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### A Proposal of Novel Performance Criterias Development for Shopping Malls

Araştırma Makalesi / Research Article

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#### **ABSTRACT**

Shopping malls are not only perceived as a place for shopping by customers; but also a place for resting, having fun, and socializing. Given the increase in the number of shopping malls and the necessity in order to meet the expectation of customers, innovative studies are needed. In this study, a novel model is developed by setting shopping malls performance criteria to contribute to the progress and performance measurement of shopping malls, which have a significant place in our daily lives. Each criterion is set after interviews with experts who are outstanding in their fields and have management experience in the mall sector. To the best of our knowledge, this study is the first in the literature in terms of presenting a novel model to evaluate performance of shopping malls. Also, this study aims to fill the gap in the literature in this field and make a positive contribution to the shopping mall sector by its original and comprehensive (for all areas in this sector) criterias.

Keywords: Shopping malls, performance measurement, performance criteria.

## Alışveriş Merkezleri İçin Yeni Performans Kriterleri Geliştirme Önerisi

Ö7

Alışveriş merkezleri sadece bir alışveriş mekânı olarak değil, tüketiciler tarafından dinlenme, eğlenme ve sosyalleşme mekânı olarakta algılanmaktadır. Alışveriş merkezleri sayısındaki artış ve tüketici beklentilerini karşılayabilme gerekliliği ile birlikte yenilikçi çalışmalara ihtiyaç duyulmaktadır. Bu çalışmada, hayatımızda önemli yeri olan alışveriş merkezlerinin gelişimine ve performans ölçümüne katkı yapılması amacıyla alışveriş merkezi performans kriterleri belirlenerek, bir model önerisi geliştirilmiştir. Belirlenen kriterlerin her biri kendi alanında etkin ve alışveriş merkezi sektöründe yöneticilik yapmış kişilerle görüşülerek belirlenmiştir. Bildiğimiz kadarıyla bu çalışma, alışveriş merkezlerinin performansını değerlendirmek için yeni bir model sunmak açısından literatürdeki ilk çalışmadır. Bu çalışma ile, sunulan kriterlerin alışveriş merkezi sektörü için tüm alanları kapsayıcı ve alanında özgün olması sebebiyle, bu alanda literatürdeki eksikliğin giderilmesi ve alışveriş merkezi sektörüne olumlu katkı yapması hedeflenmektedir.

Anahtar Kelimeler: Alışveriş merkezleri, performans ölçümü, performans kriterleri.

#### 1. INTRODUCTION

As people's traditional consumption habits have changed, so too have shopping places. Shopping places have taken different forms and shapes in the past; the shopping mall is the most recent form. The concept of the shopping mall is of big structures in which different needs are met, that include plenty of shopping stores, are considered as life and entertainment centers, and located in the city center or periphery. We can say that Westernstyle shopping styles and behaviors have become widespread in Turkey. Shopping malls are no longer visited for only shopping, but have been turned into places also hosting social, cultural, and entertaining activities. And also, shopping malls are dynamic environment, in which shops change, promotions appear and disappear continuously [1]. Turkey's first mall was Galleria in the Ataköy district of Istanbul, which came

into use in 1988. Following the 2000s, the numbers of chain stores, entertainment centers, and showrooms have increased. This progress also spread to Anatolia. Plenty of malls have been constructed since 1988. The increasing numbers of shopping malls by year and city, according to Turkey's Council of Shopping Centers 2017 report, are specified below. The development of the Shopping Centers and Investors Association, by city and year, according to the activity report of 2017, is given below [Fig.1] and [Fig.2]. As malls' numbers have increased, the competition is rising. This competition pushes executives to follow progression closely and to develop successful administrative and advertising strategies to attract target customers. It may be said that, related to increasing numbers of shopping malls and tougher competition, innovative developments/solutions, which satisfy modern needs, are required. Diversity in social activities responding to customer needs, originality in architecture, and valuing children are the leading factors.

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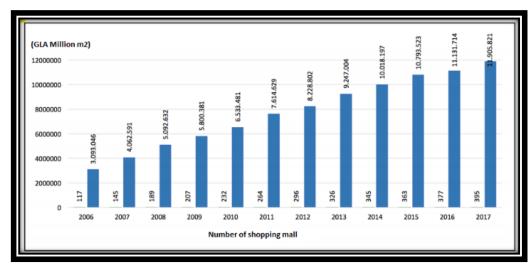


Fig.1. Development of malls by year, council of shopping centers (AYD report,2017)

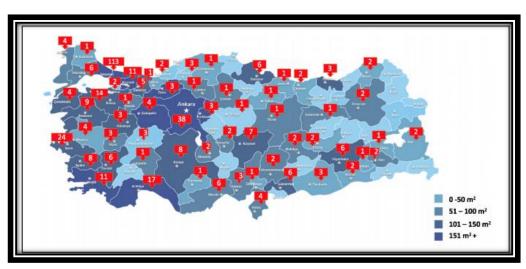


Fig.2. Development of malls by city, council of shopping centers (AYD report,2017)

In this study, we present a novel performance index model for shopping mall. In this model, we use following main criteria; like green building, investor, tenant, visitor, turn-over, and social life, and secondary criteria related to each, and with the help of literature research and expert opinions. The rest of the paper organized as follows; in section 2 we conducted a comprehensive literature review, in section 3; we presented the performance index model for shopping centers. And finally we addressed conclusion and discussion in the last section

#### 2. LITERATURE REVIEW

The rapid increase in the number of shopping malls that has a crucial place in people's daily lives necessitates examination of these centers' positive and negative effects scientifically. It is observed that plenty of studies discussing different sides of shopping malls have been published in the national and international literature. Some of these studies on malls are summarized below.

