



Megaron

<https://megaron.yildiz.edu.tr> - <https://megaronjournal.com>
DOI: <https://doi.org/10.14744/megaron.2025.43067>

M G A R O N

Article

Evaluating architectural appeal in Turkish shopping mall investments: Insights from investors and consumers

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ARTICLE INFO

Article history

Received: 02 March 2025

Revised: 22 April 2025

Accepted: 03 May 2025

Key words:

Architectural appeal; consumers; Friedman; investors; shopping mall.

ABSTRACT

In modern society, shopping malls are key elements of daily consumer activity. Even though some studies indicate that spatially “architectural appeal” is considered as one of the supportive factors on commercial performance and also an attractiveness component to visit mall, it is open to be proven this aspect by comparing from perspective of investors and consumers in Türkiye among other influencing factors. To address this gap, surveys were conducted with purposeful sample of institutional investors to ascertain their rankings of investment success factors based on the existing literature and consumers’ preference of shopping malls. The data analysis commenced with an assessment of normality, which was followed by measuring importance level of the variables was evaluated using the Friedman test. Mann-Whitney U test was utilized to compare the priority variables for both investors and consumers groups. The findings suggest that decision-makers in Türkiye, deemed *the presence of anchors, location of the investment, and tenant mix structure* more critical than architectural appeal. For consumers, factors such as *product/price variety, entertainment opportunities, food and beverage services* are primary reasons to frequent a mall. Based on the comparison results, *location* was considered most important by investors, while consumers found *product/price diversity* more attractive. This study makes a unique contribution to the literature by offering a comparative analysis of shopping mall investments’ performance from the perspectives of entrepreneurs and consumers alike, providing insights for entrepreneurs, developers, designers, and retailers.

Cite this article as: Yoğurtçu, F. B., Köksal, A. (2025). Evaluating architectural appeal in Turkish shopping mall investments: Insights from investors and consumers. *Megaron*, 20(2):177–189.

INTRODUCTION

In the contemporary era, shopping malls have become an integral part of consumers' daily lives. These malls go beyond the simple act of shopping and provide users with quality leisure time and browsing activities that characterize their hedonic experiences by taking advantage of the architectural appeal of the mall itself (Bäckström, 2011; Lucia-Palacios et al., 2016). The concept of these social centers can be

attributed to the architect Victor Gruen, who designed them in the 1950s (Derya Arslan & Ergener, 2023). The malls operated during this period became popular everyday spaces where people could gather, engage in various activities, and purchase products from different brands. Furthermore, to attract consumers, new design strategies were developed based on architectural appeal (Derya Arslan & Ergener, 2023). Within this context, a range of design elements were employed to enhance aesthetics, safety, comfort, and hygiene.

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At the present time, these design components remain an important motivating factor for consumers to visit shopping centers regularly (Çavka, 2023a). Moreover, Teller & Elms (2010) argue that the architectural appeal of a shopping mall still has a positive impact on the commercial and financial performance of the investment, thereby gaining an edge in an intensely competitive market. But, for a shopping center investment to be commercially successful and perform consistently, it is not enough to have only architectural appeal elements. Various factors influence the consumer's motivation to visit and the investor's decision to invest. To achieve comprehensive commercial and financial success from an investment, it is essential that the expectations of both consumers and investors are aligned.

Based on the relevant literature, several key factors come to the fore for a mall's success such as the presence of anchor brands (Damian et al, 2011), location selection, tenant mix structure (Teller & Reutterer, 2008), the role of mall management, the availability of entertainment and dining options (Zacharias & Schinazi, 2003), and consumer shopping behavior (Bloch et al., 1994). In addition, architectural appeal is also a supportive factor influencing a mall's commercial performance during the operational period (Gilboa & Vilnai-Yavetz, 2013; Tozzi et al., 2022; El-Adly, 2007). However, previous scholarly research has tended to examine these success factors of shopping mall investments, including architectural appeal, from either the consumer or the investor perspective discretely. On the other hand, while previous studies have comprehensively investigated the role of architectural appeal from the consumer perspective (Teller & Reutterer, 2008; Damian et al., 2011; Mittal & Jhamb, 2016; El-Adly, 2007; Zacharias & Schinazi, 2003; Singh & Sahay, 2012; Anselmsson, 2016; Wee, 1986), only a limited number of studies—such as those by Ahmadi et al. (2020), Brettmo & Sanchez-Diaz (2022), Çavka (2023a), and Oztaysi et al. (2016) — have explored this factor from the investor perspective. Although all these researches have highlighted architectural appeal as an effective factor in the commercial success of a mall, there is a lack of research comparing its relative importance among other factors from investor and visitor's preferences from consumer perspectives. This study seeks to address this gap in the literature by analyzing and comparing the primary expectations of investors and consumers within the context of architectural appeal. However, the data of this study is limited to the opinions of consumers and experts in shopping mall investments in Istanbul, Türkiye. In line with the aim of the study, the research questions were structured as follows.

