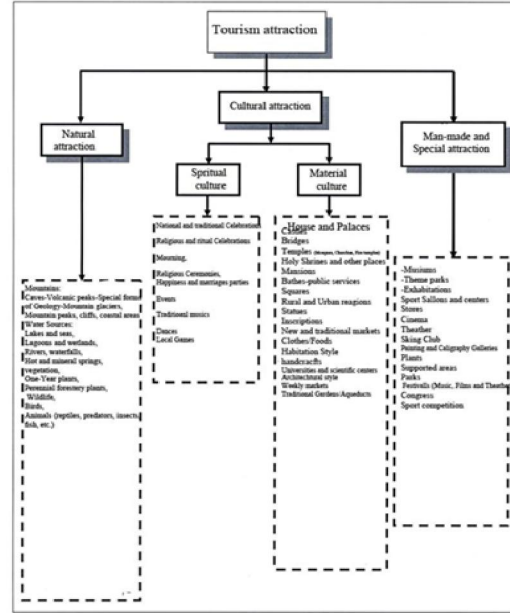


Figure 4: Types of Tourist Attractions

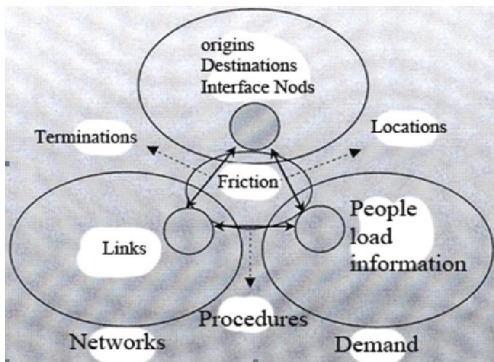
These systems basically depend on the business environments which originated from the distribution of costs, capacities, efficiencies; accordance to fact, and transportation rate. Such conditions are interrelated with transportation networks either in capacity or in spatial range. In other words, the transportation systems can be explained by a complex set of relationships between transportation supplying which fundamentally is network operational capacity as well as the needs related to movement in a given geographic area which is called demand can be justified (Rodrigue, 2044,4). Tourists start their travelling from source to tourism destinations via different kinds of transportation. In fact, providing tourism services need to travel to access such services. Hence, the quality of transportation is effective on tourist satisfaction from the tourism product (Lamb and Davidson, 1996: 264-5). In general, the relationship between transportation and tourism can be seen in the following four elements (Page, 2007, 123).

- Tourists
- The relationship between transport and tourists` experience
- The effects of transportation on tourists` Understanding
- Tourists` need for reliable, efficient and safe transportation

Transportation system can be considered as a set of relationships between the nodes, networks, and demand. The demand for public, load, performance and information transportation derived from a variety of social-economic activities. Nodes are the places that movement started from it, terminated to it and pass through it (Javaheri, 2007).



**Figure 5:** Tourists' travelling from origin to destination and vice versa



**Figure 6:** The components of the transportation system

### 12.1. Residences (Lodgings)

Lodgings were developed in result of the tourism industry development in tow sections of domestic and foreign tourists in the tourist destinations with the purposes of leisure and business activities (Pizam & Holcomb 2008, 1). The accurate definition of tourism lodgings is somewhat difficult due to the use of different statistics in each country. It includes items such as hotel accommodation, motel and rental house (Pizam, 2010, 2). In general, the following characteristics can be considered for tourist lodging:

- **Seasonality:** The demand is variable. So that most of the lodging customers may recourse to the places in boom seasons of tourism destinations.
- **Occupancy levels:** Demand for rooms is different throughout the seasons. Lodgings services cannot be reserved and must be sold in a given time.

- The location of the lodging specifies its availability and attraction.
- There are rankings (both voluntary and statutory) for residential services.
  - Repairing the lodging is costly (Page, 2007, 212)

### 2. Discussions

We can conclude that the supply and demand in the tourism system are interdependent. So that, if each of the supply and demand levels are presented imperfectly, it may disrupt the process of tourism and ultimately make the tourists dissatisfied. In fact, the public policies of governments and also tourist related organizations' operations must also be in a way that can bring supply and demand into balance level. Effects of supply and demand in the tourism system are such that determine the successfulness or unsuccessfulness. In the suitable tourism infrastructures are not provided in a country, for example if there is not any required condition for resting or residence of tourists along with historical and antiquities buildings, not only the tourists can be so effective on region economic situation, but also they may suffer and regretted. Thus against the demand, the supply of services can be known as a centrality of facilities and services to meet the needs of tourists. If the needs are met well, it will lead to produce exchange and economic prosperity and sustainable development in a country.

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### References

1. Cooper, c. fletcher, j. gilbert, D wanhill, s.she pherd, R. (1998), tourism: principles and practice (2 nd), newyork:longman.p47-114.
2. Edward (1991), Tourism planning. Network. P74.
3. Gun (2002), tourism planning. Rut ledge. Newyork. P15.
4. Lamb, b aand W. Husbands (eds) practicing responsible Tourism: international case studies in Tourism planning policy and development. Chiester. Wiley. p5.
5. MILL, Robert Christie and Alistair M.Morrison (1985), the tourism system: an introductory text: Englewood cliffs, new jersey: prentice hall. p 38-47.
6. Pizam, Abraham (2010), international Encyclopedia of hospitality management- second Edition, Elsevier Ltd UK. P2.
7. Pizam, Abraham & Holcomb, judi (2008), international Dictionary of hospitality management, Elsevier Ltd, UK.p1.
8. Rey,y.(1998) Tourism: an Introduction. newyork: longman .p25-35.
9. Rodriguc , jeam -paul(2004),Trans portation and the Geogaraphical space: dept. of economics & geography, Hofstra university. P4.
10. Stephen j. (2007) , Tourism management for change . elsevir Ltd, oxford. P123-212.