Kirk L. Wakefield and Julie Baker studied (1998) individuals' desire/motivation to spend time in a mall, and three factors that affect shopping enthusiasm: tenant diversity, the atmosphere of the mall, and participation in shopping [3]. E. Cengiz and B. Özden, (2002) examined buying behavior and conduct research on factors that influence visitors and tenants in preferring the shopping mall. In the study, researchers discuss visitors' reasons for preference, what characteristics of malls are liked by customers, and what services provided by the mall are liked and used [4,5]. Kristy E. Reynolds and others' (2002) compared traditional malls and factory outlets' shopper typologies and discussed implications for retail strategy [6]. Ibicioglu's (2005) research aimed to examine visitors' demographic characteristics and visitors' behaviors. He suggests that malls need to develop new strategies and alternatives for middle-aged and elderly adults. This study, which is assisted by statistical techniques, demonstrates that there is a strong tie between education level and going out/having fun, income level, and visiting frequency [5,7]. Akat and

others' (2006) made a study regarding buying behaviors of customers' in a mall in Bursa. In the study, a correlation is observed between customers' age and shopping frequency, education level, and paying methods [8]. In his research, Muhammed Ismail el-Adly (2006) emphasizes that to enhance the development of malls, more academic research is needed. His study aims to evaluate malls according to different shopper typologies. He concludes that different locations and designs are necessary for different typologies [9]. Ilter and others' (2009) aimed to classify the high school students' expectations regarding malls with the Kano model. It is defended that, to attract youngsters, mall administrations need to make restaurants, cafes, and movie theaters attractive; as a result, youngsters would spend much more time in malls. This study shows that, with the help of sustainable originality and fulfilling expectations permanently, customer satisfaction would increase [5,10]. Jean Charles Chebat and other's (2010) approached branding in the retail sector. This study sought an answer to the question of how 'the best mall image' is constructed; in this respect evaluation factors, like store atmosphere, price, and advertising, are discussed [11]. Hülya Bakırtaş (2010) investigated the effect of in-store atmosphere on consumption emotions. The method of the study is based on the hypothesis tests developed with the data obtained from the consumers with an improved questionnaire [12]. Asiltürk (2010) emphasized that the positioning of shopping malls in the market considering education, age, income and social class is important in terms of the integrity of the businesses and their long-term sustainability [13]. Köksal and Emirza (2011) dealt with the site selection of retail stores in the mall and on the high streets, and mall managers' approaches. They also made a suggestion about site selection for new retail stores. The study concludes that high rents and prices are needed to be reduced in malls; and issues like the parking lot, cleaning, and social activities are needed to be enhanced in high street stores [5,14]. Çelik, (2011) defended that customers' expected service quality is higher than perceived service quality in malls, and that this gap affects customer satisfaction negatively. The study concludes that retailing businesses' service and customer care are sometimes inadequate [5,15]. Akıncı (2013) examined customer behaviors of teenagers (13-19 age group) with 104 subjects. The study concludes that going to malls are the most preferred leisure activity, and some factors like location of the mall and its distance to the subject's home are the leading agents teenagers mall choices [16]. Yuzhen Shang and others (2016) investigated the indoor air quality during the summer in Western China using subjective survey and field measurement. The research makes a contribution to knowledge regarding discomfort in malls by investigating air conditioning systems within the stores and contaminants [17]. Narjes Haj-Salem and others (2016) researched what factors drive mall loyalty of male and female shoppers. For females, mall atmosphere,

design, and perceived service quality are determinants of mall loyalty. For males, the mall atmosphere and prices are the primary factors. This study aims to explain how service and product quality, prices, and mall atmosphere affect the mall loyalty of male and female shoppers [18]. Amit Mittal and Deepika Jhamb (2016) discussed determinants of shopping mall attractiveness. They found that merchandising, variety, milieu, and convenience are these determinants. This defends the idea of a close relation between motivations of Indian shoppers and the rest of the world [19]. Bikrant Kesari and Sunil Atulkar (2016) explained the positive correlation between mall shoppers' satisfaction and shopping values. The study aims to help mall owners to acquire a competitive advantage, attract new customers, and keep their profitable customers by enhancing customer satisfaction [20]. Johan Anselmsson (2016) examined the positive relation of developments in the mall sector to boosted sales figures and to visiting frequency. Moreover, he is seeking for an answer as to how to compete with online shopping, which has increased in the last decade [21]. Muhammed Ismail el-Adly and Riyad Eid (2016) researched perceived value, shopping atmosphere, customer satisfaction, and loyalty in UAE by structural equation modeling. Their findings defend that mall atmosphere has a positive impact on customer satisfaction [22]. İçal ve Aliağaoğlu (2016) reported that there was a significant relationship between the marital status of the consumers, their education and the frequency of visiting shopping malls [23]. Wessam el-Abd and others (2017) investigated the design of roof windows in the context of daylight performance. This paper suggests new designs to optimize daylight performance, and also gives a shopping mall from Cairo as an example [24]. Gopal Das and Geetika Varshneya (2017) proposed a model that helps to better understand customers' feelings in malls. This model includes the mall atmosphere, customers' feelings, and reactions [25]. As it is seen in the above-mentioned studies, there is no peer to the holistic model we propose, which covers every issue regarding malls. This research aims to fill the gap in the literature.

