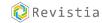
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# **Determinants of Shopping Mall Attractiveness: The Case of** shopping malls in Nairobi, Kenya

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#### **Abstract**

In the recent past there has been massive growth of shopping malls in Africa. As a result, in some countries like Kenya, shopping malls have to fight to ensure they attract shoppers to the mall and as a result maintain the image and the current tenants while attracting new quality tenants. This study focused on identifying and validating a tool to measure the determinants of shopping mall attractiveness. Data was collected from residents of Nairobi City in Kenya. A total of 303 respondents participated in the study. Initially a tool with 38 items was developed from the literature and after subjecting it to a factor analysis, validity and reliability tests a 17item scale was achieved. Confirmatory factor analysis (CFA) and structural equation modelling (SEM) were used in the determination of shopping mall attractiveness dimensions. From the analysis of data, five key determinants of shopping mall attractiveness were identified. These included: design and aesthetics; service options; convenience and safety; service employees; and, utilitarian value. Amongst the five dimensions, convenience and safety was identified as the most important in influencing shopping mall attractiveness.

**Keywords:** shopping mall; Shopping centres; shopping mall attractiveness; Kenya

#### Introduction

The last decade has witnessed a drastic growth of shopping malls in Africa. This growth has been majorly driven by increasing urbanization, population growth, increased economic growth and political stability, internationalization efforts by global retailers, changing consumer lifestyles and rising household incomes among other factors. According to research by Sagaci (2018), between 2011 and 2018, there was a marked growth of shopping malls in Africa from 225 to 581 malls. South Africa had the largest mall numbers followed by Egypt and Kenya. By 2020, it is projected

that Kenya will have 73 shopping malls. In Sub-Saharan Africa, Kenya has the largest shopping centre space after South Africa, and with the largest development pipeline (Sagaci, 2018).

According to Cytonn (2018), in Kenya, Nairobi leads in the gross leasable area (GLA) with more than 50% of the malls accounting to over 60% of the GLA in Kenya. This is followed by Mombasa and Kisumu with 10.0% and 7.4% GLA respectively. The trend in shopping mall growth has been worrying as some malls struggle to attract tenants for the available space. As at 2017, the retail sector had an average yield of 8.3%, and occupancy rates of 80.2%, a decline from 2016's 8.7% and 82.9%, respectively. This was due to increased supply and a tough economic environment. Though the sector had shown some recovery in 2018, the growth of the sector posed critical sustainability challenges as a result of oversupply of mall space and changing consumer trends.

To differentiate themselves, newer malls were more focused at being destination malls than just shopping malls. Destination malls have been found to perform better than normal shopping malls (Cytonn, 2018). Destination malls are large integrated retail centres where the driver of traffic is not shopping but different experiences. In these centers, dining, leisure and entertainment become core with shopping being an adjunct activity but not the key driver to the mall. Such malls have also been categorized as "eat, drink, work, sleep" places with a primary focus being on creating exceptional experiences. In Kenya, there were three destination malls located in Nairobi. These were Two Rivers Mall, The Sarit Centre and Garden City Mall.

The success of the shopping malls is premised on several factors. The location of the mall close to major highways for high visibility and near attractive catchment areas is critical. This also allows for ease of accessibility of the mall as shopper's desire convenience in mall entry and exit. The design of the mall is also important. A mall should have an attractive layout; enable ease of movement around and between floors; open spaces, and; provision of sufficient walking space as well as parking space. Inherently and more cardinal is tenancy. Shoppers are attracted to a mall by the types of tenants (tenant mix) as well as the anchor tenant(s).

#### Literature Review

A shopping mall is a group of retail business planned, developed, owned and managed as a unit. A shopping mall is defined as an aggregation of retail and other commercial establishments owned and managed as a single property (International Council of Shopping Centers, 1999). Levy, Weitz and Pandit (2014) defined shopping malls as

closed, climate-controlled, lighted shopping centres with retail stores on one or both sides of an enclosed walkway. The development of shopping malls started in the United States of America in the 1920's and later spread to other countries in the world (Kowinski, 1985). Nelson (1958) indicated that shopping malls are developed on the principle of cumulative attraction according to which cluster of similar but complementary retail outlets have greater drawing power over the geographically dispersed outlets. Various authors use the terminology shopping mall and shopping centers interchangeably. Whereas there is arguments that the two are different, it is generally agreed that these two words both refer to a large space that allows a person access to more than one store. In this paper the two words are used interchangeably.

Shopping malls offer services to its consumers in the form of a convenient access to a desirable mix of retailers within a managed environment to provide a satisfying and safe, shopping and leisure experience (Kushwaha, Ubeja & Chatterjee, 2017). According to Cil (2012) in shopping mall, outlets arrangement and layout are designed to ensure both the increased usage of the mall and customer improved sales. The layouts take into account the needs of the customers and the arrangement should attract the attention of the visiting customers.

