

An evaluation into the architectural factors attracting customers to Malaysian shopping malls

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Abstract

This study is aimed at evaluating the architectural factors attracting customers to shop in the Malaysian shopping malls. Studies in the past, focused attention primarily on the provisions of various shopping items that attract customers to a mall without given due considerations to the architectural factors. The architectural factors were evaluated using five point Likert scales, which is used to obtain mean scores of the factors that attract customers. A questionnaire survey was administered to major customers patronizing Malaysian shopping malls. The customers were randomly selected. The architectural factors attracting customers to shop in the Malaysian shopping malls were ranked using Friedman's comparison test.

The results indicated significant differences in the customers ranking of the factors. This study is limited to the customers patronizing Malaysian shopping malls. The study provided the criteria for an evaluation of the architectural factors that attract customers to shop in the malls. The study also provides information to the developers of shopping malls in developing countries for an improved business growth. The study created bases for self-evaluation and competition among the developers of shopping malls for the enhancement of productivity and general contribution to the country's GDP. This study emanated from the governmental reports and past research in the area of retailing businesses in Malaysia. Finally, the study recommended developing shopping malls in certain locations, provision of facilities and services and constructions of malls with high quality materials and nice aesthetics beautification.

1.0 Introduction

The construction industry contributes immensely to the development of shopping mall businesses in most of the developing countries today; the contributions are through provisions of infrastructures required for the businesses. The based on the growing number of malls, customers tend to be more selective. The customers are more likely to patronize malls that are architecturally attractive and have quite attractive features in addition to the variety of stores and merchandise that match their preferences. Therefore, it is essential for malls developers to have adequate knowledge of the architectural features that attract customers to certain malls (Meyer-Ohle, 2014; Wong et al., 2001). The development of shopping malls have currently witness economic boom and improved the life styles and living standards of peoples in developing countries like Malaysia. The architectural features of modern shopping malls have impacted on the modern way of carrying out a business through the erection of architectural monument under the administration of central management. In recent decades, most of the Asian countries have witnessed the significant economic growth. The boom has come about as a result of increased developments of shopping malls that entirely change the economy of many Asian countries. In particular, the architectural features of shopping malls

have taken new dimensions towards attracting customers in many of the Asian countries. The architectural features such as mall location, facilities, aesthetics and quality of the structures have attracted customers for businesses in Malaysian shopping malls (Koçak 2010; Berman & Evans, 2001; Lui 1997; Yoon & Kijewski, 1997).

The development of shopping malls in Malaysia evolved from the social and recreational activities of doing businesses in addition to traditional shopping destination of Malaysia in 1980s and beyond (Lim et al., 2003). The shopping mall business is a major contributor to the Malaysian gross national income (GNI). The business contributed almost RM57 billion to the GNI in 2009. In order to achieve the 2020 GNI target, the malls businesses are seen as a key driver of domestic consumptions, which in turn will lead to economic growth (Koçak 2010). According to Retail Group Malaysia (RPM), retail business which comprises of shopping malls deal recorded about 8.1 percent development in 2011 with an amount of RM8.2 billion sales (Inside Malaysia, 2012).

According to the information from Malaysian Association of Shopping and High-rise Complex Management expressed that one in five Malaysian shopped in a mall once a week this is possibly the reasons for growing of shopping malls. The architectural features in shopping malls were the major features that attracted customers for shopping (Dennis et al., 2002; Berman & Evans, 2001). In accordance with the circumstances, malls location, malls facilities aesthetics and quality of structures in the malls are seen as the key features that attract customers for shopping in a mall (Yue-Teng et al., 2012; Wong et al., 2001). Therefore, there is the need to identify and assess the architectural features that attract customers for retailing business in Malaysian shopping malls.

The objectives of the study are:

- i. Identify the major architectural factors that attract customers for shopping in the Malaysian Malls.
- ii. To rank the important architectural factors that attract customers to shop in the malls

2.0 Literature Review

The literature review discusses on the shopping malls attractive factors such as locations, aesthetics, facilities and services and quality of structures.

2.1 Shopping Malls

Shopping is concerned with making physical contact with malls or shopping centers in a way that customers have direct contact with some of the physical architectural features incorporated in the constructions of the malls (Anselmsson, 2006; Dholakia, 1999). According to Howard (2007), shopping is considered as recreation actions particularly in perspective of the increment of the shopping malls where the customers usually have direct contact with the physical architectural features in the malls for the purpose of shopping (South & Spitze, 1994; Fram & Axelrod, 1990).

A shopping mall is defined by ICSC (2004) as a building complex, constructed purposely with the aim of shopping business. It contains retail and other business. Sankar (2005) defined shopping mall as a shopping complex joined by walkways and other architectural features. The mall provides easy access to different and variety of shopping products through using of the architectural features and also it provides a kind of excitement to the targeted buyers.