#### 3. THE PROPOSED PERFORMANCE CRITERIAS

Shopping malls, are a cluster of independent shops, planned and developed by one or several entities, with a common objective [1]. Shopping malls, which are increasing in number day-by-day, give customers opportunities to have fun in addition to the shopping service. In this competitive atmosphere, performance evaluation has grown in importance. Decision making is one of the most important activities in the business world. Managers need accurate and reliable estimates for decisions. In doing so, it is better to take scientific into consideration [26]. measures Performance measurement is one of the methods that can be used when making decisions. The most significant phase of the performance evaluation is setting proper criteria. Many criteria are taken into account in the malls' performance evaluation. The model we suggest for the mall sector has 140 criteria, of which six are main criteria and 134 sub-criteria. Literature about the sector is reviewed before setting these criteria. Following the review, issues not being covered in the literature and prominent concepts are decided. We put the finishing touches to criteria by interviewing with experts in the mall sector.

In the hierarchical structure model, the main criteria are specified at Level 1, and sub-criteria are specified at Levels 2, 3, and 4. Main criteria of the mall performance index are in Fig. 3. Sub-criteria diagram of each main criterion is given in the examples.

Green buildings are the product of rising sustainability and innovation trends in the real estate sector. These buildings allow us to live more healthily. In order to obtain higher standards they provide more efficiency, health, and comfort, and less pollution. As for the site selection of the structure, in all phases, these nature-friendly and economical buildings are compatible with the life cycle, suitable for nature, constructed by eco-friendly materials, and their energy needs are supplied by energy-efficient, renewable resources. The increasing popularity of green buildings over recent decades obliges us to take related concepts into account; the descriptive chart and hierarchical structure of criteria for green buildings in our model are specified in Fig.4 and Table 1.



Fig.3 Hierarchical structure of shopping mall performance index main criteria

#### 3.1. Green building performance index

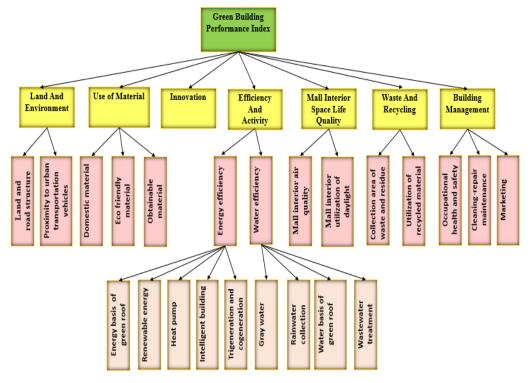


Fig.4. Hierarchical structure of green building performance index

**Table 1.** The explanations of criteria determined in green building performance index

|                        | explanations of dding performance in   | criteria determined in green<br>ndex   | Level 3<br>Criterion 2  | Energy<br>Efficiency                       | The criterion that determines<br>the importance of energy use<br>efficiency in green building<br>performance                                |
|------------------------|--|--|-------------------------|--|---|
|                        | CRITERIA                               | DEFINITIONS OF<br>CRITERIAS  | Level 3                 | Proximity To                               | The criterion that determines   |
| Level 1<br>Criterion 1 | Green Building<br>Performance<br>Index | The criterion that determines<br>the importance of green<br>building concept for   | Criterion 3             | Urban<br>Transportation<br>Vehicles        | the importance of shopping<br>mall location, proximity to<br>public transport, in green<br>building performance                             |
| Level 2                | Efficiency and                         | shopping mall performance index  | Level 3<br>Criterion 4  | Land and Road<br>Structure                 | The criterion that determines<br>the importance of shopping<br>center land and road structure<br>suitability in green building              |
| Criterion 1            | Activity                               | The criterion that determines<br>the importance of water and<br>energy efficiency for green<br>building performance                            | . 10                    | <b>D</b>                                   | performance   |
| Level 2                | Innovation                             | The criterion that determines  | Level 3<br>Criterion 5  | Domestic<br>Material                       | The criterion that determines<br>the importance of the use of<br>local materials in shopping  |
| Criterion 2            | imovación                              | the importance of activities<br>such as; having firsts,<br>offering differentiating  |                         |  | mall for green building<br>performance  |
|                        |  | services, renewal in interior<br>and exterior design in green<br>building performance  | Level 3<br>Criterion 6  | Eco-Friendly<br>Material                   | The criterion that determines<br>the importance of sing<br>environmentally friendly<br>materials in shopping mall<br>for green building     |
| Level 2<br>Criterion 3 | Land and<br>Environment                | The criterion that determines<br>the importance of land<br>structure, transportation   |                         |  | performance   |
|                        |  | facilities in green building performance   | Level 3<br>Criterion 7  | Obtainable<br>Material                     | The criterion that determines<br>the importance of a product<br>or material that previously<br>used inside or outside the                   |
| Level 2<br>Criterion 4 | Use of Material                        | The criterion that determines<br>the importance of domestic<br>materials, environmentally  |                         |  | shopping mall   |
|                        |  | friendly materials and recyclable materials in green building performance  | Level 3<br>Criterion 8  | Mall Interior Air<br>Quality               | The criterion that determines<br>the importance of ventilation<br>in shops and places in<br>shopping mall for green<br>building performance |
| Level 2<br>Criterion 5 | Mall Interior<br>Space Life<br>Quality | The criterion that determines<br>the importance of activities in<br>green building performance   | Level 3                 | Mall Interior                              | The criterion that determines   |
|                        |  | that may affect the basic<br>quality of life in shopping<br>mall such as; quality of<br>indoor ventilation, quality of<br>daylight utilization | Criterion 9             | Utilization of<br>Daylight                 | the importance of sunlight in<br>shopping mall for green<br>building performance  |
| Level 2                | Waste and                              | The criterion that determines  | Level 3<br>Criterion 10 | Collection Area<br>Of Waste And<br>Residue | The criterion that determines<br>the importance of waste and<br>residual landing points in  |
| Criterion 6            | Recycling                              | the importance of waste and<br>waste collection, usage of<br>recycled material in green<br>building performance                                |                         |  | shopping mall for green<br>building performance   |
| Level 2<br>Criterion 7 | Building<br>Management                 | The criterion that determines<br>the importance of building<br>management in the shopping<br>mall for green building<br>performance            | Level 3<br>Criterion 11 | Utilization of<br>Recycled<br>Material     | The criterion that determines<br>the importance of use of<br>recycled materials in the<br>shopping mall for green<br>building performance   |
| Level 3<br>Criterion 1 | Water Efficiency                       | The criterion that determines<br>the importance of water use<br>efficiency in green building<br>performance                                    | Level 3<br>Criterion 12 | Marketing                                  | The criterion that determines<br>the importance of marketing<br>activities in shopping mall<br>for green building<br>performance            |