The growth and development of shopping malls has been driven by several theories. In the current study, in order to understand shopping mall evolvement, three main theories are explained including: the Central Place Theory; Retail Agglomeration Economics, and; the Retail Demand Externalities.

The *central place theory* focuses on explaining retail trade between cities (Damian, Curto & Pinto, 2011). This theory was formulated by two scientists in Germany: geographer Walter Christaller in 1933 and economist August Losch in 1940. Generally, consumers based on their convenience would likely shop in the closest outlet to them (Anderson, 1985). Similarly, consumers prefer to do their shopping in larger shopping centres/malls due to the variety on offer than in smaller malls who may have limited offering. The central place theory provides a framework for analyzing the size and location of retail centers. Based on this theory, shopping malls bring about an agglomeration of a variety of retails outlets at a centralized location. The agglomeration of diverse retailers in particular towns or shopping centres increases the attractiveness of those places for consumer shopping (Bucklin, 1967).

The *economies of agglomeration theory* is based on the cost savings arising from urban agglomeration. This is as a result of firms that are related being located near

each other leading to economies of scale as well as network effects. When firms in a related sector cluster together, they may have complementarities that would allow significant reductions in costs of production. The clustering drives customers and suppliers to the cluster location than would a single firm do and therefore lead to each firm benefitting. The basic concept of agglomeration economies is that production is facilitated when there is a clustering of economic activity.

In retail location theory, Nelson (1958) indicated that the agglomeration of retail stores is based on the theory of cumulative attraction and the principal of compatibility. According to Nelson, when stores dealing in the same merchandise are near to each other, they are likely to do more business compared to being scattered. When stores locate in clusters, consumers can achieve an easier and cheaper overview of the products available without facing additional transportation costs, since the proximity between the stores enables the consumer to easily go from store to store (Kantola, 2016). A larger variety helps fulfill the consumer's needs in multipurpose shopping in order to reduce his/her search and transportation costs (Fujita & Thisse, 2002). Due to the reductions in transactions costs, many consumers choose to shop at stores located in a shopping center setting over isolated located stores (Kantola, 2016).

The *retail demand externalities theory* refers to "the effects a store derives when customers are drawn to a particular shopping centre or store by the presence of high-order retailers (sometimes anchor tenants) or an appealing tenant mix" (Damian et al., 2011). Certain stores generate externalities by drawing customers to other stores, while many stores primarily benefit from external mall traffic. Therefore, to varying degrees, the success of each store depends upon the presence and effort of other stores, and the effort of the developer to attract customers to the mall. In designing and leasing shopping centre space, developers recognize that the attractiveness of the centre to customers, and thus to tenants, depends on the types and sizes of stores that it contains. Shopping malls help reduce consumer search costs by assembling choice through the provision of a large number of stores in a single location.

The subject of shopping malls and its attractiveness has been studied over a long period of time (Borusiak, Pierański, Florek, & Mikołajczyk, 2018). However, due to the proliferation and performance issues of the mall the subject has received renewed interests. All over the world growth of shopping malls and centres has been recorded despite the suboptimal and declining performance of these establishments. A

shopping mall is deemed to be attractive based on its capability to be perceived in a way that it induces positive emotions, positive cognitive appraisal and encourages people to approach or to get inside (Dębek, 2015). Attractiveness is therefore a function of shoppers and tenants needs, demands and preferences. The attractiveness of shopping malls has also been found to be as a result of their ability to address utilitarian shopping needs as well as leisure and hedonic potential (Ng, 2003). Ng further states that shopping mall attractiveness is based on the mall's ability to fulfill a shopper's cognitive, physiological and social needs, moderated by a shoppers' individual characteristics and situational factors.

Shopping mall attractiveness has been defined as a multi-dimensional feature, having several factors including: product related factors and its attributes; site-related factors; environment-related factors; retailer related factors; customers related (Dębek, 2015; Borusiak et al., 2018).

Borusiak et al. (2018) in studying factors affecting mall attractiveness among university students found the most critical factors being offer perception, location and decoration, comfort of shopping, entertainment, and toilet accessibility. Can, Kurtulmusoglu and Atalay (2016) in a study among youths / students found convenience of the mall location and entertainment as being important for this respondent group. In a study on mature shoppers, Hu and Jasper (2001) identified five major factors which influenced them including convenience, choice, crowds, ambiance, parking and hedonic shopping orientation. In a study of teens (12 – 17 years), Wendy and Sandra (2005) found that the most important attributes were: mall friendliness to teens; "cool" stores in the mall; mall being a good place to hang out with friends; and mall attractive design.