Ahmed et al., (2007) reported that the recreation, amusement and social features of a shopping mall separated it from purchasing sections and products. In this manner, a customer might visit to have some rest. Moreover, the shopping mall is characterized as a building that contains both shopping items and recreational facilities. According to Assael (1987) shopping behaviour is seen as a certain inclination by a customer to purchases something.

2.2 Shopping malls attractiveness factors

Shopping centres vary in location, size, design, aesthetics, qualities, facilities, and management services. Customers might be attracted to one or more of the architectural features which attract tastes and choices to shop in a particular mall. In the event of growing shopping malls

and centers there is a need to consider the architectural factors that are attracting customers to shop in a mall when building a new shopping center. Numerous scholarly studies were conducted on different parts of the shopping centers yet just few evaluated the items of architectural factors towards attracting customers to shopping malls (Teller, 2008; Dennis et al., 2002a; Denis et al., 2002b; El-Adly, 2007; Ruiz, 1999; Wong and Yu, 2003).

Bodkin and Lord (1997) stated that the most important reasons for selecting malls are the locations of the malls, facilities available in the malls, qualities of structures built in the malls, the designs and aesthetics, conveniences, presence of a specific store in the malls, prices and services. According to Rajagopal (2006) locations and facilities on a shopping mall are the two most attractive factors that attract customers to a mall while El-Adly (2007) argued that the aesthetic factors of a mall attract more customers than any other factor. Tanan (1998) stated that quality of mall structures like convenience, car park is the most important customer's attractive factor and proposed five essential factors as attraction power of shopping mall which includes location, business concept, design, tenant mix, and management.

2.3 Location of shopping mall

The studies in the past consider locations of shopping malls as components of convenience. This attracts customers to patronize the shopping mall (Bloch et al., 1994; Ahmed et al., 2007; El-Adly, 2007). According to Koçak (2010), location is not only necessary for customers, also the managers that manned the day to day affairs of the malls. Usually, location of a business is one of the most difficult factors the developers face when it comes to the selection of various and alternative site locations, the decision-makers who have to assess the number of alternatives against well-defined criteria for the best location. The key achievement and success of a shopping mall is "location (Syahara & Ristiana, 1992).

Location has a very wide significance especially in the areas that includes residential, parks and offices. Location also has a very nearby relationship with the accessibility of shopping mall (Syahara & Ristiana, 1992). Besides that, Nicholls et al., (2002) pointed out that, location is likely the most important elements for a shopping mall.

A strategic location allows easy access, attracts a large number of customers, and boost possible sales of a retail opening. Thus accessibility attracts close neighbours of a shopping mall (Kocaili, 2010). Retail location has long been considered as an important strategic business decision for a number of reasons. First, customers' store choice decisions are influenced greatly by accessibility of retail locations according to spatial interaction models, which denote the relationship between a consumer's perception of utility and characteristics of a destination (Saxena, 2011). Secondly, retailers may be able to develop a sustainable competitive advantage through location strategy (Levy et al. 2007). The choice of a retail store location has a major and profound impact on its business performance. A wrong choice in most times could mean failure, whereas a good choice may lead to the business development toward unprecedented success

In today's highly competitive environment, choosing the correct site location for a retail outlet ranks amongst the top factors in determining that outlet's success or failure. Maximizing sales is a primary objective for retailers; hence, finding the perfect site location that will facilitate both pace and growth is of key importance (Saxena, 2011). Currently customers' shopping trend is heading toward merging different destinations and purposes in their shopping trips, which is known as cross-shopping (Khan, 2011). A location provides the business, with strategic advantages that competition may find difficult to overcome.

2.4 Facilities and services in the shopping mall

Generally, malls are considered based on the type of services installed or provided and the ways and means by which they deliver them. These might include transport facilities and services such as lifts, escalators conveyors etc. which are regarded as essential for any modern mall that appreciates the sensitivity of the shopping industry. Thus these services can be classified as personal

services (Lovelock et al., 1998). Past studies have also added that shopping centers provide services for the public in terms of access roads within the vicinity, sign boards and amenities such as restrooms (Berman & Evans, 2001).

Besides that, facilities and services also dealt with comfort factors that customers desired e.g. cleanness, width and security of the shopping mall. Provision of air conditioning services, comfortable seats together with rest rooms; central heating, spacious parking, and safety must be made available to enable customers to spend time during shopping or to socialize in the mall. In addition, developers have to ensure that customers are comfortable if they want to keep up with the attractiveness factors (El-Adly, 2007).