| Level 3<br>Criterion 13 | Cleaning-Repair<br>Maintenance       | The criterion that determines<br>the importance of activities<br>of cleaning, repair,<br>maintenance in shopping<br>mall for green building                    |
|-------------------------|--------------------------------------|--|
| Level 3<br>Criterion 14 | Occupational<br>Health And<br>Safety | performance The criterion that determines the importance of the activities of occupational health and safety in shopping mall for green building performance   |
| Level 4<br>Criterion 1  | Rainwater<br>Collection<br>Systems   | The criterion that determines<br>the importance of using<br>rainwater harvesting system<br>in water efficiency, for green<br>building performance              |
| Level 4<br>Criterion 2  | Water Basis of<br>Green Roof         | The criterion that determines<br>the importance of using green<br>roof systems in water<br>efficiency for green building<br>performance                        |
| Level 4<br>Criterion 3  | Gray Water                           | The criterion that determines<br>the importance of using gray<br>water system in water<br>efficiency for green building<br>performance                         |
| Level 4<br>Criterion 4  | Wastewater<br>Treatment              | The criterion that determines<br>the importance of using gray<br>water system in water<br>efficiency for green building<br>performance                         |
| Level 4<br>Criterion 5  | Intelligent<br>Building              | The criterion that determines<br>the importance of using<br>intelligent building system in<br>energy efficiency for green<br>building performance              |
| Level 4<br>Criterion 6  | Heat Pump                            | The criterion that determines<br>the importance of using heat<br>pump system in energy<br>efficiency for green building<br>performance                         |
| Level 4<br>Criterion 7  | Renewable<br>Energy                  | The criterion that determines<br>the importance of using<br>renewable energy system in<br>energy efficiency for green<br>building performance                  |
| Level 4<br>Criterion 8  | Trigeneration<br>and<br>Cogeneration | The criterion that determines<br>the importance of using<br>trigeneration and<br>cogeneration system in<br>energy efficiency for green<br>building performance |
| Level 4<br>Criterion 9  | Energy Basis of<br>Green Roof        | The criterion that determines<br>the importance of using green<br>roofing system in energy<br>efficiency for green building<br>performance                     |

#### 3.2. Investor performance index

Mall investors can be defined as intermediaries providing a good shopping experience, creating added value in the retail sector, contributing to the improvement of the sector, and constructing world-class places that intertwine with cities. The descriptive chart and hierarchical structure of criteria, taking into account concepts regarding the mall sector that are emphasized by investors, are specified in Fig.5 and Table 2.

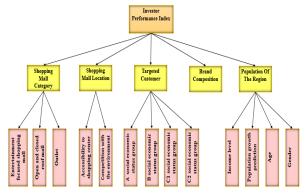


Fig 5. Hierarchical structure of investor performance index

**Table 2.** The explanations of criteria determined in investor performance index

| pe                         | erformance index                          |   |
|----------------------------|---|---|
|                            | CRITERIA                                  | DEFINITIONS OF CRITERIA   |
| Level 1<br>Criterion<br>2  | Investor<br>Performance<br>Index          | The criterion that determines the importance of green building concept in shopping mall performance                               |
| Level 2<br>Criterion<br>8  | Shopping Mall<br>Category                 | The criterion that determines the importance of shopping mall classified as entertainment-based, open-air in investor performance |
| Level 2<br>Criterion<br>9  | Brand<br>Composition                      | The criterion that determines the importance of the brand structure to be formed in the shopping mall in investor performance     |
| Level 2<br>Criterion<br>10 | Shopping Mall<br>Location                 | The criterion that determines the importance of shopping mall location in investor performance                                    |
| Level 2<br>Criterion<br>11 | Targeted<br>Customer                      | The criterion that determines the importance of visitor group which targeted to come to the shopping mall in investor performance |
| Level 2<br>Criterion<br>12 | Population of The Region                  | The criterion that determines the importance of demographics in shopping mall environment in investor performance                 |
| Level 3<br>Criterion<br>15 | Entertainment<br>Focused<br>Shopping Mall | The criterion that determines the significance of the entertainment-themed shopping center in the context of investor performance |