- What is the importance level of architectural appeal among the other success factors affecting the commercial success of a mall investment for investors in Türkiye?
- To what extent architectural appeal is important among consumers' preferences for visiting shopping malls in Türkiye?
- Which characteristics stand out when comparing the

factors influencing commercial stability for mall's investors and the preference variables of visitors in Türkiye?

This research contributes to the literature by uniquely discussing the impact of architectural appeal on shopping mall investment success from both investor and consumer perspectives. It also emphasizes the need for a holistic understanding of architectural appeal as a strategic factor and identifies key success factors for mall investments in Türkiye, offering valuable insights for retail sector investors.

LITERATURE REVIEW

Investors of shopping malls compete to attract consumers, aiming for long-term returns through design, development, and management that draws interest (de Castro et al., 2020). On the other hand, Nasim & Shamshir (2018) argue that shoppers, in turn, assess malls based on spatial, functional, and experiential qualities. To engage consumers, investors offer diverse stores, entertainment, events, new sales channels, and leverage architectural appeal as part of mall attractiveness (Teller & Elms, 2012; Warnaby et al., 2005).

Although architectural appeal is considered beneficial for the commercial success of shopping malls (Oteng-Ababio & Arthur, 2015; Anselmsson, 2016; Vilnai-Yavetz et al., 2021) and linked to overall attractiveness (Döbek, 2015), its academic conceptualization remains fragmented. Factors such as orientation and ambience shape mall attractiveness (Teller & Reutterer, 2008), through atmosphere often being central focal point (Wakefield & Baker, 1998). In some cases, atmosphere—closely tied to architectural appeal—is the most influential element (Turley & Milliman, 2000), and one of the strongest contributors to retail investment success (Teller & Elms, 2010). Furthermore, Döbek (2015) claimed that architectural appeal directly impacts consumer satisfaction and loyalty.

As Finn & Louviere (1996) noted, most previous studies evaluating architectural appeal focused on consumer opinions related to a mall's image, design, or atmosphere. Similarly, Çavka, (2023b) found that spatial openness—defined by the balance of open and enclosed areas—is a top priority for consumers. Additionally, the study highlights that design features fostering social interaction, such as communal zones and fluid circulation, are key aspect in modern mall development. This aligns with retail architecture trends that emphasize experiential over purely transactional aspects (Teller & Reutterer, 2008). Moreover, Mittal & Jhamb (2016), El-Adly (2007), Zacharias & Schinazi (2003), and Singh & Sahay (2012) emphasize that architectural features enhancing comfort, orientation, and emotional connection—such as natural lighting and human-scale proportions—are increasingly valued by consumers. Yuan et al. (2021) identified four dimensions of shaping mall experiences: Visual atmosphere, physical comfort, spatial configuration, and operational management. These reflect the sensory and functional facets of architectural appeal influencing users' perceptions and behaviors in retail spaces. Rather than being

merely aesthetic, architectural appeal is shaped by sensory, emotional, and cognitive engagement (Baker et al., 2002; Kwon et al., 2016; Olonade et al., 2021; Gomes & Paula, 2017; Normie, 2004). However, Aliagha et al. (2015) argues that this influence on consumer loyalty is limited, compared to factors such as cleanliness, amenities, and accessibility.

Although the essence of architectural appeal has frequently been explored from the consumer perspective in the shopping mall literature, it has received limited attention from the investor standpoint. Teller et al. (2016) claimed that the main reason behind this approach is that investors prioritize marketable attributes during production period. Only few investor-focused studies, undertake factors influencing mall success include location, tenant mix, and architectural design, with appeal as a sub dimension (Ahmadi et al., 2020; Çavka, 2023a). Yet, Oztaysi et al. (2016) demonstrated that managers focus more on brand mix, consumer behavior, and market structure—indicating architectural appeal is not seen as central to marketing strategies. However, evolving user expectations and market trends necessitate that investor must consider flexible spatial planning, user comfort, efficient circulation, and maintenance-friendly design strategies to enhance architectural appeal (Çavka, 2023a).

In conclusion, the concept of architectural appeal in shopping malls has been addressed in a fragmented manner

within the existing literature, primarily under the themes of "attractiveness" and "investment success factors." Within the scope of this study, architectural appeal is defined as an investment success factor from the perspective of investors, and as a visit preference from the perspective of consumers. Furthermore, there appears to be a gap of studies that rank the importance of architectural appeal among other influential factors from both investor and consumer viewpoints. Therefore, by comparatively examining the extent to which the expectations of these two groups align within the framework of architectural appeal in the context of investment success. This study aims to contribute original value to the field and offer an innovative perspective to the existing body of shopping mall literature.