In the Korean market, there have been fierce competition to improve the services in shopping malls through creating a more relaxed atmosphere like departmental stores and other competitive ideas for a better services that includes: food court, free kids lounge, free shuttle bus services from various residential areas to the malls, ATM machines, and dry cleaners under one roof to attract more customers (Jin & Kim, 2003). The Korean malls houses a variety of "family" stores for clothes, shoes, accessories, sports wears, electronic appliances, and mobile services, in addition to kiosks selling candy (Jin & Kim, 2003).

Customers have different perceptions and expectations from the services in the shopping malls, which mainly focused on the salespeople being knowledgeable, courteous and helpful. Warm gestures like smiling, greeting, kind eye contact all play on the positive impression about the store or the mall in general (Winsted, 1997). Service quality is hard to determine as it has to do with what happens on the ground. Yet Wisniewski (2001) has identified service quality as "the difference between customer expectation of service and perceived service". Accordingly, if the expectation is higher than the performance, then quality can be perceived as less satisfactory causing dissatisfaction on the customer's part.

Among the many concerns for services in the shopping malls, security has a part to play (Sit et al., 2003; Haytko & Baker, 2004) A security can be an important factor in attracting customers to a certain mall, yet lack of security can lead to disruptions in the shopping process and even perpetrating crimes therefore provision of security gadgets is essential in malls, especially in the communities where violence rate is high.

2.5 Aesthetic and design of the mall

Craig and Turley (2004) agree that 'aesthetic' has to do with beauty, neatness and design among other things. In modern malls, further attention has been given to this that was neglected in the past. To motivate customers means to invest in the inside and outside environments of the mall including layout and architecture so that the customers may stay longer and repeat visit to the mall. According to the study conducted by Lui (1997) today's malls have witnessed a shift in terms of interior design; moving from a quiet classic design to a more sophisticated one with picturesque and eye-catching layout and decoration. Anselmsson (2006) added that decorations are important and spaces should be kept as bright and spacious as possible.

In a study by Loudon and Britta (1993) it was found that a better interior design helps to boost the mall image over time. Customers assess the mall by heavily drawing on some physical features as lacking or being available such as architectural designs and amazing shapes as well as design features like high ceilings, architecture, flooring/carpeting, interior landscaping, and store layout. Loudon and Britta (1993) said mall is a drama staged and maximized by the inclusion of more physical attractive features.

Today's shoppers evaluate shopping malls which have unique design or architecture, entertainment such as theatres and playgrounds, and sometimes attractive restaurants are the central focus in certain shopping areas ((Chun, Hassan, & Noordin, 2005; Yan & Eckman, 2009). Besides that, Wakefield and Baker (1998) found that the architectural design of a mall is the most decisive factor

which affected mall excitement, while a mall's interior design highly influenced the customers' desire to stay longer in the mall.

Other than that, Frassetto (2001) stated that atmosphere as a major factor in people's decisions to visit a shopping centre and a good atmosphere encourages people to stay longer and buy more. Very few numbers of studies in the past dealt with these particular aspects of the aesthetic elements that mainly focused on color and music types (Solomon, 1994; Peter & Olson, 1994). In general, atmospheric characteristics can be considered an extension to variety of products and can be well exploited to affect the buyers' mood and behavior positively and hence the mall image as a whole (Tiwari & Abraham, 2010).

2.6 Quality of structures in the mall

The qualities of engineering structures play an important role on the customer's choice of a shopping mall. The engineering structures such as basement car parks, storey car parks, the structural steel frames and roof trusses attract customers to shopping malls. The type of modern roofing elements design specifically to conserve heat/cold in the mall complex attracts customers to shop (Lambert, 1972). In a study by Charters and Pettigrew (2006) which pointed out that shoppers find it hard to determine what quality of structure is by giving an example on different structures type. More attention is focused when trying to evaluate quality of structures. For instance, perception based on quality differs on different type of structures. This was supported by Tsiotsou (2005) which added that "quality is a multidimensional concept that is always difficult to determine. The quality of a structure is relied on its specifications.

Previous studies linked quality directly to specifications (Carman, 1990; Parasuraman et al., 1996). While others find an indirect link through satisfaction (Cronin & Taylor, 1992; Sweeney et al., 1999) but still others arguably hold that both relationships exist (Tsiotsou, 2006). Although some would often confuse satisfaction and perceived quality to be interchangeable, especially among practitioners, Rust and Oliver (1994) proposed that the two are different in two ways: perceived quality is a more specific concept relying on product and service features, whilst satisfaction can stem from any dimension.