| Level 3<br>Criterion<br>16 | Closed Roof<br>Mall                    | The criterion that determines the importance of fully closed or partially open shopping mall structures in investor performance  | Criterion   | Growth<br>Prediction                                     | The criterion that determines the importance of the future population situation in the targeted region in investor performance |  |  |
|----------------------------|--|--|---|--|--|--|--|
| Level 3<br>Criterion<br>17 | Outlet                                 | The criterion that determines the importance of the shopping center where investors mainly sell end-of-season products in investor performance                           | 3.3. Visitor performance index  When we consider the growing number of malls and competition, businesses need to satisfy target customers to increase attraction and retention. Malls, which turn into social centers, are no longer places for shopping only; hence, they ought to offer entertainment, new experiences, and a broad range of products and services. |  |  |  |  |
| Level 3<br>Criterion<br>18 | Accessibility To Shopping Center       | The criterion that determines the importance of transport alternatives being very comfortable and convenient to the shopping center in investor performance              |   |  |  |  |  |
| Level 3<br>Criterion<br>19 | Competition<br>With the<br>Environment | The criterion that determines the importance of having different shopping center options in the targeted region in investor performance                                  | The descri<br>criteria, wh<br>expectations  | ptive chart and<br>nich are set in<br>s, are specified i | hierarchical structure of<br>the light of mall visitors'<br>Fig.6 and Table 3.   |  |  |
| Level 3<br>Criterion       | A Social<br>Economic                   | The criterion that determines the importance of the top class Socio-   |   | formance index   | f criteria determined in visitor   |  |  |
| 20                         | Status Group                           | Economic Status group in investor performance. The social elite  |   | CRITERION  | DEFINITIONS OF<br>CRITERION  |  |  |
|                            |  | consists of noble families, wealth<br>from at least 2-3 generations,<br>major industrialists, senior<br>managers and famous self-  | Level 1<br>Criterion 3  | Visitor<br>Performance<br>Index                          | The criterion determining the importance of customers in shopping mall performance   |  |  |
| Level 3<br>Criterion       | C1 Social<br>Economic                  | employed individuals.  The criterion that determines the   | Level 2<br>Criterion<br>13  | Expectations of Visitor                                  | The criterion determining the importance of visitor expectations in visitor performance  |  |  |
| 22 Status C                | Status Group                           | importance of the socio-economic<br>status group, which is above the<br>level of the middle, in investor<br>performance. This group of<br>professional professionals and | Level 2<br>Criterion<br>14  | Satisfaction of<br>Visitor                               | The criterion determining the importance of visitor satisfaction in visitor performance  |  |  |
|                            |  | managers together with C2 constitute a large part of the country.  | Level 2<br>Criterion<br>15  |  | The criterion determining the importance of loyal visitor mass in visitor performance  |  |  |
| Level 3<br>Criterion<br>23 | C2 Social<br>Economic<br>Status Group  | The criterion that determines the importance of Socio-Economic Status group under the medium level in investor performance. Officers, workers, small business            | Level 2<br>Criterion<br>16  | Profile Of<br>Visitor                                    | The criterion determining the importance of kind of visitor which coming to the shopping mall                                  |  |  |
| Level 3<br>Criterion       | Age                                    | owners (trades).  The criterion that determines the importance of the average age of   | Level 3<br>Criterion<br>28  | Outdoor and<br>Green Area<br>Expectation                 | The criterion determining the importance of open and green area visits for visitors  |  |  |
| 24                         |  | the target region in investor performance  | Level 3<br>Criterion<br>29  | Social Activity<br>Expectation                           | The criterion determining the importance of social activities for visitors   |  |  |
| Level 3<br>Criterion<br>25 | Gender                                 | The criterion that determines the importance of gender status in the targeted region to investor performance   | Level 3<br>Criterion<br>30  | Health and<br>Fitness Service<br>Expectation             | The criterion determining the importance of health-sport service areas for visitors  |  |  |
| Level 3<br>Criterion<br>26 | Income Level                           | The criterion that determines the importance of the income situation in the targeted region to investor performance  | Level 3<br>Criterion<br>31  | Physical<br>Elements<br>Expectation                      | The criterion determining the importance of areas such as ventilation, lighting, cleaning, parking for visitors                |  |  |

| Level 3<br>Criterion<br>33   | Diversity in<br>Service  | The criterion determining the significance of the venues (eg VIP in the cinema) that differentiate the standard service offered at each shopping mall                            | Tenants are<br>between p<br>Businesses<br>maintain an | intermediaries w<br>roducers of goo<br>focus their attend<br>increase their n<br>hance products, |
|--|--|--|---|--|
| Level 3<br>Criterion<br>34   | Location   | The criterion determining the importance of shopping mall location for visitor   | consideration<br>expectation<br>main and the          | on of these crit<br>s. Definitions and<br>ne subcriteria, have                                   |
| Level 3<br>Criterion<br>35   | Staff  | The criterion determining the importance of shopping mall and store staff for visitors   | Table 4. Th   | e in malls, are spe<br>ne explanations of<br>formance index                                      |
| Level 3<br>Criterion<br>36   | Interior-<br>Exterior Design   | The criterion determining the importance of interior and exterior designs in shopping mall for visitors  | Level 1<br>Criterion 4                                | Tenant Performance Index   |
| Level 3<br>Criterion<br>37   | Customer and<br>Shopping<br>Mall Prestige<br>Relation  | The criterion determining the importance of prestige in shopping center and importance of harmony between the targeted customer and incoming customers                           | Level 2<br>Criterion 17                               | Tenant<br>Expectations   |
| Level 3<br>Criterion<br>38   | Financial<br>Expenditure<br>Capacity   | The criterion that determines the importance of the client's financial expenditure capacity in the shopping mall in visitor performance  | Level 2<br>Criterion 18                               | Satisfaction of<br>Tenant  Performance of  |
| Level 3<br>Criterion<br>39   | Time Spent at<br>Mall  | In visitor loyalty, The criterion that determines the importance of the time that the customer spends in shopping mall   | Criterion 19  Level 2 Criterion 20                    | Store  Type of Tenant  |
| Level 3<br>Criterion<br>40   | Frequency of<br>Going To Mall  | In visitor loyalty, The criterion<br>that determines the importance of<br>the frequency of the customer<br>going to the shopping mall  | Level 3 Criterion 44                                  | Physical Conditions  |
| Level 3<br>Criterion<br>41<br>Level 3<br>Criterion<br>42   | Tourist Visitor  Child Visitor   | The criterion determining the importance of the number of tourists in arriving visitors  The criterion determining the importance of the number of children in arriving visitors | Level 3<br>Criterion 45                               | Campaigns and<br>Ads   |
| Level 3<br>Criterion<br>43   | Male-Female<br>Visitor   | The criterion determining the importance of the number of adults (male and female) in arriving visitors  | Level 3<br>Criterion 46                               | Request of<br>Tourist Visitor  |
|  | Visitor Perforr Index  | mance  | Level 3<br>Criterion 47                               | The Right Brand<br>Composition   |
| Expectations Visitor   | of Satisfaction C<br>Visitor   | Loyaly Of Visitor Profile Of Visitor   | Level 3<br>Criterion 48                               | Square Meter<br>Leasable Area  |
| brand composition<br>expectation<br>Physical elements<br>expectation<br>Social activity<br>expectation | Herbith and finess Herbith and finess Outdoor and green  Dutdoor and green  Customer and shooping and prestige relation Diversity in service | Staff  Location  Financial repartity capacity capacity for and Time spent at mall Time spent at mall Time spent at mall Anda-Female Visitor                                      | Level 3<br>Criterion 49                               | Mall<br>Management   |
| <b>Fig.6.</b> Hie  | erarchical structure   | of visitor performance index   | Level 3   | Rental Terms   |

