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Research Article

A COMPARATIVE ANALYSIS OF SOME SHOPPING CENTERS IN METROPOL CITIES OF TURKIYE USING IPA AND IPCA METHODS

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Abstract

With the influence of globalization and modernism, habits have begun to change in many areas. Especially in recent years, as a result of economic and social events, the urban lifestyle has also changed. As a result of the change, people have started to prefer multifunctional shopping centers where all kinds of products, in addition to their basic needs, are available together and where they can have more rest opportunities. Areas with this function, which are also considered urban attraction points, are increasing their share in the service sector day by day. There is a highly competitive environment among shopping malls that have a significant customer potential. Understanding the competitive position of these areas is vital for decision-makers. This study, conducted in Ankara and Istanbul samples, aims to analyze to what extent the physical features of shopping malls meet the preferences and expectations of users. These properties were evaluated using IPA and IPCA methods. In this context, the study presents a comparative analysis of Ankara, which was selected as the focal location, and Istanbul, which was selected as the rival location. As a result of the analysis, the criteria that Ankara and Istanbul have higher performance than each other and the features that should be prioritized in performance improvement studies to increase their competitiveness were determined. It has been concluded that shopping malls in Ankara are in a position to compete with Istanbul.

Keywords: Shopping centers; IPA method; IPCA method

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Araştırma Makalesi

TÜRKİYE'NİN METROPOL ŞEHİRLERİNDEKİ BAZI ALIŞVERİŞ MERKEZLERİNİN IPA VE IPCA YÖNTEMLERİ KULLANILARAK KARŞILAŞTIRMALI ANALİZİ

Sevgi ÖZTÜRK[*], Öznur IŞINKARALAR [**], Dilara YILMAZ [***], Feyza KESİMOĞLU [****]

Öz

Küreselleşmenin ve modernizmin etkisiyle birçok alanda alışkanlıklar değişmeye başlamıştır. Özellikle son yıllarda ekonomik ve sosyal alanda yaşanan olaylar neticesinde, kentsel yaşam tarzı da değişmiştir. Yaşanan değişim sonucunda, insanlar artık temel ihtiyaçlarının yanı sıra her türlü ürünün bir arada bulunduğu ve daha fazla dinlenme fırsatı bulabildikleri çok işlevli alışveriş merkezlerini tercih etmeye başlamıştır. Kentsel çekim noktaları olarak da değerlendirilen bu işleve sahip alanlar, hizmet sektöründeki payını her geçen gün artırmaktadır. Önemli bir müşteri potansiyeline sahip olan alışveriş merkezleri arasında yüksek bir rekabet ortamı bulunmaktadır. Bu alanların rekabetçi konumunu anlamak, karar vericiler için hayati önem taşımaktadır. Ankara ve İstanbul örnekleminde gerçekleştirilen bu çalışmada, alışveriş merkezlerinin fiziksel özelliklerinin, kullanıcıların tercih ve beklentilerini ne ölçüde karşıladığının analiz edilmesi amaçlanmaktadır. Bu özellikler, IPA ve IPCA yöntemleri kullanılarak değerlendirilmiştir. Bu bağlamda çalışma, odak yer olarak seçilen Ankara ile rakip yer olarak seçilen İstanbul'un karşılaştırmalı bir analizini sunmaktadır. Analiz sonucunda Ankara ve İstanbul'un birbirinden daha yüksek performansa sahip kriterleri ve rekabet güçlerini artırmaya yönelik performans iyileştirme çalışmalarında öncelik verilmesi gereken özellikler belirlenmiştir. Ankara'daki alışveriş merkezlerinin İstanbul ile rekabet edecek konumda olduğu sonucuna varılmıştır.

Anahtar Sözcükler: *Alışveriş merkezleri; IPA analizi; IPCA analizi*

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INTRODUCTION

In addition to having significant potential today, industrial developments and urbanization also cause many problems in the physical, social, and economic areas of cities (Yigit et al. 2014; Sen et al., 2018; Kravkaz Kuscu et al. 2022). These developments on a global scale also affect people's lifestyles (Kose and Donmez, 2021). Urbanization and technological developments, which are among the most important effects of industrialization, have led to the concentration of larger and high-rise shopping and trade areas in city centers. In this direction, shopping habits also vary according to different settlements in the world. Social relationships in all societies living in history have been fed by commercial activities and created the places that have an important role in directing urban life (Kosa and Gural, 2020). As an important result of modernization, the process of social and economic change has caused some changes in urban life, revealing the need for people to use their time more limitedly. Accordingly, consumption habits have been greatly affected and the transition process from a production society to a consumption society has begun. As a result of the changing lifestyle, the time allocated for shopping as a necessity has decreased. However, in the new social order, activities served besides shopping have come to the fore. In this new order, people currently prefer shopping malls, where all kinds of products are together and provide more recreation opportunities (Birol, 2005; Bozkurt and Ulus, 2014; Aslan et.al., 2018).

Shopping centers are structures that have attained their present form after centuries of human processes. These structures began to emerge in the 19th and 20th centuries as a continuation of arcades and big stores in history as a result of economic globalization dynamics (Uzun et. al. 2017). The first shopping center in the world was the 'Northland Shopping Center' in the USA in the 1950s (Sezer et. al. 2014). In Turkiye, this process started in the 1980s as a result of economic progress. In 1988, the 'Galleria Shopping Center' was opened in Ataköy, Istanbul. In 1989, the 'Atakule Shopping Center' was opened in Ankara. In the following years, the number of shopping centers, which has been increasing, constitutes a large part of the retail sector. Today, approximately 432 shopping malls provide service in Turkiye (Kurucay and Kurucay, 2021; Ozturk et.al. 2021a).

The modern shopping centers that have been built in recent years integrate many stores with supermarkets/hypermarkets and social activity areas. Therefore, these centers are considered as new urban landmarks. Especially Istanbul is of great importance within the scope of modern shopping centers. Shopping centers with many different concepts such as fully closed, semi-closed, and open space designs have an important place in the city (Ozturk et. al. 2021a). At the same time, shopping centers have important contributions to the tourism sector. Shopping centers, which enable people to spend their free time in a qualified way, ensure the social, cultural, and economic development of destination areas (Tokarchuk et. al. 2015; Yu et. al. 2016). Shopping also has positive effects on people's quality of life. This effect, called shopping-life balance, is defined as a balanced satisfaction between shopping life and other living spaces (Sweeney et. al. 2015; Chen et. al. 2016; Sirgy et. al. 2020). People who have a shopping-life balance have a balanced satisfaction between shopping and other living spaces and spend their spare time efficiently (Greenhaus et. al. 2003; Sirgy et. al. 2020). This balance established in people's lives also directs the changes in the consumption sector (Sirgy et. al. 2020).

Factors such as the change in consumption understanding, competition gaining a global dimension, and technological developments require businesses to make more profitable decisions. This research aims to question the competitive features of the services offered by shopping malls in these changing conditions in the service sector.