Customers highly depend on their perception of quality to distinguish various structures and products depending on two categories: intrinsic cues related to the physical composition of a structure or product, and extrinsic cues that make up the outside of the product related to it but not part of its physical components. Some attributes as size, length, wide, texture color, and shape of structure make the intrinsic cues of some elements. Without changing the nature of a structure itself, we cannot change its intrinsic attributes. Extrinsic cues to quality include, for example, the specifications curing time attractive colours (Yoon & Kijewski, 1997).

3.0 Research method

This study is quantitative in nature; a questionnaire survey was administered to 200 customers that visit shopping malls weekly in the five states of Malaysia that comprised of Selangor, Penang Island, Kedah and Sabah Johor Bahru that cover west and east Malaysia. The population of this study comprised of all Malaysian customers that visit shopping malls, have the willingness, ability and tendency to shop. The questionnaires were randomly distributed to the customers of the selected shopping malls in the five states. The customers were asked to answer the questionnaires at a counter after completion of a shopping. This study experienced difficulties in answering the questionnaire because of poor cooperation from the customers, which most of them were walk away customers and just take the questionnaire without answering it. As a result of that, only the responses of 100 respondents were received a total of 120 questionnaires were returned and 100 were analyzed respectively. This indicated 60% return and 50% response rates respectively. Twenty (20) questionnaires were rejected i.e. not included in the analysis because of discrepancies in the responses and/or majority of the items in the questionnaire were left unattended or unanswered. IBM SPSS version 21 was used in the data analysis.

3.2 Operationalization of the constructs

The four research constructs i.e. location of a mall, facilities and services installed in the mall, aesthetics and design of the mall and the qualities of structures constructed in the mall were all measured using a five-point Likert Scale. The Likert Scale is concerned with uni-dimensionality that makes sure all factors measure the same thing and is the most popular scaling procedure in use today (Guidici, 2003; Oppenheim, 2000). The construct were measured using a five-point Likert Scale, with the scale defining the perception of customers on the architectural factors that attract the customers. The scale ranges from strongly disagree to strongly agree. As shown below:-

- i. Strongly Disagree: refers to architectural factors that extremely do not attract customers to shop in a mall.
- ii. Disagree: refers to architectural factors that do not attract customer to shop in a mall.
- iii. Neutral: refers to architectural factors that neither attract nor distract the customers to shop in a mall.
- iv. Agree: indicates where the architectural factors attract the customers to shop in a mall.
- v. Strongly Agree: implies where the architectural factors that extremely attract customers to shop in a mall.

3.3 Content validity

Sekaran and Bougie (2011) stated that content validity is used in research to validate the research instruments used for a research study. Content validity is used to assess how well an idea or concept is represented by the items in a questionnaire. The content validity for this study was conducted by requesting experts in the field of development of shopping malls. This was achieved base on the experience of the experts in the area of developments of shopping malls in Malaysia. The experts comprised of three academics from universities on the rank of professors and two consultants architects in the industry on the suitability of the items in the questionnaire. After thorough discussions, the experts validated, verified and agreed on 8 items under location of a mall, 10 items under facilities and services installed in a mall, 8 items under the aesthetics and design of a mall and 5 items under qualities of structures constructed in a mall as shown in the table 1.0 below:

Table 1.0: Content Validity

S/N	Location of a Mall	Facilities and Services	Aesthetics and Design	Quality of Structures
1	Developing a shopping mall that is close to security building	Preferring a shopping mall with fully-equipped and clean rest rooms.	The shopping mall layout makes it easy to shop	Getting very good quality parking space is very important to customers
2	Preferring a shopping mall near other public places such as parks, cafes, restaurants	Preferring a shopping mall to be air-conditioned properly	The environment (i.e. lighting and decoration) in the malls attract customers	Having quality constructed basements attracts customers
3	Developing a shopping mall that is close to other shopping centres	Preferring a shopping mall with a variety of restaurants that have comfortable dining halls.	Environment and interior design encourage customers	Preferring a quality structural buildings (malls)
4	Attractive location of a shopping mall	Preferring a shopping mall with electric lifts,	Mall architecture design encourages customers	The quality of structural steel roofing trusses

		escalators, and banks with ATM services.		attract customers
5	Shopping mall which is located near public offices.	Preferring all kinds of easy shopping like many counters and less crowded places.	Good mood in a nice mall.	General quality of the buildings (mall) attract customers
6	Preferring shopping mall located near security offices	Preferring shopping mall in which security is of high priority.	The merchandise displays in a shopping mall attracts customers	-
7	More than one means of transportation to reach the nearest shopping mall	Mall that has large parking space	The brightness of the colours in the mall motivate customers	-
8	Same shopping mall that is far away.	Kindness of the mall's staff	The background music motivates customers shopping activities.	-
9	-	Preferring a shopping mall with branches for famous companies such as telecommunications companies.	-	-
10	-	Preferring a shopping mall with a worshipping place.	-	-

3.4 Method of data analysis

The data obtained for this study was analyzed with statistical package for social science IBM SPSS version 21, SPSS is the general software used in social and applied sciences for data analysis (Sekaran and Bougies, 2011; Pallant, 2010; Marques, 2007) responses were encoded and programmed into a system using numbers to represent real data collected, this helped to analyze the data efficiently and effectively (Sekaran&Bougie, 2011) and were entered into the SPSS using data entry interface.