METHODOLOGY AND DATA

The research methodology is portrayed in Figure 1. Initial stage entailed the identification of pertinent data sources within the related literature through a comprehensive literature review. In the subsequent phase, the sources were subjected to content analysis, resulting in the formation of a pool of potential variables. Then, Pareto analysis was used to reduce the number of variables. Following, these variables were converted to surveys to collect data from

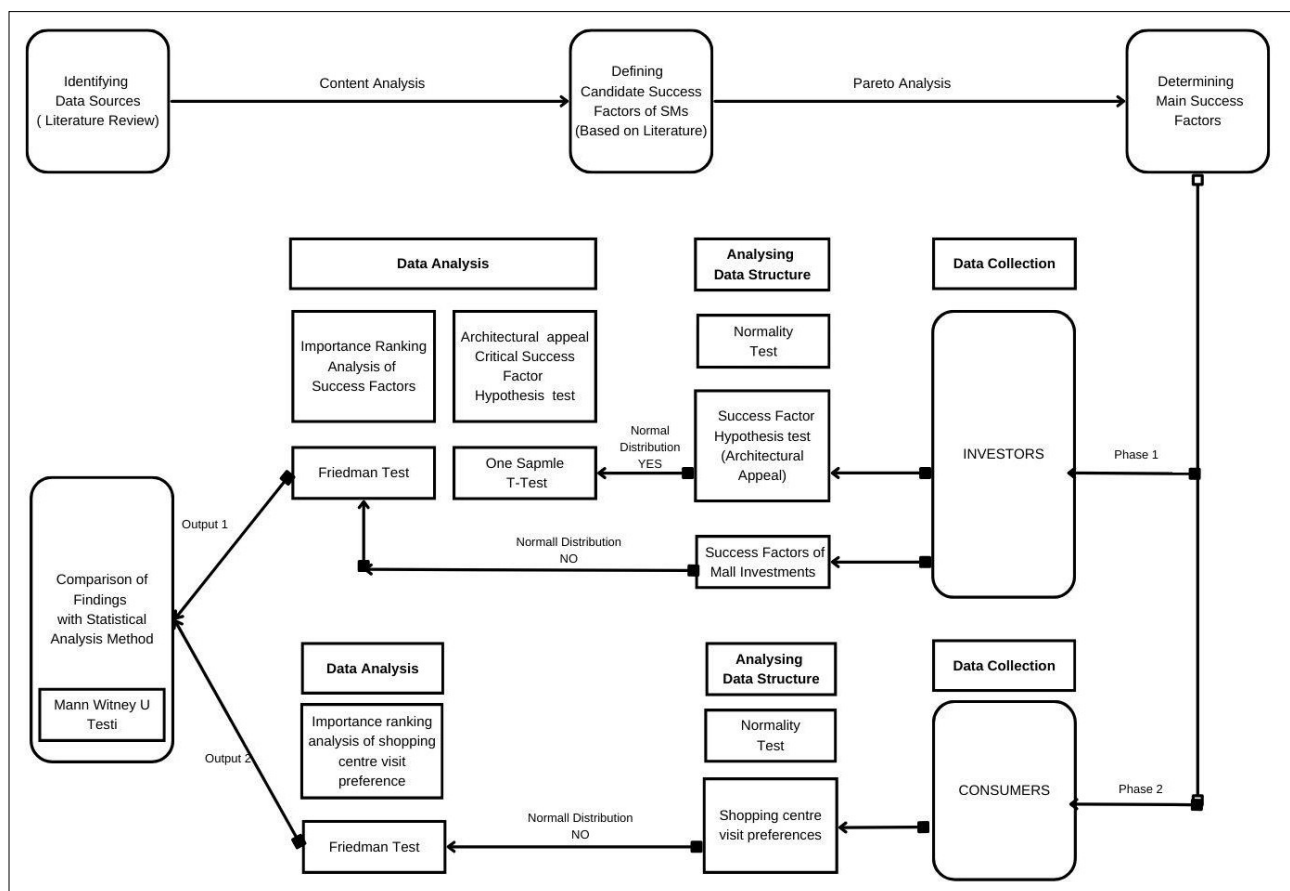


Figure 1. Research methodology flow chart.

investors and consumers. A variety of analyses were applied to present investors and consumers' dimensions.

