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# THE EVALUATION OF LOCATION SELECTION FOR SHOPPING CENTERS IN TURKEY: THE CASE OF ISTANBUL

## Abstract:

Today, Shopping centers are not places that only respond to shopping needs but they have become structures that offer social activities and various facilities, as well. Cinemas, children's playground, entertainment and recreation areas, restaurants and food departments are the components of shopping centers; they immediately entered the daily life activities of costumers. Today, costumers mostly prefer these shopping centers that are in different sizes and categories and which are half-open or fully-covered; they have become places where people choose to go as they help protect people from unfavorable weather conditions, additionally they respond working population's needs for shopping, sports and entertainment. This study looks into the factors that are influential on the preferences for shopping center location selection and explains these factors through a conceptual model. By means of a comprehensive literature search, the theoretical framework of the factors affecting the causes of preference is established and relevant research questions are chosen. Thus, the theoretical foundations of the model have been created. The field research includes the companies that operate in Istanbul but making shopping center investments all over Turkey. In this study, among the qualitative research methods, in-depth interview technique and interview form approach are preferred. Interviews have been held with people from project development departments of the companies investing on shopping centers pursuing different characteristics. The survey was maden in 23 different shopping center developer companies and 108 questionnaires in total have been given by using face-to-face interview technique. The results of the study have been evaluated by applying Analytical Hierarchy Process method. AHP can be defined as the decision-making and estimating method, which gives the percentage distribution of decision points in terms of factors affecting decisions; it is used in the identification of decision hierarchy. This study aims at becoming a source for shopping centre investors, developers, architects and other related disciplines; additionally, expects all these sides to act with the knowledge of what is expected from them.

## Keywords:

Shopping Center, Site Selection, Real Estate Development, Analytical Hierarchy Process, City Planning

## 1 Introduction

A shopping center is a complex, which consists of retail shops and various entities of service; it is designed, planned, structured and managed by a central unit. Containing various types of commercial enterprise and sales units of different trade volume, these complexes are established on the basis of offering service to consumers in a certain area or a certain group of consumers.

Shopping centers, in other words, are retail complexes where plenty of stores hence a greatnumber of commercial products coexist in order to provide consumers with the ease and comfort. These centers do not only include a group of various retail shops brought together within a certain plan, but they also serve as retail complexes where there are small retail shops selling specialty goods, and various other stores such as theatres, banks, pastry shops, cafeterias, hairdressers and drugstores to make it convenient for customers. A great majority of these complexes provide customers with a parking lot.

Shopping centers, today, are not places that only respond to shopping needs but they have become structures that offer social activities and various facilities, as well. Cinemas, children's playground, entertainment and recreation areas, restaurants and food departments are the components of shopping centers; they immediately entered the daily life activities of consumers. Consumers today mostly prefer these shopping centers that are in different sizes and categories and which are half-open or fully-covered; they have become places where people choose to go as they help protect people from unfavorable weather conditions, additionally they respond working population's needs for shopping, sports and entertainment. This study looks into the factors that are influential on the preferences for shopping center location selection and explains these factors through a conceptual model. By means of a comprehensive literature search, the theoretical framework of the factors affecting the causes of preference is established and relevant research questions are chosen. Thus, the theoretical foundations of the model have been created. The field research includes the companies that operate in Istanbul but making shopping center investments all over Turkey. In this study, among the qualitative research methods, in-depth interview technique and interview form approach are preferred. Interviews have been held with people from project development departments of the companies investing on shopping centers pursuing different characteristics. The survey was made in 23 different shopping center developer companies and 108 questionnaires in total have been given by using face-to-face interview technique. The results of the study have been evaluated by applying Analytical Hierarchy Process method. AHP can be defined as the decision-making and estimating method, which gives the percentage distribution of decision points in terms of factors affecting decisions; it is used in the identification of decision hierarchy. This study aims at becoming a source for shopping centre investors, developers, architects and other related disciplines; additionally, expects all these sides to act with the knowledge of what is expected from them.

## 2 Literature

Shopping center site selection, selection of the region will be established businesses, specifically identifying the location of the region and within the boundaries of the designated place of business is to select a piece of land will be installed (Yuksel, 2010). Carrying a long-term feature of facility location selection, affecting the competitiveness of the business is a strategic investment decisions (Üreten, 2006). Due to the long-term and strategic decision is difficult and costly to be replaced (MacCarthy&Atthirawong, 2003). Here's the business decision has a vital importance for the future (Top, 2009).