Urban Planning and Shopping Center

Shopping centers have become an essential structural part of urban life. Along with social and economic changes such as urbanization, population growth, and pandemics in recent years, people's lifestyles have also changed. As a result of this situation, people have started to prefer high-rise shopping centers in cities, which contain many different functions. These centers, which are also important for economic growth in the field of sustainable development, have many spatial features that enrich and support people's social

activities. With these features, shopping malls are complexes where shops and many different service areas are designed, planned, and managed as a central unit. The physical and environmental conditions, characteristics of shopping centers, and their connection with each other are important in terms of providing benefits to the city people. Shopping malls that are physically and environmentally pleasing, comfortable, clean, and eye-catching also affect consumers' preferences in terms of product and store diversity. Nowadays, shopping malls, which are no longer used only to buy things, also serve people who want to spend their free time in a quality way. Shopping malls, with their facilities, very large physical spaces, and a wide variety of stores, carry global consumption standards and attraction strategies to the region where they are established, greatly changing the consumption habits of the people of that region (Afaq et al. 2020). Shopping malls are one of the most important traces of the global economic system in space. The spatial organizations of these centers have characteristic features that support the transformation of the concept of shopping into consumption. Thanks to these features, shopping center managers try to develop appropriate policies to increase the competitiveness of the centers (Brandão et al. 2014). It is known that the design, maintenance, service quality, strengths, and weaknesses of shopping malls, which have a wide place in the literature, are important for sustainable development in urban life (Birol, 2005; Bozkurt and Ulus, 2014; Tokarchuk et al. 2015; Yu et al. 2016). Sustainable development consists of multidimensional aspects and is essential in examining many different effects of urban development. It is an issue that needs to be emphasized for environmental, social, and economic growth (Lorek and Spangenberg, 2014). The built environment is where the energy and materials produced by the world's resources are used. Sustainable shopping malls are important architectural structures that emphasize the place of buildings both in the local ecosystem and on the global scale (Lorek and Spangenberg, 2014; Clements-Croome and Croome, 2004). Sustainable urbanism is sometimes called sustainable urban form (Han et al. 2019). In cities, sustainable architectural structures are considered architectural design that emphasizes local ecosystems and the global environment. Areas with this function, which are also regarded as urban attraction points, increase the payment in the service sector daily. In the urban economy, there is a highly competitive environment among shopping malls with significant customer potential. Understanding these components is vital for decision-makers (Lee et al. 2005; Tekin et al. 2014; Kaihatu and Spence, 2016; Krey et al. 2022).

Service Quality

Quality is defined as meeting the offered product or service to the needs of consumers (Su and Lin, 2008; Tekin et al. 2014). The concept of service quality is defined as consumers' evaluations of the level of excellence of the service provided (Caruana et al. 2000; Tekin et al. 2014). With the increase in the share of the service sector in the economy, there has been an increase in academic and sectoral interest in service quality. Service quality has an important role in successful business management (Chaniotakis and Lymperopoulos, 2009; Auka, 2012; Ali et al. 2021; Windiari and Djumarno, 2021). The high level of service quality also provides significant contributions to businesses in terms of competition. In this sense, it is an important requirement to measure the service quality systematically and regularly, to identify the deficiencies of the enterprises, and to evaluate these aspects by intervening in a timely response (Tekin et al. 2014; Donmez and Turkmen, 2015). IPA (Importance- Performance Analysis) and IPCA (Importance-Performance Competitor Analysis), which are effective methods in evaluating service quality, facilitate the determination of management strategies and the determination of priority areas in the arrangements to be made in enterprises (Martilla and James, 1977; Deng, 2007; Albayrak and Caber, 2015).

MATERIAL AND METHOD

Ankara and Istanbul, two major cities of Turkiye, which are suitable for the purpose of the study and can meet the methodological criteria, were chosen as the study area. For the study, Ankara was chosen as the focal place and Istanbul as the competitor place. Among these cities, well known to those living and visiting the city the five in Istanbul and the other five in Ankara, in total ten shopping malls (AVMs) in the city, which are thought to have an important contribution to the city and by the purpose and method of the study, were

selected (Table 1). Ankamall, one of the shopping centers selected from Ankara, is located in Yenimahalle district. The shopping mall, which was opened in 1999, continues to serve with a size of 278.000 m². Arcadium is a shopping mall that has been in service since 2003, covering an area of approximately 40.000 m² in Çankaya district. Armada AVM, which started to serve in 2002, has 26 floors and a floor area of approximately 30.000 m². In 2003, Armada AVM was selected as the 'Best shopping center in Europe' by the International Council of Shopping Centers and became the second award-winning shopping center in this field after Akmerkez in Istanbul. Kızılay AVM has been serving in Çankaya district since 2011, with a usage area of approximately 37.988 m². Panora Shopping Mall is important as it has the largest landscape area of 40.000 m² among the shopping malls in Turkey. Cevahir AVM, one of the shopping centers selected from Istanbul, started to serve in the Şişli district in 2005. Forum AVM is located in the Bayrampaşa district of Istanbul. The shopping mall has the distinction of being the largest shopping center in Turkey, with a construction area of 495.000 m² and a leasable area of 175.000 m². İstinye Park AVM is located in the Sarıyer district. The shopping mall, opened in 2007, has 921 stores. Kanyon AVM opened in 2006, is located in Şişli district, and has an area of approximately 40.000 m². Having a leasable area of 74.643 m² Zorlu Center AVM has been in service since 2013 and is located in Beşiktaş district.

Table 1. Shopping centers selected for the study (**Source:** Prepared by Dilara YILMAZ)

CITY	SHOPPING CENTER
Ankara	Ankamall
	Arcadium
	Armada
	Kızılay
	Panora
İstanbul	Cevahir
	Forum İstanbul
	İstinye Park
	Kanyon
	Zorlu Center

'Importance-Performance Analysis (IPA) and Importance-Performance Competitor Analysis (IPCA)' methods were used in the study, which aims to measure the spatial characteristics and service quality of shopping centers. There are numerous studies in the national and international literature on the measurement of service quality. In these studies, evaluations were made taking into account the physical characteristics, natural beauties, facilities, planning, and architectural features of shopping malls. The importance of comparative analysis is emphasized, especially in the evaluation of shopping malls, which are one of the public spaces where competitiveness is important. At the same time, factors such as changing consumption mentality, global competition, and technological developments require businesses to make more profitable decisions. (Ozeren et al. 2011; Albayrak and Caber, 2015; Albayrak et al. 2018; Aslan et al. 2018; Ferman and Ilhan and Ferman, 2019; Ozturk et al. 2021b; Lesmana and Sugiarto, 2021; Liew et al. 2021; Dueñas et al. 2021; Trunfio et al. 2022). Therefore, the study, shopping centers were focused and these methods were preferred, which were used less than other service quality measurement methods. This research is aimed to question the competitive components that are effective in these changing conditions in the service sector. In this context, in this study, the service quality of shopping centers selected from the cities of Ankara and Istanbul was evaluated with the "IPA (Importance-Performance Analysis) and IPCA (Importance-Performance Competitor Analysis)" methods in line with the expert opinions. 23 features determined in the areas of environment, planning design, access, and service were first analyzed in line with IPA matrices. Then, the IPCA matrix was made and the cities of Ankara and Istanbul were compared in terms of service quality.