Data

In the first part, to define the data, a comprehensive literature review was conducted using databases such as Scopus, WOS, ProQuest, and Türkiye's Dissertation Centre, with keywords such as "shopping mall development", "investment success factors," and "architectural appeal". The review included journal articles, conference papers, and postgraduate dissertations. In the second phase, a content analysis was applied to identify the data factors, based on a total of 210 scientific publications. This analysis resulted in a candidate pool of 28 variables, including the architectural appeal. In the subsequent stage, the Pareto analysis was employed to ascertain the key success factors that have a broad impact on the shopping malls' commercial success (Haughey, 2010). Thus, Table 1 illustrates 13 key success factors based on the related literature. Sampling was composed after examination of similar studies conducted by researchers such as Pantano et al. (2021), Martin & Turley (2004), and Bloch et al. (1994) in the shopping mall literature reveals that a "purposive sampling" approach was employed for each group. This method not only allows for the identification of knowledgeable and experienced individuals or groups but is also one of the commonly used techniques in qualitative research for selecting and identifying information-rich cases, ensuring the most efficient use of limited resources (Yağar & Dökme, 2018).

During data collection phase, for investor group, an online survey was conducted with a total of 17 experts who have worked or are currently working in various departments of shopping mall investment sector in Türkiye such as portfolio management, business development and rental unit, project development, facility management. Most of these experts possess considerable experience during the feasibility and operational phase of mall development.

As was stated previously, to score the key factors, including the architectural appeal, a "ranking scale" was utilized. Ranking scale is advantageous to facilitate a direct comparison between factors and enables the determination of their relative importance (Arıkan, 2018). In this regard, the 13 factors, based on the literature, were ranked by the experts on a scale of 1 to 13 according to their level of importance.

In the second phase of the study, data were collected through face-to-face surveys from 96 consumer who visit shopping centers regularly. Same factors were aligned for consumers, and similar ranking scale was applied. However, the factor pertaining to the utilization of software technology in the context of innovation during the feasibility phase was excluded from the survey as it was deemed to be irrelevant for consumers. Consequently, importance ranking questions were prepared for nine literature-based success factors, allowing consumers to rate them on a scale from 1 to 9. Participants were also asked to provide demographic information regarding their age, education level, monthly income, and frequency of visits to shopping malls.

Table 1. Literature-based success factors in shopping mall investments

Factor Code	Shopping Mall Investments Success Factors	Resources in the Shopping Mall Literature
X-1	Age distribution of the population residing within a five-kilometer	(D'Arcy et al., 1997; White & Gray, 1996)
X-2	Education level of population living within 5 km	(El-Adly, 2007; Des Rosiers et al., 2005)
X-3	Household income level population living within 5 km	(Beddington, 1990; White & Gray, 1996)
X-4	Carpark capacity	(El-Adly, 2007; Said et al., 2020)
X-5	Tenant mix	(Beddington, 1990; Krugell, 2010; Teller & Reutterer, 2008; Brown, 1992; Xu et al., 2022)
X-6	Presence of Anchors	(Brown, 1992; de Bruwer, 1997; Abratt et al., 1985; Finn & Louviere, 1996)
X-7	Entertainment and food and beverage opportunities	(Zacharias & Schinazi, 2003; Feldmann, 2004)
X-8	Physical size of the shopping mall	(Tay et al., 1999; Martin & Turley, 2004)
X-9	Shopping mall's architectural appeal	(Murphy et al., 2013; Anselmsson, 2016; Mittal & Jhamb, 2016; Wee, 1986; Howell & Rogers, 1981)
X-10	Location and easy accessibility	(Krugell, 2010; Des Rosiers et al., 2005; Hoyt & Nelson, 1960; Cheng et al., 2007; Cheng et al., 2005)
X-11	Product and price diversity depending on tenant mix	(Yavas, 2001; Glaeser et al., 2001; Yiu & Xu, 2012)
X-12	Open to sustainable development in commercial, social and environmental contexts of the investment	(Križan et al., 2022; Ferman & İlhan, 2019; İlhan, 2020)
X-13	Use of software technology in an innovative context during the feasibility stage	(Masebe et al., 2020; Pupentsova et al., 2022)

Analysis of Data Structures

In the study, all data collected from the investor and consumer sample groups through surveys were subjected to a structural examination using normality assumption tests. This preliminary evaluation serves the purpose of determining the appropriate data analysis technique that can provide robust results (Uysal & Kılıç, 2022). The normality test results were examined using three different methods. The initial method entailed the interpretation of Skewness and Kurtosis values, which represent the Skewness and Kurtosis of the data, respectively. If these values fell between -1.5 and +1.5, the data were deemed to exhibit a normal distribution (Tabachnick et al., 2018). The second method entailed dividing the Skewness and Kurtosis values by their respective standard error values. If the resulting values fell between -1.96 and +1.96, the data were deemed to be normally distributed (Büyüköztürk, 2018). The third method entailed an examination of the significance (Sig) values associated with the Shapiro-Wilk and Kolmogorov tests. If the p-value was less than 0.05, the data were deemed to deviate from a normal distribution. In assessing normality, if the sample size (n) was below 50, the significance value of the Shapiro-Wilk test was employed, whereas if n exceeded 50, the significance value of the Kolmogorov-Smirnov test was utilized to evaluate the results (Büyüköztürk, 2018).