In a different study, Can et al. (2016), identified several factors affecting mall attractiveness. The factors were mall loyalty programmes; traffic around the mall and parking facilities; facilities for disabled people; the quality of the mall locality; and the quality of mall visitors. In a study on the attractiveness of shopping centres in the Czech Republic and Slovakia, Kunc, Križan, Bilková, Barlík, and Maryáš (2016) identified several important endogenous factors as the gross leasable area and tenant mix. They also identified other exogenous factors such as parking and accessibility. O'Reilly (1931) identified the endogenous factor of mall size and distance on mall selection and concluded that larger shopping centers present a higher attraction to customers, who would be willing to travel longer distances to arrive to them. Finn and Louviere (1996) identified six dimensions affecting mall attractiveness namely

merchandise, atmosphere, services, accessibility, anchor tenant and trendiness. In another study in Malaysia, Wong and Nair (2018) found that a shopping mall's success depends what a shopper goes through from the moment they get into the malls parking area to the time of exit of the mall parking. They identified six dimensions that makes a shopping mall attractive to urban shoppers with the most important being child friendliness and parking facilities.

In a study on community shopping malls, Wongkerd (2017) found that shoppers visited the community malls mainly to shop and for entertainment. He found that community shopping mall image was the most important attractiveness dimension of community shopping mall to consumers. Other factors included entertainment, convenience of shopping, ambience of the mall, security at the mall, lifestyle of consumers, reduced shopping time, architecture of the mall, and rewards associated with the purchase at malls. According to Levy et al. (2014), a shopping mall image is comprised in the totality of functional and emotional qualities while Hunter (2006) and Ooi and Sim (2007) stated that the shopping mall image is defined by the anchor shop and the physical appearance of the shopping mall. Makgopa (2016) studied South African shoppers and found that consumers desired comfortable shopping experiences, socialization and entertainment in the shopping malls. A similar study in Southern Africa by Dubihlela and Dubihlela (2014) identified various features in shopping malls, such as merchandizers, accessibility, service, amenities, ambiance, entertainment and security as important in attracting shoppers to a mall.

In other studies, the attractiveness of the shopping mall is influenced by the anchor tenant. Konishi and Sandfort (2003) defined an anchor store as "a store that increases, through its name's reputation, the traffic of shoppers at or near its location". An anchor store is a business within a shopping mall whose aim is to significantly increase the mall's appeal (Damian et al., 2011). Yuo et al. (2004) noted that shopping mall attractiveness varies based on the presence of anchor tenants and the extent to which it can draw customers to the mall. Researchers have also found that anchor tenants have the ability to attract attention in a shopping mall and hence determine the level of success of a shopping mall. They also determine the number of customers that visit the shopping mall, commodity retail prices at the mall and the level of profit achievable at the mall.

## **Objectives of the Study**

The objective of this study was to identify the determinants of shopping mall attractiveness. This was achieved through a process of validating a shopping mall

attractiveness scale then using the same to determine the dimensionality of shopping mall attractiveness.

## Methodology

The research design for this study was both descriptive and explanatory. The target population of this study were shoppers who visited various shopping malls in the City of Nairobi, Kenya from where the sample for this study was drawn. Altogether, 385 questionnaires were randomly distributed to the target respondents. A structured questionnaire was developed and administered to collect primary data. The questionnaire was developed from various mall attractiveness scale items as used by various researchers. A scale with about 38 items developed from the literature was subjected to a pretest to check on its suitability. Some item wordings were changed to reflect appropriate meaning and relevancy in the Kenyan situation.

Factor analysis was used to explore the data and its structure. To determine the number of factors to extract, the principal component analysis was used as the extraction method while the rotation method was oblique rotation, specifically Promax (Tabachnick & Fiddell, 2007; Thurstone, 1947) with Kaiser Normalization. After the factor analysis, confirmatory factor analysis (CFA) was performed to test the fit of the model used. The scale's internal consistency was tested by using reliability analysis with Cronbach's alpha (a minimum of 0.7 was deemed acceptable) while the construct validity was tested by employing confirmatory factor analysis (CFA) which was performed using the structural equation modeling (SEM).

## Sample Demographic Profile

As indicated before 385 questionnaires were distributed with 303 returned representing a response rate of 78.7%. From the responses, 48% of the respondents were males while 52% were females. In terms of the distribution of the respondent's age, 3.6% were below 20 years; 51.8% between 20 – 30 years; 30.7% between 31 – 40 years; and, 13.9% over 40 years. In terms of occupation, 59.1% were self-employed, 19.5% working, and 21.5% not working. Regarding frequency of mall visits, only 2.6% visited a mall daily, 42.6% once a week, 21.1% several times a week and 33.7% once monthly.

## **Data Analysis**

## **Reliability Tests**

The scale's internal consistency was tested by using reliability analysis with Cronbach's alpha (Hair, Anderson, Tatham, & Black, 1998). The Cronbach alpha for the variables used to construct the scales was 0.948. A Cronbach alpha of 0.70 is

considered acceptable (Nunnally, 1978). The adequacy and suitability of the sample for factor analysis was checked using the Kaiser-Meyer-Olkin (KMO) measure. KMO returns values between 0 and 1 and as a rule of thumb KMO values between 0.8 and 1 indicate that the sampling is adequate. In this study, KMO test was 0.896 fulfilling the requirements for adequacy of data for factor analysis. The Bartlett's test **of sphericity** was also used. For factor analysis to be recommended, the Bartlett's test of sphericity must be less than 0.05. In this study, data were suitable for performing EFA as indicated by the Bartlett's test of sphericity yielding significance (p < 0.001, Approximate Chi-square of 2711.03, with 210 degrees of freedom).