Importance-Performance Analysis (IPA)

The analysis, first used by Martilla and James (1977), is a function of evaluators' perceptions of importance and performance regarding a quality, salient product or service features (Figure 1). The IPA matrix consists of four clusters with a size of 2 * 2, which consists of data on the importance and performance of various features (Albayrak and Caber, 2015; Yildirim, 2019; Ozturk et al. 2021b). These clusters allow managers to evaluate existing marketing strategies and identify their shortcomings to create quality-based marketing strategies (Matzler et al. 2003).

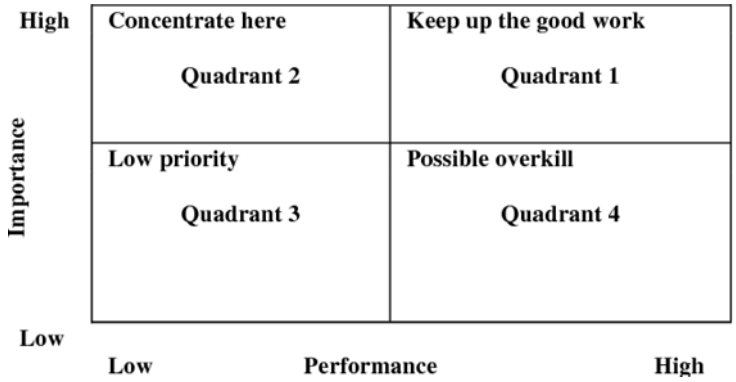


Figure 1. IPA matrix **(Source:** Martilla and James, 1977).

Four clusters in the matrix; 1st Quarter-Keep up the good work: It is the set of features that are both important and high-performing by the evaluators. 2nd Quarter-Concentrate Here: It is the cluster where the evaluators attach high importance but the performance level is low. 3rd Quarter-Low Priority: It is the set of features that are both low in importance and low in performance by the evaluators. 4th Quarter-Possible Overkill: It is the set of features that are of low importance but high-performance level by the evaluators (Martilla and James, 1977; Dwyer et al. 2012; Ozturk et al. 2021). Importance-performance analysis has become a method frequently used by many researchers and managers over time. Today, in the field of marketing, which is one of the most important effects of globalization, business managers have to determine their weaknesses and strengths compared to their rival managers (Albayrak et al., 2018). Importance-performance analysis is accepted as a comprehensive evaluation method in this regard (Martilla and James, 1977; Albayrak and Caber, 2015; Aslan et al. 2018; Ozturk et al. 2021b; Lesmana and Sugiarto, 2021; Liew et al. 2021; Dueñas et al. 2021; Trunfio et al. 2022).

Importance-Performance Competitor Analysis (IPCA)

In recent years, there have been studies that include competitor information in the IPA framework. Taplin (2012) argued in his study that qualities can change in different places. For this reason, he proposed a technique he called 'Competitive Importance Performance Analysis (CIPA)'. In CIPA, qualifications are made according to the importance between the focal place and the competitor place on the vertical axis and the performance differences on the horizontal axis. Chen (2014) presented the service quality-based 'IPA (CZIPA)' analytical framework in his study. In the study conducted by Albayrak and Caber (2015), it was seen that the methods put forward in these studies were insufficient and could not directly determine the importance-performance relationship. In this direction, the 'Importance-Performance Competitor Analysis (IPCA)' method has been proposed. The method was created by incorporating competitor place information into the IPA approach. IPA is a GAP analysis that compares the importance and performance scores of qualifications. GAP analysis is evaluated as the difference between expectations and user perceptions regarding all indicators in each dimension of service quality (Eq 1). Service quality is a difficult issue to evaluate because it tends to depend on repeated comparisons of the customer's expectations of a service. For this reason, the use of GAP analysis enables evaluations to reach more accurate results. Significance scores higher than performance scores indicate a negative GAP, while the opposite indicates a positive GAP. It shows the 'iso-priority line' where importance equals performance. GAP analysis is widely used in studies on the

measurement of service quality. In the IPCA method, GAP information is used on the vertical axis. The second variable is the performance difference (PD) shown on the horizontal axis (Eq 2). If the performance of the competitor place is higher than the performance of the focal place, this indicates a negative difference, and if it is lower, it indicates a positive difference (Albayrak and Caber, 2015; Albayrak et al. 2018).

$$GAPi = Pi - Ii$$

P_i= The performance value of the focal place

I_i= The importance value of the focal place

(Equation 1)

$$PDi == Pfocal, i - Pcompetitor, i$$

$P_{focal,i}$= The performance value of the focal place

$P_{competitor,i}$= The performance value of the competitor place

(Equation 2)

The matrix formed by the GAP and PD differences consists of four quarters; 1st Quarter-Solid Competitive Advantage: It is the section in the first quadrant where the features that have both a higher performance score and an importance score than the competing places are located. These qualities show the strengths of the place. 2nd Quarter-Head-to-head Competition: The qualifications found in this section are beyond the expectations of the evaluators, but the focus place has a lower performance score than the competing place. In line with the qualifications in this section, the focal place has to do the necessary work to reach the performance level of the competitor place. 3rd Quarter-Urgent Action: This quarter is the section with features that have lower performance and importance scores than the competing place. These qualities show the weaknesses of the focal place. These are the qualities that need to be emphasized first to improve them. 4th Quarter-Null Advantage: It is the section where the performance value is higher than the competitor's place, but the qualities that the evaluators do not attach importance to. Although the focal place may seem to have an advantage over the competing place, it is not an advantage as the evaluators do not attach importance to it (Albayrak and Caber, 2015).

Comparative analysis of shopping malls, which are important in the global economy today, plays an important role in determining the expectations and satisfaction levels of users. In the study, IPA and IPCA methods, which allow comparative analysis, were preferred to evaluate the services offered by shopping malls, which are among the important symbolic structures of Ankara and Istanbul, and to question their spatial characteristics. The study was carried out in four stages. In the first stage, a literature review was conducted on the classification and general characteristics of shopping malls. In the second stage, a total of 23 spatial features were determined under four titles (Environment, Planning Design, Access, Service) to measure the service quality as well as the physical, environmental, and spatial characteristics of shopping malls (Table 2). In determining these properties, studies of Kinley et al. (2003), Ozeren et al. (2011), Albayrak et al. (2018), Aslan et. al. (2018), the studies conducted by Ilhan and Ferman (2019) were used. After the criteria were determined, expert evaluations were made by a team of 15 experts each, consisting of landscape architects, architects, urban planners, and industrial product designers. While selecting experts, care was taken to find professional groups that would contribute to the evaluation of the criteria determined at the last stage, that could be reached by the authors, where face-to-face interviews could be held, and who had previously visited shopping malls. After the expert groups were determined, as a result of face-to-face interviews conducted by the authors, the expert groups first scored the importance levels of the spatial features of the shopping malls. Then, they completed their evaluations by scoring performance levels. The data obtained from the evaluations were analyzed comparatively with IPA (Importance-Performance Analysis) and IPCA (Importance-Performance Competitor Analysis). The data obtained from the evaluations were analyzed comparatively with IPA (Importance-Performance Analysis) and IPCA (Importance-Performance Competitor Analysis).