Founded in choosing the location of multi-criteria decision-making methods are used, some studies are listed below.

Kodali and Routroy; using AHP in the supply chain has worked on problems of potential location of facilities (Kodali&Routroy, 2006). Zahir, the uncertainty associated with the location selection by AHP in order of priority was eliminating (Zahir, 1991). Yang and Lee; AHP were looking for a solution to the facility location selection (Yeng& Lee, 1997). Tzeng and others; restaurants in Taipei have used the AHP method in site selection (Tzeng et al, 2002). Burdurlu and the Ejder; furniture industry AHP method decided on the choice of the place of establishment (Burdurlu&Ejder, 2003). Timör; easy using AHP worked on retail outlets for the product (Timör, 2002). Kuo et al; facility location selection using fuzzy AHP and managers to gain speed but has been seen that better results are obtained (Kuo et al, 1999). Kahraman and others; using fuzzy AHP method to the location selection decision has worked in the group. Kahraman, Chen et al; fuzzy AHP method to solve the problem were using the facility location (Kahraman et al, 2007). Wu et al, using fuzzy AHP method worked on facility location selection (Wu et al, 2007). Ustasüleyman and Perçin; ANP approach and methods used in the selection of location alternatives were compared (Ustasüleyman and Perçin, 2007). Badri; AHP and goal programming methods have worked on facility location selection (Badri, 1999).

In this study, one of the multi-criteria decision-making models with AHP Proceeding to the location selection was designed to achieve ideal results.

### 2.1 Analytical Hierarchy Process

AHP, a hierarchical addressing problems and binary comparison logic is based on multi-criteria decision-making techniques (Felek et al, 2007). A large number of multi-criteria decision-making techniques from each other, taking into account the effect of individual factors, decision makers are approaches that help in the selection of the most appropriate decision. A multi-criteria decision-making technique in the location selection, the Analytic Hierarchy Process (AHP) is one of the preferred methods (Ayan and Perçin, 2012). AHP was developed by Saaty in the late 1970s. AHP is preferred by the decision makers why multi -criteria decision-making ability to take into account the subjective criterion. AHP multi-criteria decision making approach, which is one of the qualitative factors are of paramount importance. In a detailed evaluation of alternatives is a technique which combines qualitative and quantitative factors. Various levels at independently of

the factors, in a hierarchical structure in which they are used in the evaluation by using AHP (Anık, 2007). AHP is structured in a hierarchical format in the problem. Figure 1 shows a three-level hierarchical structure. Located at the top of the hierarchy of an object and purpose, respectively, under the criteria and alternatives in a way that the underlying structure is completed (Felek et al, 2007).

By AHP, the decision-making problem which is the subject problem is separated into components are arranged in a hierarchical structure. The basic building blocks in AHP pair wise comparisons. When making a binary comparison between criteria, shown in Table 1 and Saaty recommended values 1 through 9 are used includes basic analog scale (Felek et al, 2007).

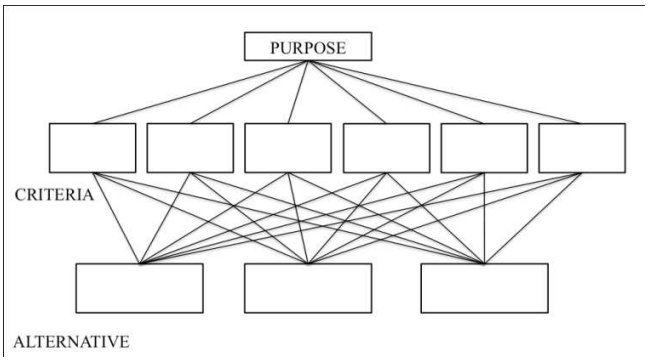


**Fig.1: Three-level Analytical Hierarchy Model**

*Source: Thomas L. Saaty and Luis G. Vargas, "Models, Methods, Concepts & Applications of The Analytic Hierarchy Process", Springer; 2001, s. 3.*