### **Factor Analysis**

In order to examine the dimensionality of the scale construct, exploratory factor analysis was undertaken. To determine the number of factors to extract, the principal component analysis was used as the extraction method while the rotation method was oblique rotation, specifically Promax (Tabachnick & Fiddell, 2007) with Kaiser Normalization as recommended.

Five factors emerged after satisfying the two required tests including the Kaiser criterion (eigenvalues greater than 1) and a scree plot. These three factors accounted for 62.4% of the total variance. In identifying the items loading on each component, out of the 38 items in the questionnaire, 17 items were found not to satisfy the requirements for inclusion as their factor loadings were below the recommended 0.5. The items were omitted. From the analysis, and based on the highest factor loadings of the remaining items, the first factor was composed of four items, the second factor was composed of five items, the third factor was composed of six items, while the fourth and fifth had three items each.

Based on the items in each component, some suggested themes arise. The factors were named as Design and Aesthetics, Service Options, Convenience and Safety, Service Employees, and Utilitarian Value. The table below provides the various items and their factor loadings.

**Table 1: Factor Analysis Component Loadings** 

| Statement  |       | Component |      |        |      |  |
|--|-------|-----------|------|--------|------|--|
| Statement  | 1     | 2         | 3    | 4      | 5    |  |
| My desired mall has attractive interior wall and floor           | .899  |           |      |        |      |  |
| color schemes  |       |           |      |        |      |  |
| My desired mall has latest interior design                       | .824  |           |      |        |      |  |
| My desired mall has an attractive architecture                   | .790  |           |      |        |      |  |
| The design of my desired mall is innovative and inspiring        | .752  |           |      |        |      |  |
| There are multiple options of shopping, entertainment and eating |       | .800      |      |        |      |  |
| There are a variety of stores in the mall                        |       | .734      |      |        |      |  |
| The Mall provides a one roof solution – All under one            |       | .697      |      |        |      |  |
| Roof   |       |           |      |        |      |  |
| The mall has convenient opening and closing hours                |       | .598      |      |        |      |  |
| It is easy locating desired stores in the mall                   |       | .504      |      |        |      |  |
| It is convenient to access the mall from the highway or          |       |           | .839 |        |      |  |
| road   |       |           |      |        |      |  |
| The Mall is generally clean                                      |       |           | .675 |        |      |  |
| The mall is near to my home or workplace                         |       |           | .615 |        |      |  |
| It is safe to shop at the mall                                   |       |           | .587 |        |      |  |
| It is easier to access and leave the mall's parking bays         |       |           | .585 |        |      |  |
| The mall has security & safety features                          |       |           | .506 |        |      |  |
| Staff working in the mall are knowledgeable                      |       |           |      | .872   |      |  |
| Staff in the mall are friendly                                   |       |           |      | .835   |      |  |
| The staff in the mall are helpful                                |       |           |      | .762   |      |  |
| There are comparatively low prices in shops within the           |       |           |      |        | .864 |  |
| mall   |       |           |      |        |      |  |
| Shops in the mall give discounts                                 |       |           |      |        | .692 |  |
| There is free parking in the mall                                |       |           |      |        | .618 |  |
| Extraction Method: Principal Component Analysis. Rotation        | on Me | thod:     | Prom | ıax wi | th   |  |
| Kaiser Normalization.  |       |           |      |        |      |  |
| a. Rotation converged in 8 iterations.                           |       |           |      |        |      |  |

Reliability Analysis for the variables

In terms of reliability, as shown in the Table below, all the shopping mall attractiveness elements were found to be fit as they all had a Cronbach Alpha score above 0.7.

**Table 2: Determinants Reliability** 

| Dimension              | Number of items | Cronbach's Alpha |
|------------------------|-----------------|------------------|
| Design and Aesthetics  | 4               | 0.863            |
| Service Options        | 5               | 0.772            |
| Convenience and Safety | 6               | 0.792            |
| Service Employees      | 3               | 0.830            |
| Utilitarian Value      | 3               | 0.721            |

### **Components Relevance**

The components derived through factor analysis were tested to derive the most relevant in the Kenyan environment. The highest mean score for the factors was posted by Service Employees (3.87) followed by Design and Aesthetics (3.83), Convenience and Safety (3.78), Service Options (3.57) and lastly Utilitarian Value (3.46) as indicated in the table below.