Table 2. Importance-performance criteria (**Source:** Compiled from studies conducted by Kinley et al. (2003), Ozeren et al. (2011), Albayrak et al. (2018), Aslan et. al. (2018), Ilhan and Ferman (2019)).

		IMPORTANCE CRITERIA	PERFORMANCE CRITERIA
ENVIRONMENT	1	Keeping the shopping mall and its surroundings clean and hygienic	The mall and its surroundings seem clean and hygienic.
	2	The absence of an element that threatens the security of the shopping mall and its surroundings	There is no element that threatens the safety of the shopping mall and its surroundings.
	3	Green area presence	The presence of a green area is sufficient.
	4	The harmony of the shopping mall and its surroundings	The mall and its surroundings look harmonious.
	5	Building integrity with its surroundings and appearance	The building is in integrity with its surroundings and appearance.
PLANNING DESIGN	6	Adoption of the principle of equal use for all (ramps etc.)	The principle of equal use for everyone (ramps etc.) has been adopted.
	7	Having open shopping areas	Outdoor shopping areas are available.
	8	The architectural design of the building is aesthetic and attractive	The architectural design of the building looks aesthetic and attractive.
	9	Impressive and spacious interior design	The interior design is impressive and spacious.
	10	Sufficient lighting units	Lighting units are sufficient.
	11	Sufficient and well-maintained seating units	Seating units are adequate and well-maintained.
	12	Using plant pots	The use of plant pots is sufficient.
	13	Compatibility and sufficient eaves and shading elements	The eaves and shading elements are harmonious and sufficient.
	14	The planning is clear and understandable (finding the desired place easily).	Planning is clear and understandable (finding the desired place easily).
	15	Adequate circulation and direction signs	Circulation and direction signs are sufficient.
	16	Sufficient and well-maintained flooring	Floor coverings are adequate and well-maintained.
	17	The planting design is suitable in terms of size and form.	The planting design is suitable in terms of size and form.
ACCESS	18	Having an indoor/outdoor parking area	Has indoor/outdoor parking area
	19	Ease of access (pedestrian/private vehicle/public transport)	Access is easy (pedestrian/private vehicle/public transport).
	20	Being close to environmental uses such as shopping, eating and drinking, children's playground, residence and work areas	It is close to environmental uses such as shopping, eating and drinking, children's playground, residence, and work areas.
SERVICE	21	Having a variety of services (ATM, safety deposit box, information unit, etc.)	The variety of services (ATM, safety deposit box, information unit, etc.) is sufficient.
	22	Having local elements (units where the city's local products and clothes are sold, etc.)	There are local elements.
	23	Having various activities (Go kart, ice rink, seasonal events, etc.)	There are various activities (Go kart, ice rink, seasonal events, etc.).

In the third stage, the expert group was asked to evaluate the criteria determined. While making the evaluation, firstly, the catalogs were shown to the experts, and information was provided. Then, experts were asked to score 23 criteria (1: very unimportant, 2: unimportant, 3: somewhat important, 4: important, 5: very important) 5-point Likert scale to measure AVM expectations, importance levels, and performances. Then, the experts were asked to rate their shopping mall performance (1: strongly disagree, 2: disagree, 3: partially agree, 4: agree, 5: strongly agree). In the last stage, the data obtained in line with the expert opinions were transferred to the computer environment and analyzed by creating IPA and IPCA matrices with the help of the SPSS 22 program.

RESULTS

In the study, ten shopping malls selected by the purpose and method of the study, located within the borders of Ankara and Istanbul, were evaluated in line with the opinions of experts. As a result of the evaluations, IPA matrices were created for the cities of Ankara as the focal place and Istanbul, which is the competitor place. Then, the comparison of the two cities was made by making the IPCA matrix.

Results of Importance-Performance Analysis

The data obtained as a result of expert evaluations are given in Table 3. According to these data, the most important criteria for shopping centers in Ankara are; in the title of the environment; cleanliness-hygiene (4.60) and safety (4.60), in planning design; lighting units (4.00), interior design (3.80), clear planning (3.80), circulation-direction (3.80), access; indoor/outdoor parking (4.20) and, in the service title; service variety (3.60).

The most important criteria for shopping malls in Istanbul are cleanliness-hygiene (4.60) and security (4.60), equal use policy in planning design (4.00) and lighting units (3.80). In the planning design title, clear and understandable planning (3.80) and floor coverings (3.80), in the access title, indoor/outdoor parking (4.00) and easy access (4.00), and in service, service diversity (3.80), and activity diversity (3.80).

Table 3. Importance-performance averages of shopping center evaluation criteria (**Source:** Prepared by Dilara YILMAZ).

		CRITERIA	Ank.I	Ank.P	İst.I	İst.P
ENVIRONMENT	1	Cleaning and hygiene	4.60	4.64	4.60	4.56
	2	Security	4.60	4.44	4.60	4.52
	3	Green area presence	3.00	3.32	3.00	3.44
	4	Harmony with the environment	3.00	3.60	3.00	3.92
	5	Integrity with the environment and appearance	3.80	3.76	3.00	4.04
PLANNING DESIGN	6	Equal use policy	3.20	3.56	4.00	4.36
	7	Open shopping areas	2.60	3.04	2.60	3.16
	8	Architectural design	3.40	3.44	3.00	3.96
	9	Interior design	3.80	3.68	3.60	4.44
	10	Lighting units	4.00	4.36	3.80	4.52
	11	Seating units	3.60	3.88	3.60	4.04
	12	Use of plant pots	3.60	3.36	3.40	3.00
	13	Eaves and shading elements	3.20	3.72	3.00	3.68
	14	Clear and understandable planning	3.80	4.08	3.80	4.00
	15	Circulation and direction	3.80	4.12	3.60	4.12
	16	Floor coverings	3.60	4.36	3.80	4.24
	17	Planting design	3.40	3.36	3.40	3.28
ACCESS	18	Outdoor/indoor parking	4.20	4.00	4.00	4.16
	19	Easy access	3.60	3.92	4.00	4.64
	20	Close distance to environmental uses	3.60	4.24	3.40	4.52
SERVICE	21	Variety of services	3.60	4.48	3.80	4.68
	22	Local elements	2.20	1.76	2.80	1.76
	23	Variety of activities	3.20	3.76	3.80	4.00

The relationship between the performance values of the shopping center criteria of Ankara and Istanbul was questioned with the T-test. As a result of the test, it was determined that there was a statistically significant relationship ($p<0.05$) between all criteria. In general, it is seen that the performance values of the city of Istanbul, which is determined as a competitor place, are higher (Table 4).