4.0 Data analysis and results

The analysis and discussion of the data obtained for this study is presented in this section.

4.1 Reliability test

Table 2.0 shows the reliability test for this study and is conducted using IBM SPSS software. The reliability test is achieved by determining Cronbach's Alpha for each construct. The alpha coefficient shows how reliable and consistent the survey instrument is in measuring the concept it was intended to measure. The values of the Cronbach's Alpha for the four architectural factors: The location of a shopping mall, facilities and services installed in a mall, mall aesthetics and design and the qualities of mall structures. The Cronbach's Alpha of mall location was 0.702; facilities and services installed was 0.861; the Cronbachs Alpha of aesthetics and design of a mall was 0.827 and that of qualities of structure was 0.766, with all values well above the benchmark Cronbach's Alpha value of 0.70, according to Sekaran&Bourgie (2011) and Pallant (2010). The Cronbach Alpha values

for the four constructs thus confirm that the survey instrument is reliable and consistent in the measurement of the intended purpose or items.

Table 2.0: Reliability Test by Cronbach's Alpha Coefficient of Architectural Factors

LOCATION OF A MALL	FACILITIES AND SERVICES	AESTHETICS AND DESIGN	QUALITY OF STRUCTURES
0.702	0.861	0.827	0.766

Table 3.0 presents the results of the Friedman's test for the location of a mall factors. The test indicated significant differences among the mean scores of the mall factors that attract customers to shop in a mall. The results showed that the calculated Chi-Square (χ^2) based on customers' mean scores ranking was $\chi^2=155.315$ with $p=0.000$ significant at $p=0.05$ level of significance.

Table 3.0: Friedman's Chi-square Test on the Location of a Mall Factors that Attract Customers to Shop in a Mall

S/N	N	Chi-Square	df	Assymp. Sig
1	100	155.315	7	0.000

a. Friedman Test

Table 4.0 presents the ranking of architectural factors that attract customers to shop in a mall. The table also compared the ranking scores of the factors. The customers ranked the factors developing a shopping mall that is close to residential houses as the sixth most important factor that attracts customers to shop in the mall. The factor preferring a shopping mall near other public places such as parks, cafes, restaurants was ranked second most important factor that attracts customers to shop in a mall. The next factor was a shopping mall that is close to other shopping centre was ranked first most important factor that attracts customers to shop in the mall. The factor shopping mall that has an attractive location was ranked third most important factor that attracts customers to shop in a mall. The next factor was shopping mall which is located near public offices which was ranked seventh most important factor that attracts customers to shop in a mall. The preferring shopping mall to be located near security offices was ranked fourth while needing more than one means of transportation to reach the nearest shopping mall was ranked eighth and always going to the same shopping mall even if it is far away was ranked fifth most important factors that attracts customers to shop in a mall respectively. This had indicated differences among the ranking of the factors that attract customers to shop in a mall with regards to the location of a mall.

Table 4.0: Customers Ranking of Location of a Mall Factors attracting the Customers to Shop in a Mall

S/N	Factors	Customers Ranking	
		Mean Score	Rank
1	Developing a shopping mall that is close to security building	3.91	6
2	Preferring a shopping mall near other public places such as parks, cafes, restaurants	5.75	2
3	Developing a shopping mall that is close to other shopping centres	5.94	1
4	Shopping mall that has an attractive location	4.73	3
5	Developing a shopping mall which is located near public offices	3.88	7
6	Preferring shopping mall to be located	4.55	4

7	near security offices Needing more than one means of transportation to reach the nearest shopping mall	2.98	8
8	Always going to the same shopping mall even if it is far away.	4.28	5

Table 5.0 presents the results of the Friedman's test of the facilities and services installed in a mall. The test indicated significant differences among the mean scores of the facilities and services factors that attract customers to shop in a mall. The results showed that the calculated Chi-Square (χ^2) based on customers' mean scores ranking was $\chi^2= 140.545$ with $p=0.000$ significant at $p=0.05$ level of significance.

