Navigational criticism of shopping malls

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Abstract
In order to navigate any land’s usage or any urban activity, two leading factors including social welfare and economic welfare should be considered. According to these two factors, agreeable standards, desirability, urban healthiness, security in navigating city’s operation are considered for planning city lands. In navigating the financial centers, not only local factors but also national and regional factors play an important role. Moreover, urban geographical experts, urban planners and economists’ ideas can be used. In addition, economic and commercial aspects can create active social functions (public meeting places). Therefore, trading centers have an important role in social welfare of citizens. In predicting the location of trading centers, one must consider the efficiency of supplementary activities. If, in an urban region, big shopping malls are established for distributing the production needed by citizens, we should pay attention to traffic and parking lots needed by people. Navigation of shopping malls according to modernist notions is that they should be established near the suburb of cities or near the highways or public transportation stations and with having enough parking lots. But, todays, navigation of shopping malls do not follow these notions and with locating them in city centers cause changing the structure and meaning of modernist notions. This research analyzes the location of shopping malls in Shafā St. Kerman and its traffic effect on urban structure in this area after opening with using AHP and GIS.

Keywords: shopping mall, navigation, urban structure, traffic effect

Introduction
In discussing the allocation of land to determine the type of land use, it is desired to guide the spatial organization of the city, set construction, and how to adapt them to each other and the urban system (Ziyari, 1999: 125). One of the city's most important applications in modern time is wood application that influence on the other urban activities and the lives of urban people (Pour-Mohammadi, 2006: 45).

Today, businesses can be regarded as the pulse of a city so that when the economy is flourished, city centers are prospered (Kapland, 2000: 47). Increasing the purchasing power of the people and the use of new transporting tools have a great impact on welcoming people buying from these places regardless of distance so that, in big cities, most goods and basic daily needs regardless of their place of residence can be found in commercial centers in the city center (Karami, 2003: 26). Accordingly, this factor leads to an increase in traffic in the city center and disturbing the hierarchy of businesses centers and misuse of urban spaces (Rahimion, 1999: 13). Non-optimal positioning of the new urban commercial centers and not according to its role in providing services to citizens is of the problems of cities (Balsas, 2000: 19) that causes disturbing the distribution system services and inefficiency in service system in most cities and leads to the disintegration of spatial and physical structures of the cities (Sarvar, 2002: 19).

To attribute to each retail group and other commercial facilities as a single asset with parking on site, planned, developed, owned and managed, the term "Shopping Mall" (shopping center) has been applied by foundation of the "International Council of Shopping Centers" in 1957 and adopting its constitution to further shopping centers industry and enhance its role in the distribution the commercial products and services (Jones and Williamson, 2009).
In 1972, Edward Taber has put the difference between the motivation to go shopping and buy, and caused to shopping be considered as a form of leisure (Abazari and Kazemi, 2005). So, now, going shopping and business centers are not considered just as a form of people's daily lives and meeting their needs and it should be assessed as a venue for leisure time.

The Shopping Mall, therefore, consists of any large Shopping Center with mixed application that is combined with shops, services, offices, restaurants, entertainment and other functions (Eastemct, 2009). Then, the most prominent Malls in America were formed close to the main streets. Then, the main idea of the formation and development of commercial centers (Shopping Mall) first was formed alongside the main roads, highways and near major centers of access to public transportation and parking for private cars. As a result, the development of new businesses locates and correct principles in urban areas can lead to performance improvement of main center (CJ Balsas, 2000: 19). In this regard, to choose the best option, having the best possible conditions in relation to the locating Shopping Malls in city, one can apply GIS software and AHP hierarchical model as a functional model.

Almas Shopping Mall where is located in the city of Kerman, for failing to meet the requirements of proper positioning and alignment in Shafa street where is a street with local access, attracts large crowds from all over the city in the neighborhood that because of the narrowness of the street, expensive land prices as well as the lack of adequate access to public transport stations and centers and appropriate garage to meet the needs of the customers has caused problems and ineffectiveness of the axis in response to passing traffic and apathy of the Business Center so that it does not have the possibility to take advantage of the maximum capacity and is a serious threat to the security and welfare of the people living in the neighborhood. Therefore, the main objective of this study is suggesting new location in accordance with the principles codified to locate the Shopping Mall in the city.