**Table 3: Components Relevancy** 

| Component/Determinant  | Mean   |
|------------------------|--------|
| Design and Aesthetics  | 3.8288 |
| Service Options        | 3.5733 |
| Convenience and Safety | 3.7757 |
| Service Employees      | 3.8708 |
| Utilitarian Value      | 3.4629 |

## Confirmatory Factor Analysis (CFA)

After the factor analysis, confirmatory factor analysis (CFA) was performed to test the fit of the scales. The scales' construct validity was tested by employing CFA. According to Byrne (2009) CFA can be used to determine whether the sample data is compatible with the hypothesized model of the study. Maximum likelihood estimation procedure was selected as the best method to conduct CFA as normality is assured in the data set. Several fit indices were used to test the model fit. The chi-square, degrees of freedom, the root mean square error of approximation (RMSEA), comparative fit index (CFI) were determined as recommended by Hair et al. (2010).

In assessing goodness of fit, the ratio of chi-square to degree of freedom ( $\chi$ 2/df) is used. According to Hooper et al. (2008),  $\chi$ 2/df should be less than 3 to indicate acceptable fit. In this study,  $\chi$ 2/df was 2.250 indicating an acceptable fit for this model as it was less than the 3. For the RMSEA, MacCallum, Browne, and Sugawara (1996)

suggest that a RMSEA value of between 0.00 and 0.05 indicates a close model fit, a value of between 0.05 and 0.08 a reasonable fit, and a value of more than 0.08 a poor model fit. In the current study a RMSEA of 0.064 was achieved indicating a reasonable model fit. The Comparative Fit Index (CFI) values should range between 0.0 and 1.0 with values closer to 1.0 indicating a good fit (Hooper et al., 2008). The CFI of this study was .913 indicating a good model fit. The various indices are provided in the table below.

Table 4: Goodness of Fit Indices

| Measurement       | Index   | Threshold       | Interpretation |
|-------------------|---------|-----------------|----------------|
| Chi- square (χ2)  | 402.739 | -               | -              |
| Degree of freedom | 179     | -               | -              |
| χ2/df             | 2.250   | Between 1 and 3 | Excellent      |
| RMSEA             | 0.064   | <0.06           | Acceptable     |
| CFI               | 0.913   | >0.95           | Acceptable     |
| SRMR              | 0.056   | <0.08           | Excellent      |

#### **Assessing Validity of Scale Measures**

After EFA, it has been recommended that scale validity is undertaken and specifically construct validity. Generally, to assess the construct validity of a test, convergent validity and discriminant validity are adopted (Campbell & Fiske, 1959).

## **Convergent Validity**

According to Fornell and Larcker (1981) criterion, the convergent validity of a measurement model can be assessed by the Average Variance Extracted (AVE) and Composite Reliability (CR). AVE values above 0.7 are considered very good even though 0.5 is also acceptable. Based on the test of the scale, convergent validity was achieved as all the constructs posted an AVE greater than 0.5 which is acceptable (See table below). On the other hand, all the factors recorded a CR of above 0.7. These results indicate that the scale had achieved convergent validity.

**Table 5: Convergent and Discriminant Validity Measures** 

| Factors                | CR    | AVE   | MSV   |
|------------------------|-------|-------|-------|
| Design and Aesthetics  | 0.864 | 0.613 | 0.499 |
| Service Options        | 0.776 | 0.541 | 0.509 |
| Convenience and Safety | 0.801 | 0.525 | 0.509 |
| Service Employees      | 0.831 | 0.620 | 0.490 |
| Utilitarian Value      | 0.729 | 0.574 | 0.318 |

### **Discriminant Validity**

Discriminant validity refers to the extent to which factors are distinct and uncorrelated. According to Fornell and Larcker (1981), discriminant validity can be

assessed by comparing the amount of the variance captured by the construct (AVE) and the shared variance with other constructs (maximum shared variance – MSV). According to Hair et al. (2010), discriminant validity is established where MSV is lower than the AVE for all the constructs. In testing the scale, and as indicated in the table above, all the 5 factors' MSV were lower than the AVE and thus achieving the required thresholds for discriminant validity.

#### **Determinants Correlation Matrix**

From the analysis (see Table 6 and Figure 1), the correlation between Design and Aesthetics and Service Options, Convenience and Safety, Service Employees and Utilitarian Value was estimated at 0.71, 0.61, 0.56 and 0.43 respectively; while that of Service Options and Convenience and Safety, Service Employees and Utilitarian Value was 0.71, 0.61 and 0.44 respectively; and, that of Convenience and Safety and Service Employees and Utilitarian Value was 0.70 and 0.56 respectively. Finally, that of Service Employees and Utilitarian Value was 0.56. All the 5 factors were significantly correlated at p< 0.001 level.