Table 5.0: Friedman's Chi-square Test on the Facilities and Services Installed in a Mall that Attract Customers to Shop in a Mall

S/N	N	Chi-Square	df	Assymp. Sig
1	100	140.545	9	0.000

a. Friedman Test

Table 6.0 presents the ranking of architectural facilities and services installed in a mall that attract customers to shop in a mall. The table also compared the ranking scores of the factors. The customers ranked the factor preferring a shopping mall with fully-equipped and clean rest rooms as the seventh most important factor that attracts customers to shop in the mall. The factor preferring a shopping mall to be air-conditioned properly was ranked eighth most important factor that attracts customers to shop in a mall. The next factor preferred a shopping mall with a variety of restaurants that have comfortable dining halls was ranked sixth most important factor that attracts customers to shop in the mall. The factor preferring a shopping mall with electric lifts, escalators, and banks with ATM services was ranked second most important factor that attracts customers to shop in a mall. The next factor preferred all kinds of easy shopping like many counters and less crowded places was ranked fifth most important factor that attracts customers to shop in a mall. The factor preferring a shopping mall in which security is of high priority was ranked as the fourth most important factor that attracts customers to shop in a mall. The factor visiting the mall because parking is easily available was ranked ninth most important factor by the customers. When the employees are kind and helpful was ranked first most important factor that attracts customers to shop. Preferring a shopping mall with branches for famous companies such as telecommunications companies was ranked as the tenth while preferring a shopping mall with a worshipping place was ranked third most important factor that attracts customers to shop. This had indicated differences among the ranking of factors that attract customers to shop in a mall with regards to the facilities and services installed in a mall.

Table 6.0: Customers Ranking of Facilities and Services attracting the Customers to Shop in a Mall

S/N	Factors	Customers Ranking	
		Mean Score	Rank
1	Preferring a shopping mall with fully-equipped and clean rest rooms	4.99	7
2	Preferring a shopping mall to be air-conditioned properly	4.58	8
3	Preferring a shopping mall with a variety of restaurants that have comfortable dining halls	5.65	6

4	Preferring a shopping mall with electric lifts, escalators, and banks with ATM services	6.50	2
5	Preferring all kinds of easy shopping like many counters and less crowded places	5.87	5
6	Preferring a shopping mall in which security is of high priority	6.03	4
7	Parking space is easily available	4.25	9
8	When the employees are kind and helpful, I visit the shopping mall again.	6.62	1
9	Preferring a shopping mall with branches for famous companies such as telecommunications companies.	4.14	10
10	Preferring a shopping mall with a worshipping place.	6.41	3

Table 7.0 presents the results of the Friedman's test on the aesthetics and design factors that attract customers to shop in a mall. The test indicated significant differences among the mean scores of the aesthetics and design factors. The results showed that the calculated Chi-Square (χ^2) based on customers' mean scores ranking was $\chi^2 = 63.448$ with $p = 0.000$ significant at $p = 0.05$ level of significance.

Table 7.0: Friedman's Chi-square Test on the Aesthetics and Design of a Mall that Attract Customers to Shop

S/N	N	Chi-Square	df	Assymp. Sig
1	100	63.448	7	0.000

a. Friedman Test

Table 8.0 presents the ranking of aesthetics and design factors that attract customers to shop in a mall. The table also compared the ranking scores of the factors. The customers ranked the factor. The shopping mall layout makes it easy to shop as the first most important factor that attracts customers to shop in the mall. The factor the environment (i.e. lighting and decoration) in the malls attracts the attention of customers was ranked seventh most important factor that attracts customers to shop in a mall. The next factor was the environment and interior design that encourage customers to stay longer in the mall which was ranked second most important factor that attracts customers to shop in a mall. The factor Mall architecture design encourages customers to shop frequently was ranked fourth most important factor that attracts customers to shop in a mall. The next factor was the good mood of mall staff was ranked third most important factor that attracts customers to shop in a mall. The factor the merchandise displays in a shopping mall attracts customers was ranked as the eighth most important factor that attracts customers to shop in a mall. The factor the brightness of the colours in the mall motivates customers was ranked fifth most important factor by the customers. The background music motivates customers' shopping activities was ranked sixth most important factor that attracts customers to shop. This had indicated differences among the ranking of factors that attract customers to shop in a mall with regards to the facilities and services installed in a mall.

Table 8.0: Customers Ranking of Aesthetics and Design of a Mall attracting the Customers to Shop

S/N	Factors	Customers Ranking	
		Mean Score	Rank
1	The shopping mall layout makes it easy to shop	5.22	1

2	The environment (i.e. lighting and decoration) in the malls attracts attention	4.01	7
3	Environment and interior design encourage customers to stay longer in the mall.	5.03	2
4	Mall architecture design encourages customers to visit it frequently	4.86	4
5	The good mood in a nice mall	4.92	3
6	The merchandise displays in a shopping mall attracts customer	3.57	8
7	The brightness of the colours in the mall motivates customers to visit.	4.23	5
8	The background music motivates customers shopping activities	4.18	6

Table 9.0 presents the results of the Friedman's test on the qualities of structures factors that attract customers to shop in a mall. The test indicated significant differences among the mean scores of the qualities of structures factors. The results showed that the calculated Chi-Square (χ^2) based on customers' mean scores ranking was $\chi^2 = 40.463$ with $p = 0.000$ significant at $p = 0.05$ level of significance.