#### 3.4. Tenant performance index

who establish the connection oods and end consumers. ention on some criteria to market share; therefore they services, and processes in riteria to meet customers' d hierarchical structure of the aving an impact on tenants' pecified in Fig.7 and Table

criteria determined in tenant

|                         | CRITERIA                       | DEFINITIONS OF CRITERIA   |
|-------------------------|--------------------------------|---|
| Level 1<br>Criterion 4  | Tenant<br>Performance<br>Index | The criterion determining the importance of existing tenants in shopping mall performance   |
| Level 2<br>Criterion 17 | Tenant<br>Expectations         | The criterion determining the importance of tenants' expectations in tenant performance   |
| Level 2<br>Criterion 18 | Satisfaction of<br>Tenant      | The criterion determining the importance of The criterion for measuring the satisfaction of tenants                                   |
| Level 2<br>Criterion 19 | Performance of<br>Store        | The criterion determining the importance of The criterion for measuring tenants' store performance                                    |
| Level 2<br>Criterion 20 | Type<br>of Tenant              | The criterion determining the importance of the tenant's performance of being a national, local or international tenant               |
| Level 3<br>Criterion 44 | Physical<br>Conditions         | The criterion determining the importance of physical properties of the shopping center, such as ventilation, cleaning, lighting, etc. |
| Level 3<br>Criterion 45 | Campaigns and Ads              | The criterion determining the importance of campaigns and advertisements by the mall management in tenant performance                 |
| Level 3<br>Criterion 46 | Request of<br>Tourist Visitor  | The criterion determining the importance of number of tourist visitors in tenant performance  |
| Level 3<br>Criterion 47 | The Right Brand<br>Composition | For the tenant, the criterion indicating the importance of being in the right brand mix   |
| Level 3<br>Criterion 48 | Square Meter<br>Leasable Area  | The criterion determining the importance of the square meter leasable area for tenant satisfaction                                    |
| Level 3<br>Criterion 49 | Mall<br>Management             | For tenant satisfaction, the criterion that determines the importance of the mall managers and management policies                    |
| Level 3<br>Criterion 50 | Rental Terms                   | The criterion determining the importance of rental conditions for tenant satisfaction   |

tenant satisfaction

| Level 3<br>Criterion 51 | Storefront<br>Lighting         | The criterion that determines the importance of the shop window layouts for tenants              |
|-------------------------|--------------------------------|--|
| Level 3<br>Criterion 52 | Staff                          | The criterion determining the importance of staff in store performance for tenant                |
| Level 3<br>Criterion 53 | Store Location                 | The criterion determining the importance of store location for store performance                 |
| Level 3<br>Criterion 54 | Product Diversity              | The criterion determining the importance of product variety for store performance                |
| Level 3<br>Criterion 55 | Domestic Brand<br>Tenants      | The criterion determining the importance of local tenants in tenant performance                  |
| Level 3<br>Criterion 56 | National Brand<br>Tenants      | The criterion determining the importance of national tenants in tenant performance               |
| Level 3<br>Criterion 57 | International<br>Brand Tenants | The criterion determining the importance of international tenants in tenant performance          |
| Level 4<br>Criterion 10 | Number of<br>Personal          | The criterion determining the importance of the number of personnel in store performance         |
| Level 4<br>Criterion 11 | Staff Training and Experience  | Criterion determining the importance of educated and experienced personnel for store performance |

#### 3.5. Mall turnover performance index

Not all malls show the same performance. Some malls overtake their rivals in terms of turnover and efficiency. The aim to reach high turnovers constitutes the majority of the workload. The role turnover plays in malls changes vis-a-vis category, time, and brand. The descriptive chart and hierarchical structure of the criteria for turnover are specified in Fig.8 and Table 5.