The data reliability of each survey was analyzed Kendall's W test and hierarchical clustering analysis and K-means clustering analysis methods to reinterpret each group's data (Ikotun et al., 2023). The findings are discussed in comparative analysis of investors and consumers.

RESULTS AND DISCUSSION

Investor Dimension

As previously mentioned, a dataset was compiled to determine the ranking of the architectural appeal factor among other key parameters of mall investment from the investors' perspective in Türkiye. This dataset was sourced from the related literature review and contains ratings from 17 professionals experienced for Türkiye in both operational and feasibility periods. These experts ranked 13 investment variables on a scale from 1 to 13. A normality test was applied each factor using the SPSS program. As illustrated in Table 2, "The utilization of software technology in the feasibility phase within an innovative context" (X13) did not demonstrate a normal distribution among all three methods. Moreover, factors such as the age distribution of the population residing in the surrounding area (X1), the presence of anchors (X6), location and easy accessibility (X10), and open to sustainability of investment projects in commercial, social, and environmental contexts (X12) also did not exhibit a normal distribution when analyzed

through to the Shapiro-Wilk (Sig) significance values.

As the data did not demonstrate normal distribution, the Friedman test method was employed. This non-parametric test was preferred due to the nature of the data as it facilitates the determination of the ranking of the variables' relative importance based on their mean rankings (Sheldon et al., 1996) and it yields robust outcomes even when working with datasets that do not adhere to a normal distribution (Zimmerman & Zumbo, 1993). In this context, the findings of the Friedman test, which illustrate the importance ranking of the success factors from the investor dimension of the shopping mall, are presented in Table 3.

In terms of the relative importance of the factors, architectural appeal (X9) ranked seventh ($\mu=6.64$) among 13 investment factors from the perspective of Turkish investors, indicating its relatively limited perceived influence on success. Investors may probably prioritize more measurable elements such as tenant diversity, location, accessibility, tenant capacity, market demand, operational costs as marketing strategy.

Other finding of this study indicates that the presence of anchor brands (X6) is the most critical factor for shopping mall investment success in Türkiye, with an average score of 9.71. This aligns with previous research Sirmans C.F. & Guidry K. (1993), Gatzlaff et al. (1994), and Anderson (1985), highlighting that anchor attract customers and increase the value of smaller stores. However, if anchors face financial issues or bankruptcy, customer traffic may drop sharply, potentially leading to mall closure (Glennen & Peterson, 2017) Thus, close monitoring during operations is essential for mall managers.

Furthermore, the other two critical success factors (Table 3), are the location of the investment (X10) and the tenant mix structure (X5). These findings align with previous studies by Zhou et al. (2024), Zhu & Chung (2023), Wu et al. (2023), and Leung et al. (2024), who emphasize location selection and tenant distribution as key contributors to investment success. Moreover, based on the findings, location ($\mu=9.41$) is considered more important than tenant mix ($\mu=8.94$) because a prime location can appreciate in value over time, whereas a poor location increases the risk of depreciation.

A key finding of this study is that factors such as household income level (X3), entertainment and food/beverage opportunities (X7), and parking facilities (X4) rank higher than architectural appeal (X9) ($\mu=6.64$) from the investor perspective, with scores of $\mu=8.82$, $\mu=7.76$, and $\mu=7.29$, respectively. Although architectural appeal is one of the important factors, it alone cannot guarantee the commercial success of a mall. Fundamentally, household income level directly affects the economic sustainability of the mall (Xu et al., 2022). In high-income areas, consumers tend to spend more, which increases the profitability and return on investment (ROI) of mall stores (Zhang et al., 2023). Food

Table 2. Normality test results of success factors data

Factor Description	Method 1			Method 2					Method 3	
	Skew. Value	Kurtosis Value	Normal Distr.	Skew. Error Value	Kurt. Error Value	Skew. Value/ Standard Error Value	Kurt. Value/ Standard Error Value	Normal Distr.	Shapiro-Wilk (sig) Value	Normal Distr.
X1- Age distribution	0.980	0.249	Yes	0.550	1.063	1.782	0.234	Yes	0.021	No
X2- Education level	0.149	-1.234	Yes	0.550	1.063	0.271	-1.161	Yes	0.275	Yes
X3- Household Income	-0.164	-1.420	Yes	0.550	1.063	-0.298	-1.336	Yes	0.095	Yes
X4- Carpark capacity	0.053	-1.027	Yes	0.550	1.063	0.096	-0.966	Yes	0.100	Yes
X5- Tenant mix	-1.058	0.895	Yes	0.550	1.063	-1.924	0.842	Yes	0.080	Yes
X6- Presence of Anchors	-0.888	-0.103	Yes	0.550	1.063	-1.615	-0.097	Yes	0.040	No
X7- Entertainment and food and beverage opportunities	-0.580	-0.730	Yes	0.550	1.063	-1.055	-0.687	Yes	0.190	Yes
X8- Physical size of the SM	-0.027	-1.237	Yes	0.550	1.063	-0.049	-1.164	Yes	0.136	Yes
X9 Architectural appeal	0.108	-0.882	Yes	0.550	1.063	0.196	-0.830	Yes	0.269	Yes
X10- Location and easy accessibility	-0.889	-0.728	Yes	0.550	1.063	-1.616	-0.685	Yes	0.001	No
X11- Product and price diversity	0.453	-1.136	Yes	0.550	1.063	0.824	-1.069	Yes	0,103	Yes
X12-Open to Sustainable development in commercial, social, and environmental contexts	0.509	-1.403	Yes	0.550	1.063	0.925	-1.320	Yes	0.017	No
X13- Use of software technology in an innovative context during the feasibility	1.714	2.227	No	0.550	1.063	3.116	2.095	No	0.000	No