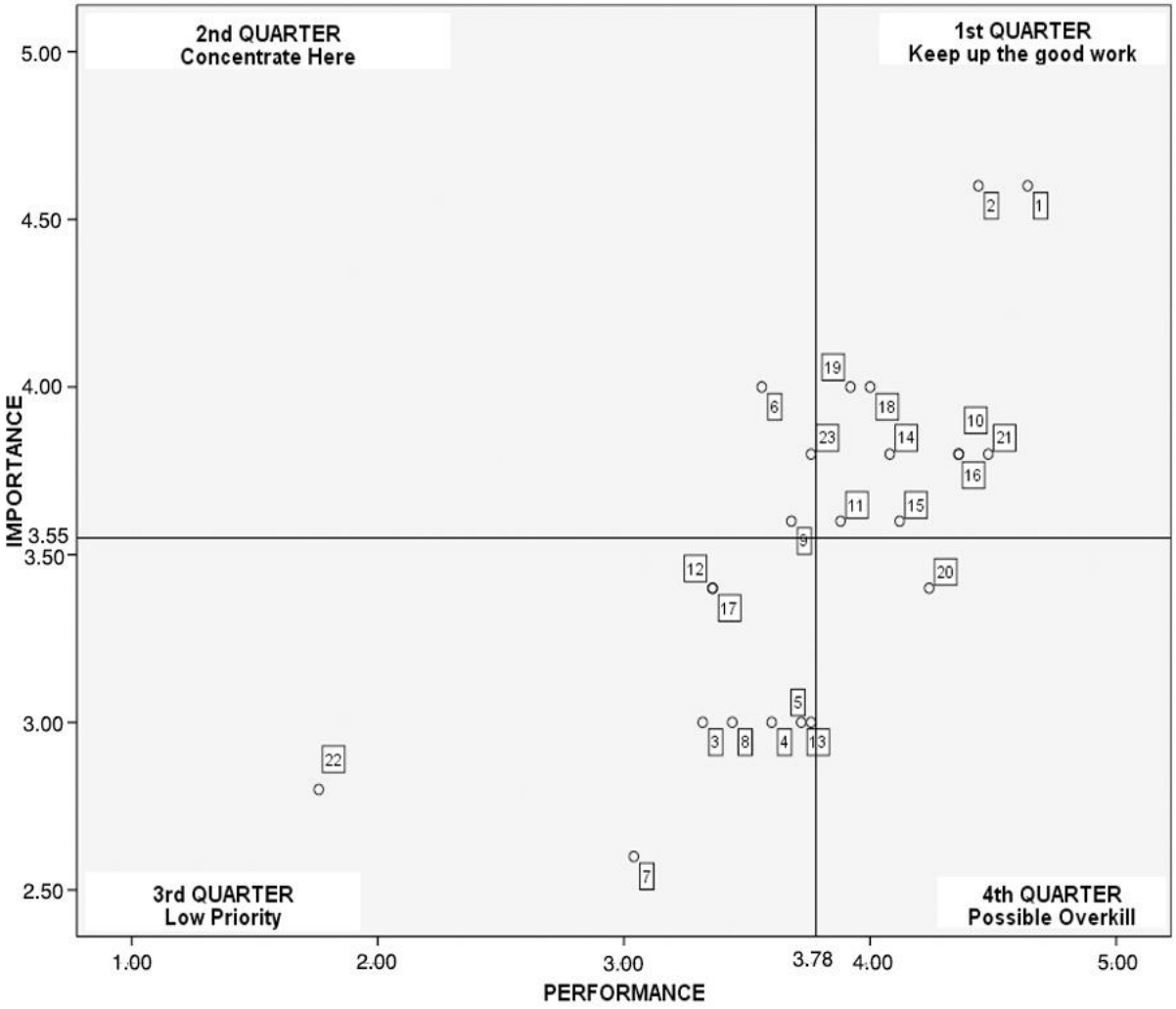
Table 4. Importance-performance averages of shopping center evaluation criteria (**Source:** Prepared by Dilara YILMAZ).

		CRITERIA	Ank.P	İst.P	Sig.
ENVIRONMENT	1	Cleaning and hygiene	4.64	4.56	0.000*
	2	Security	4.44	4.52	0.000*
	3	Green area presence	3.32	3.44	0.000*
	4	Harmony with the environment	3.60	3.92	0.000*
	5	Integrity with the environment and appearance	3.76	4.04	0.000*
PLANNING DESIGN	6	Equal use policy	3.56	4.36	0.000*
	7	Open shopping areas	3.04	3.16	0.000*
	8	Architectural design	3.44	3.96	0.000*
	9	Interior design	3.68	4.44	0.000*
	10	Lighting units	4.36	4.52	0.000*
	11	Seating units	3.88	4.04	0.000*
	12	Use of plant pots	3.36	3.00	0.000*
	13	Eaves and shading elements	3.72	3.68	0.000*
	14	Clear and understandable planning	4.08	4.00	0.000*
	15	Circulation and direction	4.12	4.12	0.000*
	16	Floor coverings	4.36	4.24	0.000*
	17	Planting design	3.36	3.28	0.000*
ACCESS	18	Outdoor/indoor parking	4.00	4.16	0.000*
	19	Easy access	3.92	4.64	0.000*
	20	Close distance to environmental uses	4.24	4.52	0.000*
SERVICE	21	Variety of services	4.48	4.68	0.000*
	22	Local elements	1.76	1.76	0.000*
	23	Variety of activities	3.76	4.00	0.000*

** p<0.05*

According to the matrix made for the city of Ankara; there are ten criteria in the 1st quarter, where there is a high level of importance and performance. There are three criteria in the 2nd quarter with high importance but low performance, nine criteria in the 3rd quarter with both low importance and low performance, and one criterion in the 4th quarter with low importance but a high-performance value (Figure 2).

According to the IPA matrix made for the city of Istanbul; there are 13 criteria in the 1st quarter of high importance and high performance, and seven criteria in the 3rd quarter of low importance and low performance. In the 4th quarter, which has low importance but high performance, there are three criteria, while there are no criteria in the 2nd quarter, which is at high importance but low performance (Figure 3).