**Table 5.** The explanations of criteria determined in mall turnover performance index

|                            | CRITERION   | DEFINITIONS OF<br>CRITERIA   |  |  |
|----------------------------|---|--|--|--|
| Level 1<br>Criterion 5     | Mall Turnover<br>Performance<br>Index               | The criterion determining the importance of turnover concept in shopping mall performance  |  |  |
| Level 2<br>Criterion<br>21 | Category of<br>Stores for<br>Turnover               | The criterion determining the importance of category classification in turnover performance  |  |  |
| Level 2<br>Criterion 22    | Brand<br>Composition<br>With Respect To<br>Turnover | The criterion that determines which brand mix is important at the shopping mall: e.g. national, international, local                 |  |  |
| Level 2<br>Criterion 23    | Turnover<br>Classification<br>With Time             | The criterion determining the importance of the time-dependent changes in the shopping mall e.g. weekday, weekend, holiday, discount |  |  |

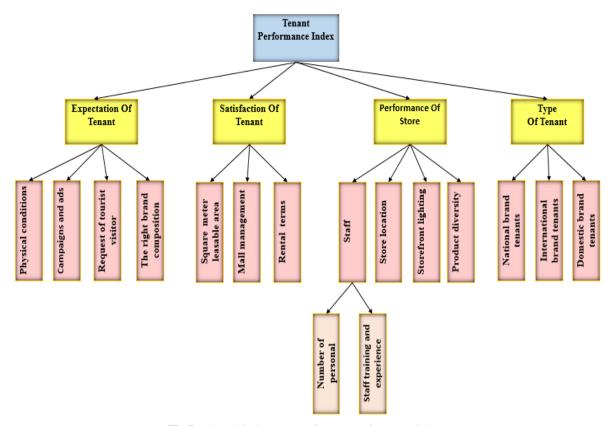
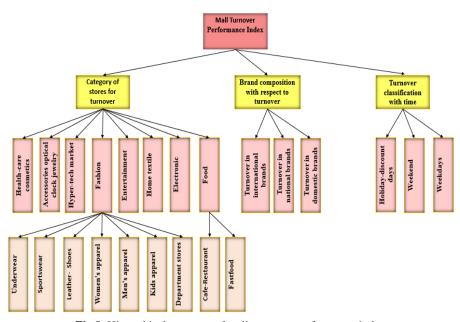


Fig 7. Hierarchical structure of tenant performance index

| Level 3<br>Criterion 58 | Food                                     | The criterion that determines the importance of turnover in the food sector                           | Level 3<br>Criterion 69 | Weekdays                  | The criterion that determines the importance of turnover in weekdays.                      |
|-------------------------|--|---|-------------------------|---------------------------|--|
| Level 3<br>Criterion 59 | Hyper-Tech<br>market                     | The criterion that determines the importance of turnover in the hyper-tech market sector              | Level 3<br>Criterion 70 | Weekend                   | The criterion that determines the importance of turnover in weekend                        |
| Level 3<br>Criterion 60 | Entertainment                            | The criterion that determines the importance of turnover in entertainment sector                      | Level 3<br>Criterion 71 | Holiday-<br>Discount Days | The criterion that determines the importance of turnover in holiday and discount days      |
| Level 3<br>Criterion 61 | Fashion                                  | The criterion that determines the importance of turnover in fashion sector                            | Level 4<br>Criterion 12 | Women's<br>Apparel        | The criterion that determines the importance of women's wear in fashion sector             |
| Level 3<br>Criterion 62 | Electronic                               | The criterion that determines the importance of turnover in electronic sector                         | Level 4<br>Criterion 13 | Men's Apparel             | The criterion that determines the importance of men's wear in fashion sector               |
| Level 3<br>Criterion 63 | Home Textile                             | The criterion that determines the importance of turnover in home textile sector                       | Level 4<br>Criterion 14 | Kids Apparel              | The criterion that determines the importance of kids wear in fashion sector                |
| Level 3<br>Criterion 64 | Accessory,Optic<br>al, Clock,<br>Jewelry | The criterion that determines the importance of turnover in Accessory, optical, clock jewelry sectors | Level 4<br>Criterion 15 | Underwear                 | The criterion that determines the importance of underwear in fashion sector                |
| Level 3<br>Criterion 65 | Health-Care<br>Cosmetics                 | The criterion that determines the importance of turnover in health-care and cosmetics sectors         | Level 4<br>Criterion 16 | Sportswear                | The criterion that determines the importance of sportswear in fashion sector               |
| Level 3<br>Criterion 66 | Turnover in<br>National Brands           | The criterion that determines the importance of national brands in turnover performance               | Level 4<br>Criterion 17 | Department<br>Stores      | The criterion that determines the importance of department stores in fashion sector        |
| Level 3<br>Criterion 67 | Turnover in<br>International<br>Brands   | Criterion determining the importance of international brands in turnover performance                  | Level 4<br>Criterion 18 | Leather- Shoes            | The criterion that determines the importance of leather and shoes stores in fashion sector |
| Level 3<br>Criterion 68 | Turnover in Domestic Brands              | Criterion determining the importance of local brands in   | Level 4<br>Criterion 19 | Cafe-Restaurant           | The criterion determining the importance of cafes and restaurants in catering sector       |
|                         |  | turnover performance  | Level 4<br>Criterion 20 | Fast-Food                 | The criterion determining the importance of fast food places in catering sector            |



 $\textbf{Fig 8}. \ \ \textbf{Hierarchical structure of mall turnover performance index}$ 

Level 3

Level 3

Level 3

Level 3

Level 3

Criterion 77

Criterion

Criterion

Criterion

Art

Game Halls

Social-cultural

Activities

Educational

Historical Building

Activities

74

75

The criterion determining

related to art in social areas.

The criterion determining

the importance of game

The criterion determining

in shopping center social

The criterion determining

activities in shopping center

For shopping mall social

the importance of the

number of Educational

life

social life

the importance of number of social and cultural activities

halls in social areas.

the importance of areas

#### 3.6. Social life performance index

Transforming economic institutions and global developments have made shopping malls an integral part of modern city life in Turkey since the 1980s. In addition to shopping, people go to malls in the summer months to avoid the heat, and in winter months to avoid the cold. Moreover, malls have become a hub for people to socialize, to participate in sports activities, to spend time with their children, to meet their friends, as well as to enjoy cultural activities such as theatre, cinema, and exhibition. Some main and sub-criteria are set in this context of malls' changing social role. Definitions and hierarchical structure of the criteria are specified in Fig.9 and Table 6.