**Table 6: Correlation Matrix** 

|                          | Design<br>and<br>Aesthetics | Service<br>Options | Convenience<br>and Safety | Service<br>Employees | Utilitarian<br>Value |
|--------------------------|-----------------------------|--------------------|---------------------------|----------------------|----------------------|
| Design and<br>Aesthetics | 0.783                       |                    |                           |                      |                      |
| Service<br>Options       | 0.707***                    | 0.736              |                           |                      |                      |
| Convenience and Safety   | 0.609***                    | 0.713***           | 0.725                     |                      |                      |
| Service<br>Employees     | 0.562***                    | 0.612***           | 0.700***                  | 0.788                |                      |
| Utilitarian<br>Value     | 0.430***                    | 0.440***           | 0.555***                  | 0.564***             | 0.758                |

<sup>\*\*\*</sup> p < 0.001

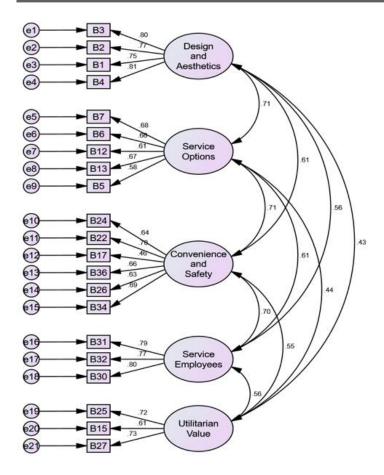


Figure 1: Shopping Mall Attractiveness CFA Path Analysis

## Assessing Model Fit with Structural Equation Modelling (SEM)

The scale was also subjected to Structural Equation Modelling (SEM). The various fit indices used to test the model fit were found to satisfy requirements as follows: Chisquare/df(<5) = 2.314; SRMR < 0.08) = 0.061; CFI(>.90) = 0.908; and, RMSEA(< 0.1)= 0.066. The estimated results of the structural model are presented in the table

Table 7: Goodness of Fit Indices

| Measurement       | Index   | Threshold       | Interpretation |
|-------------------|---------|-----------------|----------------|
| Chi- square (χ2)  | 381.788 |                 |                |
| Degree of freedom | 165     |                 |                |
| χ2/df             | 2.314   | Between 1 and 3 | Excellent      |
| RMSEA             | 0.066   | < 0.06          | Acceptable     |
| SRMR              | 0.061   | <0.08           | Excellent      |
| CFI               | 0.908   | >0.95           | Acceptable     |

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The p value was used to assess the significance of the relationship between shopping mall attractiveness and its dimensions. From the model estimates, all item loadings were significant at p < 0.05. The p-value was less than 0.05 denoting that the hypothesized path between shopping mall and all the determinants was statistically significant at .05 level of significance. The critical ratio (CR) for the regression path exceeded the threshold values required. When the critical ratio (CR) is > 1.96 for a regression weight, that path is significant at the .05 level. The results show that service options, convenience and safety, service employees, utilitarian value and design and aesthetics have a significant and positive impact on shopping mall attractiveness. Based on the regression coefficients, a change in any of the determinants will have a corresponding change in shopping mall attractiveness. The results of SEM analysis are presented in the table below and Figure 2.

Table 8: The regression path coefficient and its significance

| Path                     |   | В                               | Beta  | S.E.  | C.R.  | P     |       |
|--------------------------|---|---------------------------------|-------|-------|-------|-------|-------|
| Service Options          | < | Shopping Mall<br>Attractiveness | 0.94  | 0.834 | 0.115 | 8.135 | 0.000 |
| Convenience and Safety   | < | Shopping Mall<br>Attractiveness | 1.072 | 0.861 | 0.132 | 8.134 | 0.000 |
| Service<br>Employees     | < | Shopping Mall<br>Attractiveness | 1.203 | 0.786 | 0.138 | 8.71  | 0.000 |
| Utilitarian Value        | < | Shopping Mall<br>Attractiveness | 1.033 | 0.614 | 0.15  | 6.908 | 0.000 |
| Design and<br>Aesthetics | < | Shopping Mall<br>Attractiveness | 1.064 | 0.753 | 0.131 | 8.135 | 0.000 |

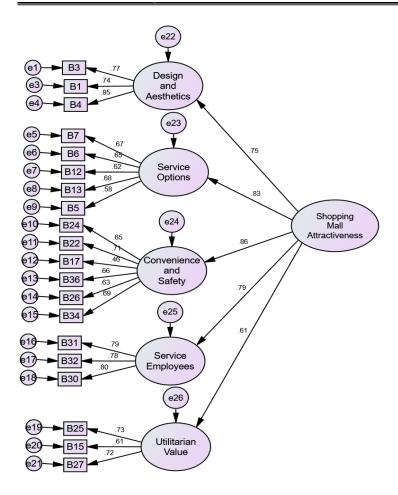


Figure 2: Shopping Mall Attractiveness SEM Path Analysis

#### **Results**

This study endeavored to validate a scale for use in assessing shopping mall attractiveness. Out of the 38 items previously used in other scales, only 17 were found to have satisfied all measures for suitability in the scale. The reason for rejection of many items was based on the fact that the adopted items had been developed in countries with different environmental factors from this study. The identification of a valid and reliable scale was a critical objective for this study focusing on a city in a developing country.