Table 9.0: Friedman's Chi-square Test on the Quality of Structures that Attract Customers to Shop

S/N	N	Chi-Square	df	Assymp. Sig
1	100	40.463	4	0.000

a. Friedman Test

Table 10.0 presents the ranking of the qualities of structures factors that attract customers to shop in a mall. The table also compared the ranking scores of the factors. The customers ranked the factor good quality parking space as the second most important factor that attracts customers to shop in the mall. The factor having quality constructed basements attracts customers was ranked first most important factor that attracts customers to shop in a mall. The next factor preferred visiting quality structural buildings (malls) was ranked fifth most important factor that attracts customers to shop in the mall. The factor The quality of structural steel roofing trusses attract customers to visit a mall was ranked fourth most important factor that attracts customers to shop in a mall. The next factor was general quality of built mall attract customers to visit was ranked third most important factor that attracts customers to shop in a mall. This had indicated differences among the ranking of factors that attract customers to shop in a mall with regards to the facilities and services installed in a mall.

Table 10.0: Customers Ranking of the Quality of Structures Attracting the Customers to Shop

S/N	Factors	Customers Ranking	
		Mean Score	Rank
1	Getting very good quality parking space is very important to customers	3.27	2
2	Having quality constructed basements attracts customers	3.55	1
3	Preferring visiting quality structural buildings (malls)	2.62	5
4	The quality of structural steel roofing trusses attract me to visit a mall	2.73	4
5	General quality of built mall attract me	2.84	3

to visit

5.0 Discussions of the findings

IBM SPSS software was used to achieve the aim of this study. Friedman's test was used to rank the architectural factors that attract customers to shop in a mall namely: location of a mall, facilities and services installed in the mall, aesthetics and design of a mall and quality of structures in a mall. The architectural factors are metrics that determined the rank level of attractiveness of customers to shop in a mall. The location of a mall had eight (8) items in the questionnaire. The items were multi-dimensional, the customers ranked the factor on the location of shopping mall that is close to other shopping centres as the first most important factor that attract customers to shop. This is possibly the reasons of the customers required alternatives and competitions where there is a concentration of shopping malls. The customers ranked and preferred a shopping mall close to public places such as parks, cafes; restaurants as the second most important factor that attracts customers to shop. This possibly indicated that the bulk of customers that patronized shopping malls were mostly travelers that can easily walk-in and shopped. The customers ranked shopping mall that has an attractive locations such as close to major roads, town centres, and tourist sites as the third most important factor that attracts customers to shop.

The customers ranked and preferred a shopping mall close to residential buildings as the fourth most important factor that attracts customers to shop. Similarly, the customers ranked and preferred a shopping mall that is far away from residential buildings as the fifth most important factor that attracts customers to shop. This is possibly due to the facts that some customers regarded shopping as a tourist activity the customers preferred to shop on far places. The customers ranked a shopping mall that is close to security buildings as the sixth most important factor that attracts customers to shop. This is possibly due to the rate of crimes that occurred in cities and some shopping malls. Location of shopping mall close to security building would give confidences to the customers on both their lives and properties. The customers ranked the location of a shopping mall close to public offices as the seventh most important factor that attracts customers to shop. This possibly due to some customers preferred to shop immediately after office hours. The customers ranked the problems of more than one means of transportation to reach the nearest shopping mall as the eighth and least most important factor that attracts customers to shop. This is possibly due to the customers preferred shopping malls close to either residential or workplaces.

The facilities and services provided in a shopping mall had ten (10) items in the questionnaire. The customers ranked kindness of the mall employees as the first most important factor that attracts customers to shop in a mall. This is due to the reasons that customers like welcoming face. The customers ranked and preferred a shopping mall with electric lifts, escalators, and banks with ATM services as the second most important factor that attracts customers to shop. This is because lifts, escalators etc. eased the difficulties of transport in large malls. The customers ranked and preferred a shopping mall with a worshipping place as the third most important factor that attracts customers to shop. This is possibly due to some customers spent more time shopping. The customers ranked and preferred a shopping mall in which security is of high priority as the fourth most important factor that attracts customers to shop. This is because the customers considered the security of themselves and belongings. The customers ranked and preferred all kinds of easy shopping like many counters and less crowded places as the fifth most important factor that attracts customers to shop. The customers ranked and preferred a shopping mall with a variety of restaurants that have comfortable dining halls as the sixth most important factor that attracts customers to shop. This is possibly due to the facts that some customers enjoyed eating outdoors. The customers ranked and preferred a shopping mall with fully-equipped and clean rest rooms as the seventh most important factor that attracts customers to shop. The customers ranked and preferred a shopping mall to be air- conditioned properly as the eighth most important factor that attracts