**Table 6.** The explanations of criteria determined in social life performance index

|                            |                                      |  | e criterion determining<br>e importance of social life<br>shopping center |    | Structure Structure                      | life, The criterion   |  |
|----------------------------|--------------------------------------|--|---|----|--|---|--|
|                            | CRITERION                            | DEFINITIONS OF<br>CRITERION  |   |    |  | determining the importance<br>of options, such as making<br>it inspired by a historical<br>structure or creating<br>historical bazaar concepts in<br>a part of shopping center or<br>making the shopping center<br>as a historical building |  |
| Level 1<br>Criterion<br>6  | Social Life<br>Performance Index     | The criterion determining<br>the importance of social life<br>in shopping center<br>performance  |   |    |  |   |  |
| Level 2<br>Criterion<br>24 | Social Areas                         | The criterion determining<br>the importance of places<br>(cinema, theater, concert)<br>that offer social life<br>opportunities in the<br>shopping center | Level 3<br>Criterion  | 79 | Modern Building<br>Structure             | The criterion determining<br>the significance of the<br>construction of shopping<br>centers as modern<br>constructions in social life   |  |
| Level 2<br>Criterion 2     | Outdoor And Green<br>Areas           | For the shopping mall's social life, the criterion determining the importance of the open-green areas in   | Level 4<br>Criterion  | 21 | 0-6 Age                                  | The criterion determining<br>the importance of game<br>halls which belonging to 0-<br>6 age group in social areas   |  |
| Level 2<br>Criterion 2     | Originality                          | shopping mall  The criterion determining the importance of shopping center to have different   | Level 4<br>Criterion  | 22 | 6-15 Age                                 | The criterion determining<br>the importance of game<br>halls which belonging to 6-<br>15 age group in social areas  |  |
|                            |                                      | structures and services<br>compared to other shopping<br>malls in social life  | Level 4<br>Criterion  | 23 | 15-18+ Age                               | The criterion determining<br>the importance of game<br>halls which belonging to<br>15-18+ age group in social   |  |
| Level 2<br>Criterion 2     | Number Of<br>7 Activity              | For the shopping center's social life, the criterion determining the importance of activity numbers in shopping mall                                     | Level 4<br>Criterion  | 24 | Social-Cultural<br>Activities For Kids   | areas  The criterion determining the importance of social and cultural activity numbers for children in social areas  |  |
| Level 2<br>Criterion 2     | Building Design<br>3                 | The criterion determining<br>the importance of the design<br>inside and outside of the<br>shopping center and stores                                     | Level 4<br>Criterion  | 25 | Social-Cultural<br>Activities For Adults | The criterion determining<br>the importance of social and<br>cultural activity numbers for  |  |
| Level 3<br>Criterion 7     | Entertainm<br>2 ent And<br>education | The criterion determining<br>the importance of areas<br>related to recreation and<br>education in social areas.  | Level 4<br>Criterion  | 26 | Educational<br>Activities For Kids       | adults in social areas  The criterion determining the importance of educational activity  |  |
| Level 3<br>Criterion 7     | Fields of Sports And<br>Recreational | d The criterion determining<br>the importance of areas<br>related to Fields of sports<br>and recreational in social<br>areas.                            | Level 4<br>Criterion  | 27 | Educational<br>Activities For Adults     | numbers for children in social areas  The criterion determining the importance of educational activity numbers for adults in social areas   |  |

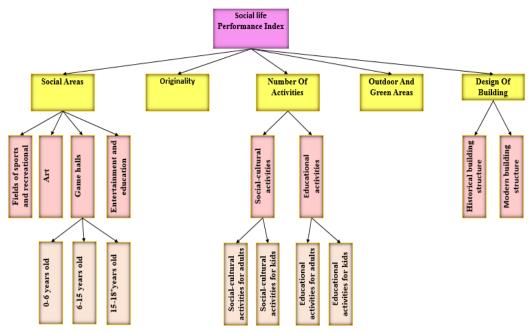


Fig.9. Hierarchical structure of social life performance index

#### 4. CONCLUSION

Due to the highly competitive environment between business, the managers of the customer-centric companies try to attract more customers and to develop a lasting relationship with profitable customers [27, 28]. Also, competition is getting tougher in the mall sector. Malls that are managed well, enhance themselves with original and innovative methods, give importance to social life, and understand the customers' needs and provide solutions, overtake their competitors in this race. Therefore, making a proper analysis, comprehending supply and demand correctly, and setting up a project is more crucial now. While new generation malls are introduced, old ones renew themselves as needed. Shopping malls are no longer places that people go for shopping only; they have been turned into something that symbolizes a lifestyle with their architecture, services, social spaces, and activities. In the new era, only malls that are managed well, promote themselves with the right concept, and adapt themselves to the new normal will survive. In this study, six main criteria and 134 subcriteria of them, which enable us to evaluate performance measurement in the mall sector, are set with the hierarchical structure. All of the main criteria in the proposed criterias are effective factors that play a role in evaluating the performance of shopping centers.

In this study, a model is developed by deciding significant concepts and issues of shopping malls. Before setting the criteria, crucial sectoral concepts in literature are reviewed, and criteria are examined in detail. Since then, the present author has interviewed five senior experts from the mall sector and revisited the research. It is hoped that the performance of shopping centers, which are important structures in the retail sector, together with

the model and criteria presented in the study, will allow for a more effective and easy evaluation. In addition, the study has a serious potential to make a positive

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