The other aspect of this study was to identify the determinants of shopping mall attractiveness. Through factor analyses it was revealed that from the point of view of shoppers in Nairobi, there were five main determinants that affected the attractiveness of shopping malls. The determinants were given various descriptive labels and these included: Design and Aesthetics; Service Options; Convenience and Safety; Service Employees; and, Utilitarian Value.

The *design and aesthetics dimension* is about appreciation of beauty through color, art and music. This is the judgments of sentiment and taste in regards to a particular phenomenon, in this case a shopping mall. It addresses issues to do with the physical evidence of the mall and how external and internal interiors are appealing to the taste of the shoppers. Some shoppers were attracted to the mall based on the interiors of the mall such as floors, walls and colour scheme while others was the interior design, attractive architecture and an innovative and inspiring shopping mall design.

In terms of *service options dimension*, shoppers were attracted and driven to a shopping mall by convenience. The shoppers related convenience in term of being able to undertake their shopping in one place as opposed to multiple locations. The options, other than shopping includes entertainment and dining. Convenience was also perceived in line with opening and closing hours as well as the ease of locating desired stores I the shopping malls.

The third dimension was service *convenience* and *safety dimension*. This aspect was concerned with being able to access the mall from the highway and in particular entry and exit. The closeness of the mall to the respondent's workplaces and homes was also identified as important. Safety within the mall and in the vicinity of the mall was also found to be important. Shoppers are concerned with their safety and that of their possessions while at the shopping malls.

In terms of *service employee's dimension*, the shoppers were driven by knowledgeable, friendly and helpful staff in the shopping mall. People develop relationships with other people based on trust. Trust towards service employees is largely influenced on whether they know and understand their work, can assist when required and possess a friendly mien. Shoppers are therefore attracted to a shopping mall as a result of the nature of the service employees through the provision of excellent customer service.

The final dimension is the *utilitarian value dimension*. This is based on the value perceptions of shoppers. The aspects of interest identified under utilitarian value dimension include low and discounted process in the outlets in the shopping mall as well as availability of free parking. A rational shopper would desire value for money

and as a result would visit shopping malls that deliver the value. Such value maybe delivered through various promotional activities sin the mall by the different stores, availability of free parking and other freebies.

From the analysis of the five dimensions, the most important dimension that influences shopping mall attractiveness was found to be *convenience and safety dimension*. Service options dimensions came second on importance while service employees was third. The dimension that affected shopping mall attractiveness least were the design and aesthetics as well as the utilitarian value dimension.

#### Conclusion

This study has endeavored to validate a tool to measure the attractiveness of shopping malls with a focus on Kenya. A 17 item scale was tested to ensure that it is ideal to measure this construct. It can therefore be concluded that the developing country specific tool identified suffices for usage as opposed to the adoption on a tool developed in countries operating in a different environment. The study also identified the dimensions of shopping mall attractiveness as five of them. These include Design and Aesthetics; Service Options; Convenience and Safety; Service Employees; and, Utilitarian Value. Amongst the five dimensions, convenience and safety was identified as the most important in influencing shopping mall attractiveness.

#### References

- [1] Anderson, P. M. (1985). Association of Shopping Centre Anchors with Performance of a Non-anchor Specialty Chain's Store. *Journal of Retailing*, 61(2), 61-74.
- [2] Borusiak, B., Pierański, B., Florek, M. & Mikołajczyk, J. (2018). Critical Factors of Shopping Centre Attractiveness in the Opinions of Students the Case of Poznan. *Handel Wewnętrzny*, 1(372), 186-202
- [3] Bucklin, L.P. (1967). The Concept of Mass in Interurban Shopping. *Journal of Marketing*, 31(1), 37-42.
- [4] Byrne, B. M. (2001). Structural equation modeling with AMOS, EQS, and LISREL: Comparative approaches to testing for the factorial validity of a measuring instrument. *International Journal of Testing*, Vol. 1, no.1: 55-86.
- [5] Can G. F., Kurtulmusoglu F. B., Atalay K. D. (2016). A case study on shopping malls attributes for young consumers. *Young Consumers*, Vol. 17, No. 3.
- [6] Campbell, T. & Fiske, W. (1959). Convergent and discriminant validation by the multitrait-multimethod matrix. *Psychology Bulletin*. 56:81 105