**Tab. 1: Importance Scale**

| Importance Value | Value Definitions |
|---|---|
| 1 | Both factors are equal importance |
| 3 | Factor 1 is more important than Factor 2 |
| 5 | Factor 1 is much more important than Factor 2 |
| 7 | Factor 1 is strongly more important than Factor 2 |
| 9 | Factor 1 is absolutely more important than Factor 2 |
| 2,4,6,8 | Intermediate Values |

*Source: Thomas L. Saaty, "The Analytic Hierarchy and Analytic Network Measurement Processes: Applications to Decisions Under Risk", European Journal of Pure and Applied Mathematics, Vol 1, No 1, 2008, s. 125.*

AHP is determined primarily target to be achieved. If then the criteria and sub-criteria are determined. At the lowest level are the alternatives to providing these criteria (Aslan, 2005). At this stage all the criterion affecting the decision-making process to identify the person skilled in the art of survey or opinion is sought (Dağdeviren et al, 2004). Following this determination, the decision hierarchy is created. Then from pair wise comparison matrices forming decision makers are asked to make comparisons. This comparison is providing the consistency test is checked, the

decision fails to provide decision-makers are asked to revise it. Then the relative weight of the matrix of pair wise comparisons (eigenvalues) are calculated.

## 3 The Developmental Process of Shopping Centers in Istanbul

The developmental process of shopping centers similar to modern day shopping centers started during the Ottoman Empire period, when the grocers or artisan-type enterprises like grocery stores gradually gathered in centers such as Grand Bazaar (Tokatli&Boyaci, 1999). With its powerful market tradition, the emergence of big shopping centers dates back to the last years of the 1980s. Istanbul still has traditional shopping areas such as the Grand Bazaar and Spice Bazaar as well as traditional shopping districts inside the urban fabric; they still carry the charm and richness of public sphere tradition stemming from shopping (Tokatli&Boyaci, 1999). The emergence of shopping centers in Istanbul coincides with the demand of consumer groups who realized the differentiating power of consumption among the social strata due to the restructuring process determined by free market conditions and the access of imported goods to the market. This is the time when car and credit card ownership became widespread and when the new consumer group had frequent contacts with overseas (Tokatli&Boyaci, 1999).

The first shopping centers in Istanbul were built in sub-centers such as Bakirkoy, Altunizade, Etiler (Galleria 1988, Capitol 1993, Akmerkez 1993) with the inspiration from the markets in the old city center markets. The shopping centers built in the first years represented the image where luxury goods were on sale, whereas many of them have turned into places aiming at upper-middle groups. However, today, projects with a different concept are conducted; they are more luxurious and completely closed or semi-closed. To illustrate, Kanyon (2006), Istinyepark (2007), UmraniyeMeydan (2007) is several of these investments. They also consist of offices, houses and their subsidiary services (such as fitness centers, daily maintenance and cleaning service and car parks), which help them to become new centers of attraction (Vural&Yucel, 2006). As a result, since capital acts in accordance with the profitable investment of that period, it is far from taking the characteristics of the place and the society into account. Now, there are two basic determinants: The first is that capital competes for sharing the city rent; and the latter is that in order to achieve the first one it pumps a new pattern of consumer behavior in the society (Uzzell, 1995). This trend, starting with Istanbul's first acquaintance with the shopping centers, can be traced clearly in the changing typology of the shopping centers for the last two decades.

Below is a map of the current shopping centers in Istanbul:

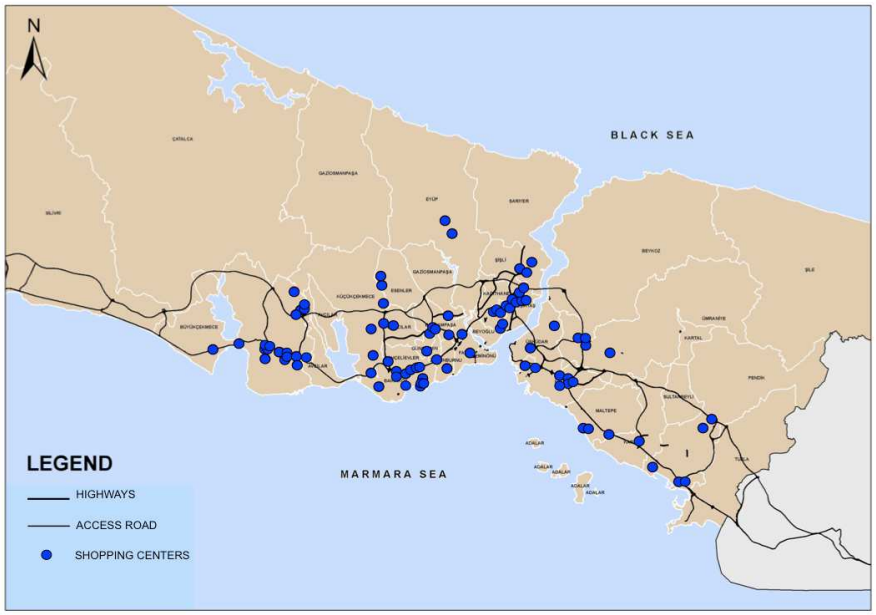


**Fig.2: Istanbul Map**

The table below shows the number and leasable area in square meters of the shopping centers in the
map above.

**Tab. 2: The distribution of shopping centers in Istanbul in terms of number and size**

| | Number of Shopping Centers | Number of Gross Leasable Area (GLA) $m^2$ |
|---|---|---|
| European Side | 44 | 1,853,900 |
| Asian Side | 19 | 681,300 |
| TOTAL | 63 | 2,535,200 |

## 4 Research Area and Methodology

This study looks into the factors that are influential on the preferences for shopping center location selection and explains these factors through a conceptual model. By means of a comprehensive literature search, the theoretical framework of the factors affecting the causes of preference is established and relevant research questions are chosen. Thus, the theoretical foundations of the model have been created.

The field research includes the companies that operate in Istanbul but making shopping center investments all over Turkey.

In this study, among the qualitative research methods, in-depth interview technique and interview form approach are preferred.

The results of the study have been evaluated by applying Analytical Hierarchy Process method.

## 5 Results

The findings obtained in this research reveal that the most important factor experts consider is Accessibility; it includes Number of Traffic, Ease of Access by car or on foot, Proximity to highways or main streets, Proximity to bus stops, Compatibility to traffic flow, Ease of Entering the Shopping Centre. The subheading Ease of Access by car or on foot outweighs the others. The fact that a great number of shopping centers are developed close to a central main street or highways such as TEM or E-5 supports this situation and finding.

However, contrary to expectations, Number of Traffic is not found the most important factor in the experts' opinion; it has been even among the factors of lowest importance. Target group's easy access by car or on foot, center's proximity to highways or main streets, ease of entering the shopping center and compatibility to traffic flow are regarded as more important than the number of traffic.

The survey yielded Economic Factors to be the second most important factor. The importance rate Rental Level in the Region sub factor (0,80), which includes the rent and rental income per m2 in the region and terms and period of rental agreements, is quite high among the other sub factors. The importance level of Construction Cost (0,20) has also been evaluated under this heading.

According to the outcomes of the survey, the third factor that experts attach importance the most in location selection for shopping centers is Demographic Characteristics, which includes Average Income and Average Population At a Certain Distance. In the experts' opinion, Average Income outweighs all the other sub factors. The fact that many shopping centers have been developed especially close to places where purchasing power is high or places where the target group can easily access supports this finding.

As for the Competitive Environment, which takes the third place, the identity of the nearby competitors is primarily more important. The power, the number and the proximity of the nearby competitors are matters of concern for shopping center projects to be developed. The stores or mix of brands in the nearby shopping centers is another subheading that is considered important.

## 6 Conclusion

In this study, in order to determine the weights of the factors that are important in location selection for shopping centers, AHP method is used; this method is more convenient for evaluating subjective judgments. In the study, in determination of the weights of the factors that are important in location selection for shopping centers, we consulted experts who take place in the real practice. While factor weights are determined with the opinions of the shopping center managers who joined the field research, the interviews are held with the executive officers of major shopping center developer companies in Turkey, considering the critical characteristics a successful shopping center should have. The survey results reflect the perspectives of shopping center developers about the factors affecting location selection decisions for shopping centers. Expert views are evaluated by using AHP, which is a convenient method for subjective problems.

When the findings of this study are compared to the other studies conducted by using AHP method, it has been observed that location selection criteria present similarities, whereas the importance levels are different.

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