Table 3. Importance ranking of shopping mall success factors from investor perspective

Importance Ranking	Success Factor Description	Factor Code	Ranking of Averages
1	Presence of Anchors	X6	9.71
2	Location and easy accessibility	X10	9.41
3	Tenant mix	X5	8.94
4	Household Income level population living within 5 km	X3	8.82
5	Entertainment and food and beverage opportunities	X7	7.76
6	Carpark capacity	X4	7.29
7	Architectural appeal	X9	6.65
8	Physical size of the shopping mall	X8	6.47
9	Product and price diversity	X11	6.12
10	Open to Sustainable development in commercial. social and environmental contexts of the investment	X12	5.94
11	Education level of population living within 5 km	X2	5.88
12	Age distribution of the population residing within a five-kilometer	X1	4.41
13	Use of software technology in an innovative context during the feasibility stage	X13	3.59

and beverage, entertainment areas also allow consumers to spend more time in the shopping center. Thus, store sales increases and tenants may pay higher rents (Zacharias & Schinazi, 2003). However, at this point, architectural appeal can still influence people, and the entertainment and gastronomy experience can keep them in the mall longer and encourage them repeatedly (Çavka, 2023a). As a result, easy accessibility, income level and entertainment opportunities including food and beverage services rank higher than architectural appeal for investors to attract more customers to the mall.

Consumer Dimension

This study also investigates the significance of architectural appeal from the consumer perspective. In this phase a survey was conducted, and data collected from 96 respondents to explore the ranking of variables. According to the demographics of the participants, 79% were in the 18-25 age range, 9% were in the 26-35 age range, and 11% were 36 years or older. In regard to the education level of the respondents, 82% of them have an associate degree, while 18% have bachelor's degree or higher. The participants of consumers stated their visiting frequency to shopping malls are in the following order: 22% visit weekly, 22% visit monthly, 30% visit more than once a month, and 22% visit every few months.

To explore the structure of the data and determine the importance ranking method for the visit preference factors,

the normality test was applied using the SPSS program. The results, as illustrated in Table 4, indicated that the data set did not exhibit a normal distribution, as evidenced by the Skewness and Kurtosis values, the ratio of these values to the standard error, and the Shapiro-Wilk (Sig) significance value. Therefore, a non-parametric test of the Friedman test, was applied to reveal the rankings of the importance of the variables (Sheldon et al., 1996).

So far, architectural appeal factor has been investigated from the investors' perspective and found that this factor is not a critical issue among the other factors such as anchors, tenant mix, and location. However, it is essential to portray the consumer preferences as well. In line with the objective, the Friedman test method was used to analyze the factors according to importance ranking that increase the frequency of shopping mall visits by consumers. This method is a non-parametric test, frequently preferred when data structures do not follow a normal distribution (Zimmerman & Zumbo, 1993).

The results of the Friedman test are presented in Table 5. According to data analysis in this section indicate that the product and price diversity ($\mu=6.40$) offered in a shopping mall is the most influential factor in consumers' decision to visit such a venue. In this regard, an evaluation of the findings pertaining to the consumer dimension of the study reveals that product-price diversity and the availability of entertainment, food and beverage options, and other services within the malls are the primary

Table 4. Results of normality tests (Consumer dimension)