- [7] Cil, A. (2012). Consumption universes based supermarket layout through association rule mining and multidimensional scaling. *Expert Systems with Applications: An International Journal.* Vol, 39 No.10, 8611-8625
- [8] Cytonn Real Estate (2018). Kenya's Retail Sector Report 2018. Nairobi
- [9] Damian, D. S., Curto, J. D. & Pinto J. C. (2110). The impact of anchor stores on the performance of shopping centres: The case of Sonae Sierra Portugal. *International Journal of Retail & Distribution Management*, Vol. 39 No. 6, pp. 456-475
- [10] Dębek, M. (2015). What Drives Shopping Mall Attractiveness? *Polish Journal of Applied Psychology*, Vol. 13 (1)
- [11] Dubihlela, D., & Dubihlela, J. (2014). Attributes of shopping mall image, customer satisfaction and mall patronage for selected shopping malls in Southern Gauteng, South Africa. *Journal of Economics and Behavioural Studies*, 6(8), 682–689.
- [12] Finn, A. & Louviere, J. J. (1996). Shopping center image, consideration, and choice: anchor store contribution. *Journal of Business Research*, Vol. 35, No. 3, pp. 241-251.
- [13] Fujita, M. & Thisse, J. F. (2002). *Economics of Agglomeration-Cities, Industrial Location, and Regional Growth*, Cambridge University Press.
- [14] Fornell, C. G., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18 (1), 39 50.
- [15] Hair, J., Black, W., Babin, B. & Anderson, R. (2010). *Multivariate Data Analysis*. Upper Saddle River, NJ, USA: Prentice-Hall, Inc.
- [16] Hooper, D., Coughlan, J. & Mullen M. R. (2008). Structural Equation Modelling: Guidelines for Determining Model Fit. Electronic *Journal of Business Research Methods* Vol. 6 (1) 53-60
- [17] Hu, H., & Jasper, C. R. (2001). A qualitative study of mall shopping behaviours of mature consumers. *Journal of Shopping Center Research*, 14(1)
- [18] 17–38.Hunter, G. L. (2006). The role of anticipated emotion, desire, and intention in the relationship between image and shopping center visits. *International Journal of Retail and Distribution Management*, Vol. 34 No. 10, pp. 709-21
- [19] Kantola, H. (2016). Retail Success: The impact of space and agglomeration. Retail Success: The impact of space and agglomeration. *JIBS Research Reports No. 2016-1*
- [20] Kowinski, W. S. (1985). *The Malling of America*, NY: William Morrow and Co.
- [21] Konishi H. & Sandfort, M. (2003). Anchor Stores. *Journal of Urban Economics*, 53 (3): 413-435.

- [22] Kushwaha, T., Ubeja, S. & Chatterjee A. S. (2017). Factors Influencing Selection of Shopping Malls: An Exploratory Study of Consumer Perception. *Vision: The Journal of Business Perspectives*, 21(3) 274–283
- [23] Kunc, J., Križan, F., Bilková, K., Barlík, P. & Maryáš, J. (2016): Are there differences in the attractiveness of shopping centres? Experiences from the Czech and Slovak Republics. *Moravian Geographical Reports*, 24(1):27–41.
- [24] Levy, M, Weitz, B. A. & Pandit A. (2014). *Retailing management*. 9th ed. New Delhi: Tata McGraw Hill Publishing Co Limited
- [25] Makgopa, S. (2016). Determining consumers' reasons for visiting shopping malls. *Innovative Marketing*, 12(2), 22-27.
- [26] MacCallum, R. C., Browne, M. W., & Sugawara, H. M. (1996). Power analysis and determination of sample size for covariance structure modeling. *Psychological Methods*, 1, 130-149.
- [27] Nelson, R. L. (1958). The Selection of Retail Location, New York: FW Dodge.
- [28] Ng, C. F. (2003). Satisfying shoppers' psychological needs: From public market to cyber-mall. *Journal of Environmental Psychology*, 23(4), 439-455.
- [29] Nunnally, J. (1978). *Psychometric theory* (2<sup>nd</sup> ed.). New York: McGraw-Hill.
- [30] Ooi, J. T. & Sim, L. L. (2007). The magnetism of suburban shopping centers: do size and Cineplex matter? *Journal of Property Investment and Finance*, Vol. 25 No. 2, pp. 111-35
- [31] Reilly, W.J.: The law of retail gravitation. WJ Reilly (1931)
- [32] Sagaci Research (2018). Shopping Malls in Africa 2018 Report. Sagaci Research
- [33] Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics (5th ed.)*. Upper Saddle River, NJ: Pearson Allyn & Bacon.
- [34] Thurstone, L. L. (1947). *Multiple factor analysis: A development and expansion of vectors of the mind*. Chicago: University of Chicago.
- [35] Wendy, B. W., & Sandra, M. (2005). Teens and shopping mall preferences: A conjoint analysis approach to understanding the generational shift toward an experience economy. *Journal of Shopping Center Research*, 12(1), 23–53.
- [36] Wong, S. C. & Nair, P. B. (2018). Mall patronage: dimensions of attractiveness in urban context. *International Journal of Business and Society*, Vol. 19 No. 2, 281-294
- [37] Wongkerd, N. (2017). A Determinant of Community Shopping Malls as Tourists' Attractiveness. *Journal of Advanced Management Science*, Vol. 5, No. 5.
- [38] You, T. S., Crosby, N., Lizieri, C. & McCann, P. (2001). The management of positive inter-store externalities in shopping centers: some empirical evidence. *European Real Estate Society Conference*, Helsinki, pp. 1-22.