2nd QUARTER-Concentrate Here

6. Equal use policy
9. Interior design
23. Variety of activities

1st QUARTER-Keep up the good work

1. Cleaning and hygiene
2. Security
10. Lighting units
11. Seating units
14. Clear and understandable planning
15. Circulation and direction
16. Floor coverings
18. Outdoor/indoor parking
19. Easy access
21. Variety of services

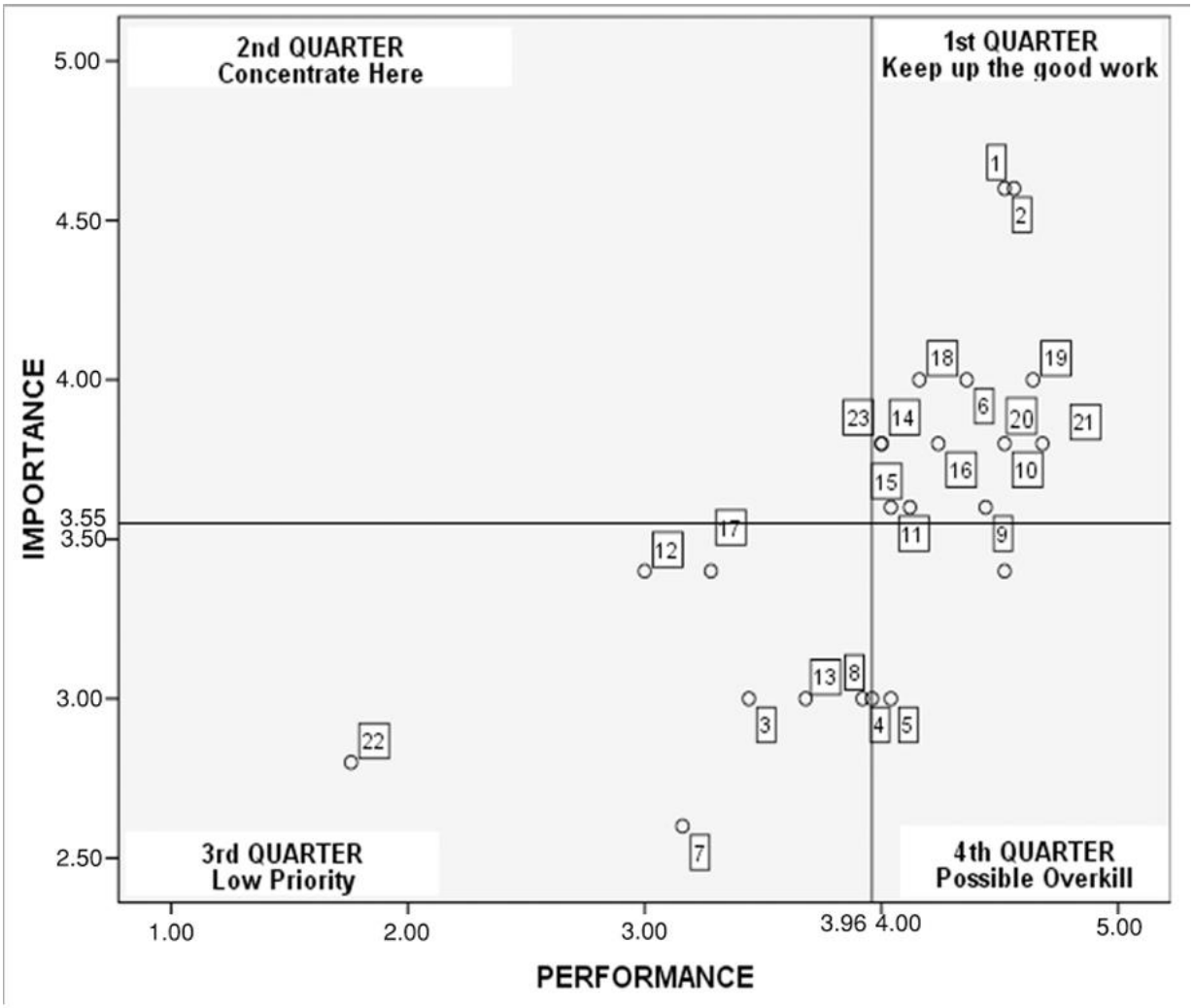
3rd QUARTER-Low Priority

3. Green area presence
4. Harmony with the environment
5. Integrity with the environment and appearance
7. Open shopping areas
8. Architectural design
12. Use of plant pots
13. Eaves and shading elements
17. Planting design
22. Local elements

4th QUARTER-Possible Overkill

20. Close distance to environmental uses

Figure 2. IPA matrix of Ankara shopping malls (**Source:** Prepared by Dilara YILMAZ)



2nd QUARTER-Concentrate Here

1st QUARTER-Keep up the good work

1. Cleaning and hygiene
2. Security
6. Equal use policy
10. Lighting units
11. Seating units
14. Clear and understandable planning
15. Circulation and direction
16. Floor coverings
18. Outdoor/indoor parking
19. Easy access
20. Close distance to environmental uses
21. Variety of services
23. Variety of activities

3rd QUARTER-Low Priority

3. Green area presence
7. Open shopping areas
8. Architectural design
12. Use of plant pots
13. Eaves and shading elements
17. Planting design
22. Local elements

4th QUARTER-Possible Overkill

4. Harmony with the environment
5. Integrity with the environment and appearance
9. Interior design

Figure 3. IPA matrix of İstanbul shopping malls (**Source:** Prepared by Feyza KESIMOGLU)

Results of Importance-Performance Competitor Analysis

For the IPCA matrix, firstly, the focal place performance-focal place importance (GAP) and PD (focal place performance-competitor place performance) scores were calculated (Table 4). Then, a matrix was created by using each criterion, GAP scores as the y-axis and PD scores as the x-axis (Figure 4). The quarters in which the criteria are positioned according to IPA and IPCA are given in Table 4 comparatively.