Factor Description	Method 1			Method 2					Method 3	
	Skew. Value	Kurt. Value	Normal Distr.	Skew. Error Value	Kurt. Error Value	Skew. Value/ Standard Error Value	Kurtosis Value/ Standard Error Value	Normal Distr.	Kolmogorov (sig)	Normal Distr.
Presence of Anchors	-0.523	-0.834	Yes	0.246	0.488	-2.126	-1.710	No	0.000	No
Carpark capacity	0.444	-1.013	Yes	0.246	0.488	1.807	-2.075	No	0.000	No
Entertainment and food and beverage opportunities	-0.648	-0.529	Yes	0.246	0.488	-2.633	-1.083	No	0.000	No
Physical size of the shopping mall	0.375	-0.813	Yes	0.246	0.488	1.525	-1.666	Yes	0.000	No
Location and easy accessibility	-0.077	-0.985	Yes	0.246	0.488	-0.315	-2.018	No	0.007	No
Product and price diversity	-0.861	0.430	Yes	0.246	0.488	-3.498	0.880	No	0.000	No
Tenant mix	-0.375	-0.868	Yes	0.246	0.488	-1.523	-1.778	Yes	0.001	No
Architectural appeal of mall	0.775	-0.527	Yes	0.246	0.488	3.150	-1.081	No	0.000	No
Open to Sustainable development	0.922	-0.217	Yes	0.246	0.488	3.750	-0.444	No	0.000	No

Table 5. Importance ranking of shopping mall visiting factors at consumer perspective

Importance Ranking	Factor Description	Factor Code	Ranking of Averages
1	Product and price diversity	X11	6.40
2	Entertainment and food and beverage opportunities	X7	6.17
3	Presence of Anchors	X6	6.10
4	Tenant mix	X5	5.93
5	Location and easy accessibility	X10	5.33
6	Carpark capacity	X4	4.10
7	Architectural appeal	X9	3.98
8	Physical size of the shopping mall	X8	3.69
9	Open to Sustainable development in commercial, social and environmental contexts	X12	3.29

factors influencing consumer visits to the centers. This finding aligns with the results of previous research by Topçu (2011), Mert & Altunışık (2000), Cengiz & Özden (2002). Besides, Tuncer et al. (2008), and Arslan & Bakır (2010) focused also on user-centered decision-making mechanisms for shopping mall visits. This suggests a relationship between product-price diversity and the distribution of tenant mix. An ideal tenant mix within a shopping mall can offer consumers different product and price segments, enhancing the consumer experience.

Another significant outcome of the Friedman test is that architectural appeal is not one of the critical factors for consumers to increase the frequency of visits to a shopping mall. The lower prioritization of architectural appeal in consumer's visit preferences can be explained by several factors. Fundamentally, consumers may perceive the architectural appeal of a mall as merely one component of the shopping experience, or they may focus primarily on their functional and social needs. As a result, functional factors such as price advantages ($\mu=6.40$), entertainment and food and beverage opportunities ($\mu=6.17$), store variety (anchors ($\mu=6.10$); tenant mix ($\mu=5.93$)), easy accessibility (location ($\mu=5.33$); parking facility ($\mu=4.10$)) may take precedence respectively over architectural appeal ($\mu=3.98$).

The findings from this part of the study are highly valuable for investors in shaping an innovative design strategy prior to construction. Consumers primarily choose to visit shopping malls due to the availability of diverse product and price options, as well as a variety of food and beverage offerings. In this context, investors can identify the optimal tenant mix during the feasibility phase, incorporating anchor brands and entertainment venues. Additionally, architects can develop effective spatial planning strategies during the design process by carefully organizing tenant placement, integrating large-scale entertainment zones, and designing efficient parking

systems to enhance the mall's overall appeal and attract a higher number of visitors.

Comparative Analysis of The Success Factors Between Consumers and Investors

So far, critical success factors from the investor's perception and the driving factors for the consumers to increase their visit to shopping malls are analyzed separately, it is also important to determine whether there is a significant difference among these factors between the two groups. Therefore, this section compares the average importance rankings the investors and consumers.

Kendall's W test was initially used to assess the level of agreement among multiple experts and participants, but due to a low concordance value (0.238), hierarchical clustering and K-means clustering were employed for further analysis. In the investor group, 15 out of 17 participants clustered factors such as anchor brands (10.20), location and tenant mix (9.80), and entertainment & food services (8.00) together. The remaining participants grouped household income (10.00), product price diversity (10.00), sustainable growth potential (11.00), and use of software technology (12.00) in a second cluster. In the consumer group, 63 participants prioritized anchor brands (6.89), price diversity (6.86), tenant mix (6.51), and entertainment & food services (6.44) in one cluster, while 36 focused on architectural attractiveness (6.06). Despite varying opinions, these results suggest a strong convergence of factors under consistent categories.

Hence, there is a significant disparity between the sample size of the expert group ($n=17$) and the sample size of the consumer group ($n=96$), a non-parametric Mann-Whitney U Test applied for statistical comparison (Mann & Whitney, 1947). As illustrated the results of Mann-Whitney U test in Table 6, the variables with a p-significance value below 0.05 were identified as product-price diversity (0.003) and location and easy accessibility (0.03).

Furthermore, upon re-examination of these two variables in terms of the average ranking as indicated in Table 7, location and easy accessibility is the highest critical factor for investors where, product and price diversity play a significant role in consumer preferences in Türkiye.