customers to shop. This is possibly due to the weather conditions. The customers ranked shopping malls with available parking spaces as the ninth most important factor that attracts customers to shop. Lastly the customers ranked and preferred a shopping mall with branches for famous companies such as telecommunications companies as the tenth and least most important factor that attracts customers to shop.

The aesthetics and design of a shopping mall had eight (8) items in the questionnaire. The customers ranked type of shopping mall layout as the first most important factor that attracts customers to shop. This is because it makes shopping easy. The customers also ranked the nature of a mall environment and interior design as the second most important factor that attracts customers to shop. This is because it encourages the customers to stay longer in the mall. The customers ranked good mood of customers in a fine mall as the third most important factor that attracts customers to shop. The customers' also ranked Malls architectural designs as the fourth most important factor that attracts customers to shop. This encourages the customers to visit the mall frequently. The customers ranked the nature of the colours in a mall as the fifth most important factor that attracts customers to shop. This is because it motivates the customers to visit. The customers ranked the background and the type of music played in a mall as the sixth most important factor that attracts customers to shop. This motivates the customers shopping activities. The customers ranked the nature of environment (i.e. lighting and decoration) in the malls as the seventh most important factor that attracts customers to shop. This attracts the attention of the customers to visit a mall. The customers ranked the merchandise displays in a shopping mall as the eighth most important factor that attracts customers to shop.

The quality of structures constructed in a mall had five (5) items in the questionnaire. The customers ranked well-structured and constructed basements as the first most important factor that attracts customers to shop. This is because of most of the customers were attracted by different type of constructions. The customers ranked very good quality parking space as the second most important factor that attracts customers to shop. This is for easy and secured parking of customers' vehicles. The customers also ranked the quality of built mall as the third most important factor that attracts customers to shop. The customers also ranked the qualities of structural steel roofing trusses as the fourth most important factor that attracts customers to shop. Lastly the customers ranked and preferred the qualities of structural buildings of the malls as the least and fifth most important factor that attracts customers to shop.

6.0 Conclusions and recommendations

The study considered four architectural factors that attracts customers to shop in a mall namely: location of a mall, facilities and services provided, aesthetics and design of the mall and qualities of structures constructed in the mall with the view of identifying and ranking of factors that attracts customers most to shop in a mall through assessing areas of attractiveness in the construction of a mall and enhancing upon them. The study also serves as a wake-up call that provided awareness to the developers of shopping malls in Malaysia through identifying and ranking the most important factors that attract customers to their malls. This would enhance business activities and improved on the overall GDP of Malaysia.

The architectural factors that attracts customers to shop in a mall were location of a mall that had eight (8) items, facilities and services that had ten (10) items, aesthetics and design that had eight (8) items and quality of structures that had (5) items. The architectural factors were identified from literatures and discussions with the stakeholders concerned in the development of shopping malls in Malaysia. These factors were ranked and evaluated the most important factors that mostly attract customers to shop in a mall under the location of the malls were development of a mall close to other shopping centres as the most important factor that attract customers to shop. This is possibly the reasons that customers required alternatives and competitions where there is a concentration of shopping malls. Then also development of a shopping mall close to public places such as parks,

cafes; restaurants and development of a shopping mall that has an attractive locations such as close to major roads, town centres, and tourist sites. Similarly, under the facilities and services in the malls provision of a mall that employed trained staff, provision of a mall that is equipped with electric lifts, escalators, and banks with ATM services and provision of a mall that has a worshipping place. Under the aesthetics and design of a mall the customers ranked the most important architectural factors that attract customers to shop in a mall includes development of a shopping mall with good layout, the nature of a mall environment and interior design and good mood of customers as the most important factors that attract customers to shop. The architectural factors under the qualities of structures were structured and constructed basements, adequate parking spaces and the quality materials used in building of a mall. These are the most important factors that attract customers to shop. The study therefore, recommends the developments of shopping malls close to residential houses were customers could easily walk a short distances for shopping. The facilities and services installed in shopping malls attract customers; the developers of shopping mall should consider the design and installation of modern facilities like conveyors, elevators, lifts etc. while designing and constructions of shopping malls. The developers of shopping mall should consider location of their mall and quality of materials during constructions.

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