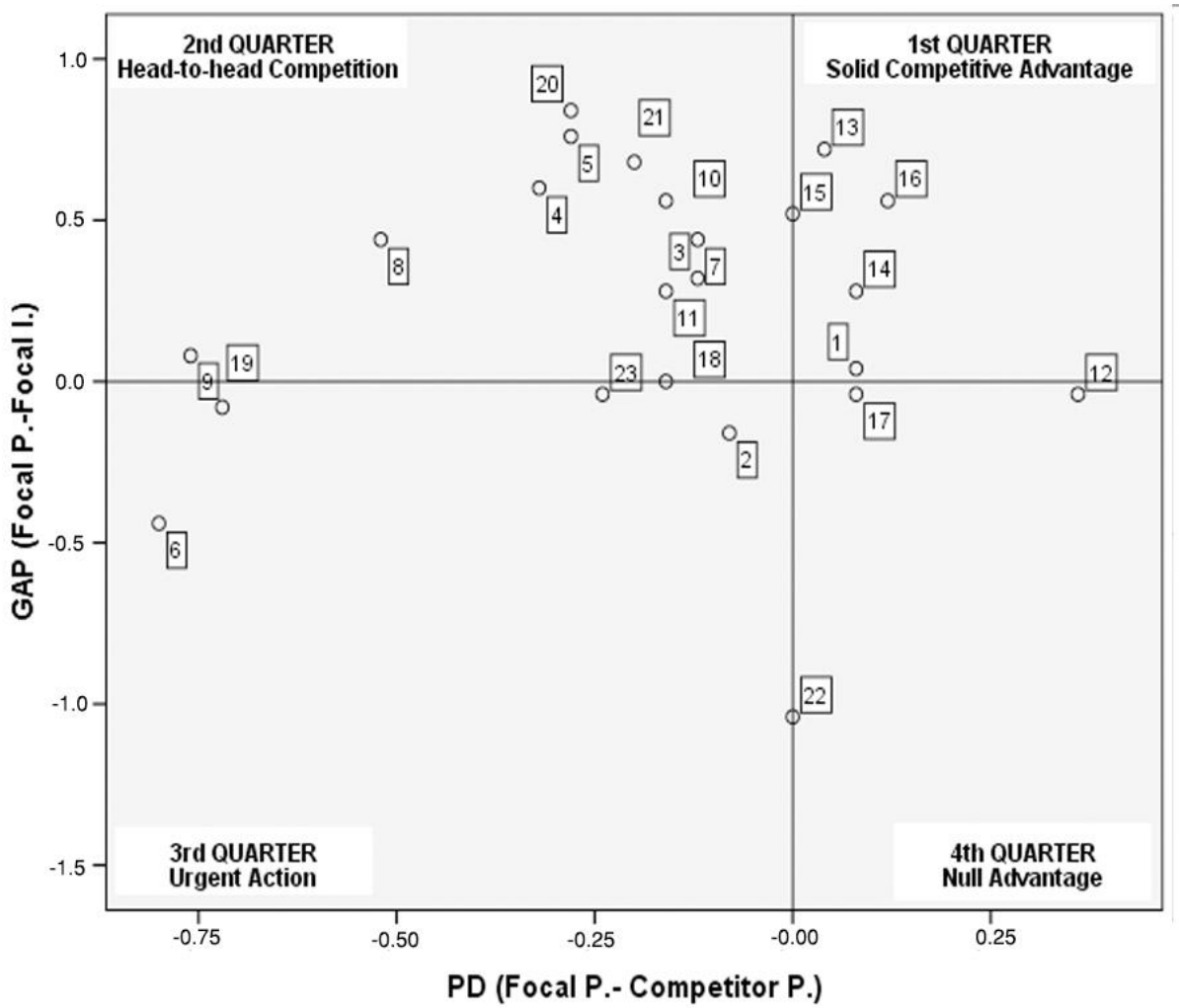
According to IPCA findings; focal place for shopping malls in Ankara, four out of 23 criteria are in the 'solid competitive advantage quarter (1st quarter)'. These criteria have positive GAP and PD scores; cleaning-hygiene, eaves-shading elements, clear-understandable planning, and floor coverings. In other words, these features have both higher performance and importance scores than the competitor place Istanbul, while at the same time showing the strengths of shopping centers in Ankara. These criteria are included in the 'keep up the good work (1st quarter)' section of the IPA matrices. Since only the eaves and shading element criterion is lower than the performance of the competitor place, it is included in the 'low priority (3rd quarter)' section of the IPA matrix.

11 criteria are in the 'head-to-head competition quarter (2nd quarter)'. These criteria, which have a higher importance score but lower performance value than the competitor place Istanbul; the existence of green areas, harmony with the environment, integrity with the environment and appearance, open shopping areas, architectural design, interior design, lighting units, seating units, ease of access, close distance to environmental uses and service variety.

Three criteria are in the 'urgent action quarter (3rd quarter)'. These criteria have both negative GAP and PD scores; safety, the policy of equal use, and variety of activities. These criteria have both lower importance and lower performance value than the competing place. In other words, these features in the focal place did not meet the expectations of the experts, as well as had a lower performance level than the competitor place. While the security feature is included in the 'keep up the good work (1st quarter)' section of the IPA matrix, the equal use policy, and activity variety are included in the "concentrate here (2nd quarter)" section.

Two criteria are included in the 'null advantage (4th quarter)' quadrant. These features, which have a higher performance value than the competitor but a low importance value; the use of plant pots and planting design.

The circulation and orientation feature is a criterion in both solid competition and head-to-head competition quarters. The criterion of 'open/closed parking' is included in both head-to-head competition and urgent action quarters. On the other hand, the local element is a criterion in both urgent action and null advantage quadrants. The criteria in the urgent action quarter are among the criteria that need to be improved because they have a high value of importance but have a lower performance level compared to the competing place.



2nd QUARTER-Head to head Competition

3. Green area presence
4. Harmony with the environment
5. Integrity with the environment and appearance
7. Open shopping areas
8. Architectural design
10. Lighting units
11. Seating units
18. Outdoor/indoor parking
19. Easy access
20. Close distance to environmental uses
21. Variety of services

1st QUARTER-Solid Competitive Advantage

1. Cleaning and hygiene
13. Eaves and shading elements
14. Clear and understandable planning
15. Circulation and direction
16. Floor coverings

3rd QUARTER-Urgent Action

2. Security
6. Equal use policy
9. Interior design
22. Local elements
23. Variety of activities

4th QUARTER-Null Advantage

12. Use of plant pots
17. Planting design

Figure 4. IPCA matrix (**Source:** Prepared by Dilara YILMAZ).

While the IPA and IPCA matrices offer similar strategies for the eight shopping mall criteria (solid competition and keep up the good work; urgent action and concentrate here; null advantage and possible overkill), they offer different strategies for other criteria. For example, the security criterion found in the 'keep up the good work' quarter according to the IPA results is in the urgent action quarter according to the IPCA results (Table 4).

Table 4. Comparison of IPA and IPCA results (**Source:** Prepared by Dilara YILMAZ).