Architectural appeal was not prioritized by either group. Ostensibly investors focus on selecting the best location to minimize future risks, while consumers prioritize access to diverse products and competitive prices. This finding coincides with Feldmann's (2004) study, so that shopping malls must be located within the main transportation arteries with a visible and distinctive design. Additionally, effective tenant mix placement, with product-price diversity and brand distribution across floors, can increase visit frequency and duration (Krugell, 2010). When examining the differences between the rankings of investors and consumers, it can be observed that shopping malls with high visitor volumes are generally located along the main arteries of the city. From a logical standpoint, if consumer survey participants have prior experience with such malls, it is plausible that the factor of accessibility and ease of transportation may rank lower in their preference hierarchy.

CONCLUSION

Shopping malls are high-capital investments with strong long-term return potential. Their success depends on factors such as anchor brands, tenant mix, location, entertainment, food and beverage services, parking, and architectural appeal. While architectural appeal may not be the main factor, it enhances the consumer experience,

increases visit frequency, and supports profitability. For overall success, consumer and investor expectations must align. Therefore, within the scope of this study, to assess the importance level of architectural appeal in Türkiye, data was collected via surveys from investors and consumers to compare. The Friedman test ranked the importance within each group, while the Mann-Whitney U test identified key variables across both groups.

The findings indicate that factors such as anchor presence, location of the investment, tenant mix structure, household income levels in the surrounding area, the entertainment, food, and beverage services offered by the mall, and parking capacity exert a more profound influence on the commercial performance of the investment than the architectural appeal. However, architectural appeal supports consumer preferences by enhancing spatial quality through aesthetics, comfort, lighting, cleanliness, and security, which can strengthen emotional connections and increase visit frequency, ultimately boosting mall performance frequency.

Conversely, the findings obtained from the consumer perspective, though limited in scope, offer partial support for this view. While factors such as the diversity of products and prices offered by the mall, the presence of entertainment and dining facilities, the availability of anchor brand stores, the fulfilment of expectations and needs through an appropriate tenant mix, ease of accessibility to the mall's location, and sufficient parking capacity are the primary reasons for consumers to visit a shopping mall, they also consider the attractiveness of the architectural appeal as a contributing factor. It can therefore be posited that an

Table 6. Results of Mann-Whitney U Test for comparison

	Anchors	Location accessibility	Tenant Mix	Entertainment and food and beverage	Carpark	Appeal of SM	Physical size	Product and price diversity	Open to Sustainable development
Mann-Whitney U	607.00	547.50	667.00	735.00	593.00	690.50	631.00	455.00	717.50
Wilcoxon W	5263.00	5203.50	5323.00	888.00	5249.00	5346.50	5287.00	608.00	5373.50
Z	-1.70	-2.17	-1.21	-0.66	-1.80	-1.02	-1.51	-2.93	-0.81
Asymp. Sig. (2-tailed)	0.089	0.030	0.227	0.511	0.071	0.307	0.132	0.003	0.420

Table 7. Comparison of location and product price diversity based on two dimensions

Factor Description	Group Variable	N (sample size)	Ranking of Averages
Location and easy accessibility	Investor Group	17	72.79
	Consumer Group	96	54.20
	Total	113	
Product and price diversity	Investor Group	17	35.76
	Consumer Group	96	60.76
	Total	113	

investment in the appeal of the architectural appeal will positively impact the future success of the investment by increasing user visit frequency.

Finally, a comparison of the prominent factors between the investor and consumer perspectives reveals that the "location and easy accessibility" of the investment holds strategic importance for investors, while consumers emphasize "product and price diversity".

This study provides a comprehensive analysis on the significance of architectural appeal among other success factors in shopping mall investments from investors view and visit motivation element from consumers' perspective in Türkiye. Moreover, this research not only examines the extent to which the spatial appeal of a shopping mall is a key factor in the context of architectural design, but also outlines the other success components of such commercial investments from both the entrepreneurial and user perspectives. This is done to provide a general framework for future research. It is anticipated that this framework will prove a valuable resource for future empirical studies in the field of shopping mall design and investment planning. Furthermore, the study's findings may inform the development of predictive models to forecast the future success of shopping mall investments.

Although architectural appeal is not the primary determinant for investors and consumers in the context of shopping malls, it nonetheless plays a noteworthy role in shaping both investment and consumption decisions. A distinguishing feature of this study lies in its integrative approach, wherein the perspectives of both key stakeholder groups are concurrently examined. Future research should aim to conduct more comprehensive analyses of architectural attractiveness by incorporating the demographic and psychographic attributes of the involved actors.

ETHICS: There are no ethical issues with the publication of this manuscript.

PEER-REVIEW: Externally peer-reviewed.

CONFLICT OF INTEREST: The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

FINANCIAL DISCLOSURE: The authors declared that this study has received no financial support.

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