**Methods**

*Multi-criteria decision-making method AHP*

To calculate the weight factors using the mentioned method, the parameters of specific topics and specific vector calculate the square matrix of priority measures. The operation consists of quantifying the superiority value information of a factor relative to the other factors. Applying AHP method with the use of geographic information system (GIS) to analyze and discuss the criteria provides a powerful tool in spatial decision-making processes. To examine and identify the most suitable location for construction of commercial complexes after the identification of risk factors using GIS and AHP, we can recognize the areas and places that have the greatest compatibility with localization the shopping Malls. In this study, Relationship, population, accessing to public transport, parking, etc factors are studied as factors in the localization Shopping Malls and maps for each field has been prepared. To achieve this, it is necessary that the maps are integrated and combined with each other. With respect to the performance of GIS, finding locations using this system is as follows:

- Knowledge of phenomena affecting the Shopping Mall's location
- Determining the location parameters
- Data collection and preparation
- Selecting the model of combining and weighting
- Creating maps of their weight factor and the Analytical Hierarchy Process
- Integration of maps based on choice and set weight factors
- Necessary export in relation to the choice and prioritize them
The most important stages in the process is integration of GIS data and weighting to factors that different methods and models are used for weighting and combining data in GIS; considering the advantages and disadvantages of each, using Analytical Hierarchy Process (AHP) is recommended as the best option.

**Factors affecting location**

In general, the factors affecting in locating shopping malls are divided into two categories of supply and demand factors. Demand factors are the factors that are causing the need for shopping malls, such as population; supply factors are also factors that are affecting shopping malls site, such as access to highways and major streets that due to its importance should be special weight given to it. The most important risk factors and indicators for locating Shopping Malls include:

- Population: Shopping Mall construction in urban centers with a population and a high concentration of wealth will increase the social interactions and dynamics in town.
- Access: Access to major streets and highways near the city is one of the top priorities in the locating Shopping Malls.
- Public transportation: Access and proximity to the public transportation system is important to Shopping Malls. On the other hand using the public transport system rather than those of private vehicles will reduce the urban traffic.
- Parking: Accessing appropriate Parking is one of the factors influencing the location of Shopping Malls, closer to the business centers, the more important are the locations.
- Financial services: Bank is a financial institute that as a whole is closely related to people's daily life and Shopping Mall also is a place to buying in bulk, therefore, financial centers and commercial complexes can have a direct relationship with.

**Determination of criteria for site selection for Shopping Mall in the city**

According to library studies, the criteria shown in table (1) were considered to locate Shopping Malls in the city. Certainly varied and numerous factors are involved, but these criteria are satiable according to the existing data and facilities.

<table>
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<th>Table 1: Criteria for Locating</th>
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<td>Purpose</td>
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<td>The criteria used to locate Shopping Mall</td>
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(Source: authors)

![Figure 1: Weighting in Expert Choice software (Source: authors)](http://www.european-science.com)
By selecting appropriate and effective measures in the Shopping Mall's location by entering this measure in Expert Choice software, an appropriate weighting was done in order to obtain the most influential factor in location and we provide the appropriate output.

According to the appropriate weighting of the criteria and taking appropriate output, the most important criteria that have special importance in the discussion are obtained.

According to the output and determining the most effective measures in right locating the Shopping Malls, we attempted to build maps in the GIS software for each of these criteria to determine the appropriate and inappropriate places and finally, the best place to establish the shopping Malls are shown by obtaining an overlapping output of all plans made for the measures.

As the produced output is observed, the proximity to financial centers has the less priority in locating Shopping Malls so that being near or far away from the financial center does not have much impact on the location.

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According to the weighting and the obtained output, the population is the less important criteria among the other criteria in discussing the Shopping Mall's location so that establishing Shopping Malls in places with low population cannot be an obstacle to its recovery.

Based on the obtained outputs providing adequate parking in inner courtyard or about the Shopping Mall is one of the three major criteria in locating these centers.

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Access to public transport stations is the second influential criterion in locating Shopping Malles so that the distance or proximity to public transport stations can attract a large impact on the debate on population and development of the centers.
According the weighting and the output of influential factors on locating Shopping Mall, access to the main roads and highways are the most basic and most important measure in question to locate these centers. Therefore, placement next to the main roads in a city has a huge impact on their performance so that in the case of wrong locating in dense urban context it can prevent the proper functioning of these centers and urban context will be disrupted.

Figure 8: Overlay Map and the best places in Locating (Reference: authors)

Preparing overlapping map and valuing the obtained points from the least to most important, the best places on the basis of shown factors were highlighted to the most important points be determined as the best location for Shopping Malls.

Figure 9: The location of Almas Building in Shafa St (Reference: authors)
Conclusion

The purpose of this study was reviewing the Shopping Mall Locations in the modern cities that are located without considering the principles and main criteria while addressing them as a new space in the cities. Therefore, not considering these measures has caused problems in urban in where they are located. Some of these disadvantages can be getting the urban context out of their main performance and as a result, lack of comfort for citizens and residents. So that its proximity with the local access has caused severe traffic and disruption in the movement of citizens and reduce the level of service in passages of the urban contexts. Based on this analysis, Figure (9) is provided from the combination of overlapping map and location of Almas Shopping Mall in the Shaf St., Kerman. In this picture that is according to data obtained from the factors output by desired standards in locating and comparison with the construction of Almas Shopping Mall, we conclude that this project has been in a position where is lower than the desired value in terms of the mentioned criteria, if the red dots on the overlapped map have the highest level of value, they are approprieat for locating and deploying business complexes and Shopping Malls.

References