		CRITERIA	IST. IPA	ANK. IPA	GAP	PD	IPCA
ENVIRONMENT	1	Cleaning and hygiene	Keep up the good work	Keep up the good work	0.04	0.08	SOLID COMPETITIVE ADVANTAGE
	2	Security	Keep up the good work	Keep up the good work	-0.16	-0.08	URGENT ACTION
	3	Green area presence	Low Priority	Low Priority	0.32	-0.12	HEAD-TO-HEAD COMPETITION
	4	Harmony with the environment	Possible Overkill	Low Priority	0.60	-0.32	HEAD-TO-HEAD COMPETITION
	5	Integrity with the environment and appearance	Possible Overkill	Low Priority	0.76	-0.28	HEAD-TO-HEAD COMPETITION
PLANNING DESIGN	6	Equal use policy	Keep up the good work	Concentrate Here	-0.44	-0.80	URGENT ACTION
	7	Open shopping areas	Low Priority	Low Priority	0.44	-0.12	HEAD-TO-HEAD COMPETITION
	8	Architectural design	Low Priority	Low Priority	0.44	-0.52	HEAD-TO-HEAD COMPETITION
	9	Interior design	Possible Overkill	Concentrate Here	0.08	-0.76	HEAD-TO-HEAD COMPETITION
	10	Lighting units	Keep up the good work	Keep up the good work	0.56	-0.16	HEAD-TO-HEAD COMPETITION
	11	Seating units	Keep up the good work	Keep up the good work	0.28	-0.16	HEAD-TO-HEAD COMPETITION
	12	Use of plant pots	Low Priority	Low Priority	-0.04	0.36	NULL ADVANTAGE
	13	Eaves and shading elements	Low Priority	Low Priority	0.72	0.04	SOLID COMPETITIVE ADVANTAGE
	14	Clear and understandable planning	Keep up the good work	Keep up the good work	0.28	0.08	SOLID COMPETITIVE ADVANTAGE
	15	Circulation and direction	Keep up the good work	Keep up the good work	0.52	0	*
	16	Floor coverings	Keep up the good work	Keep up the good work	0.56	0.12	SOLID COMPETITIVE ADVANTAGE
	17	Planting design	Low Priority	Low Priority	-0.04	0.08	NULL ADVANTAGE
ACCESS	18	Outdoor/indoor parking	Keep up the good work	Keep up the good work	0	-0.16	**
	19	Easy access	Keep up the good work	Keep up the good work	-0.08	-0.72	HEAD-TO-HEAD COMPETITION
	20	Close distance to environmental uses	Keep up the good work	Possible Overkill	0.84	-0.28	HEAD-TO-HEAD COMPETITION
SERVICE	21	Variety of services	Keep up the good work	Keep up the good work	0.68	-0.20	HEAD-TO-HEAD COMPETITION
	22	Local elements	Low Priority	Low Priority	-1.04	0	***
	23	Variety of activities	Keep up the good work	Concentrate Here	-0.04	-0.24	URGENT ACTION

**** Solid competitive advantage +head-to-head competition (mid of 1st and 2nd quarter)***
*****Head-to-head competition+urgent action (mid of 2nd and 3rd quarter)***
******Urgent action+null advantage (mid of 3rd and 4th quarter)***

DISCUSSION

As a result of the developments that emerged as a result of globalization, the importance of shopping centers has also changed. People prefer shopping centers with many different functions. These urban spaces are considered public spaces with spatial features that enrich and support people's social activities. For this reason, shopping malls are structures that offer a new living space to people outside the city in terms of visual, physical, and social aspects. Thus, it is essential to determine the service quality to make special planning and design for shopping centers, select the competitiveness, and manage them successfully. This situation also affects the competitiveness in the consumption sector. Shopping center managers attach importance to the high level of satisfaction of consumers to increase their competitiveness. At this point, the importance of comparative analysis emerges.

Comparative analysis is frequently preferred in the field of tourism. Previous studies in the literature focus on increasing visitor satisfaction levels to ensure the long-term sustainability of tourism experiences in destinations. In this context, evaluations are made by taking into account the physical characteristics, natural beauties, facilities, planning, and architectural features of the areas (Öztürk et al. 2021b; Lesmana and Sugiarto, 2021; Liew et al. 2021; Dueñas et al. 2021; Trunfio et al. 2022). IPCA, a newly developed comparative analysis method in the literature, is preferred in studies conducted in the field of tourism. Especially within the scope of importance and performance criteria between destinations, strengths are determined and suggestions are developed to improve the weaknesses. Studies have found that when these suggestions are taken into consideration, they increase competitiveness (Albayrak and Caber, 2015; Albayrak et al. 2018). Comparative analyses are also of great importance in shopping malls, which are the most important public spaces where competitiveness is important. The characteristics of shopping malls and their opportunities have been evaluated within the scope of different methods and suggestions have been developed to gain a stronger position in the consumption sector (Özeren et al. 2011; Aslan et al. 2018; Ferman and İlhan, 2019).

In this context, in the study, an evaluation of the cities of Istanbul and Ankara was presented by using IPA and IPCA methods, which are mostly used in the field of tourism, to compare shopping malls. The criteria that shopping malls should be evaluated under the headings of environment, planning design, accessibility, and service were determined by scanning the literature. In determining these criteria, care was taken to ensure that they were comparable to the method of the study. After the criteria were determined an expert group was determined and evaluations were made. As a result of the evaluations, suggestions were developed that could increase the service quality level and user satisfaction of shopping malls. The study revealed that IPA and IPCA methods, which are mostly used in the field of tourism, give effective results in evaluating the spatial characteristics of shopping malls. At the same time, unlike other studies in the literature, it has been determined that comparative analyses using IPA and IPCA methods can be adapted and used in studies in different fields.

CONCLUSION

On a global scale, developments in the consumption sector have caused the competition between shopping centers to become stronger. For this reason, it is essential to determine the service quality to make special planning and design for shopping centers, select the competitiveness, and manage them successfully.

The IPA method is widely used in studies aiming to determine service quality. In this study, IPA and the IPCA method developed using it were used to determine the competitive position of Ankara shopping centers against Istanbul. According to IPA findings; The presence of ten features out of 23 shopping center features in the Ankara IPA matrix and 13 features in the Istanbul IPA matrix in the "1st quarter (keep up the good work)" shows that Ankara and Istanbul are strong in the areas of environment, planning design, access and service from the experts' point of view. However, there are three features in the 2nd Quarter (concentrate here) in the Ankara IPA matrix. At the beginning of these features that show weakness for Ankara, which is to be developed, are the principle of equal use in the field of planning design, and interior design; In the area of service, it is the variety of activities. These features are general problems that negatively affect the image and success of the shopping mall. Therefore, it is necessary to increase the service quality of shopping centers

by focusing on these features. In Istanbul, there is no feature in the IPA matrix in the 2nd Quarter (concentrate here). This result shows that the image of shopping centers in Istanbul is more robust, and the service quality level is higher. In addition, the mean of the importance of shopping center features was calculated within the scope of IPA matrices. It was concluded that there was no significant difference between the means of matter. This result shows that the crucial qualities do not change even if the places are different.

According to IPCA findings, Ankara outperforms the city of Istanbul in terms of cleaning hygiene, eaves-shading elements, clear-understandable planning, and floor coverings. This result shows that the city of Ankara is in an excellent position to compete with Istanbul in terms of shopping center features, which experts attach more importance. For Ankara to increase its competitiveness against Istanbul, it should prioritize safety, equal use policy, and activity variety to improve performance in shopping centers. In the study in which the two methods were used comparatively, it was concluded that shopping center features were classified in different quarters that could mislead business owners in the strategic decision-making processes. The most important of these results is that the security feature classified as needing protection in the Ankara IPA matrix is classified as requiring immediate action in the IPCA matrix. It is possible to ignore this feature in terms of its competitive importance. In the study, it is crucial to make the expert evaluation by using the IPCA method as well as the IPA method and to analyze the data with the effect of competitor place in terms of making the competitiveness of Ankara shopping centers even more successful. That is because shopping center managers will increase their service quality by considering the features that require urgent action and are in the intense competition quarter. Therefore, to keep up with the modern world, managers must conduct the necessary studies to see their competitive position from a more detailed perspective.

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