Mapping Retail Service Convenience in Hypermarkets of Jakarta

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Abstract

Background: Research focuses on service convenience, its antecedents and consequents in retail setting of hypermarket in Jakarta. This aspect of retail service management has received scant attention.

Methods/Statistical Analysis: Causal research design was employed. Customers of hypermarkets in Indonesia were surveyed using structured questionnaire in local language (Bahasa). Sampling frame comprised customers shopping at hypermarkets in Jakarta. Proportionate Stratified Sampling was used and sample size was 572 customers. The main tools used for statistical analysis were Percentages, Means, Standard deviation, and Structural Equation Modeling (SEM).

Findings: It was found that Shopping Enjoyment has a significant positive influence on Service Convenience while Familiarity and treatment, Use of Technology and Environment quality have moderate positive influence on Service Convenience. Service Convenience has a significant influence on satisfaction respectively. Satisfaction has significant positive influence on Store Loyalty. It is found that the calculated p value was greater than 0.05; Goodness of Fit index (GFI) value, Adjusted Goodness of Fit Index (AGFI) value and Comparative Fit index (CFI) value were greater than 0.9 indicating a very good fit. It was found that Root Mean Score Error of Approximation (RMSEA) value was minimal.

Application: The research has actually served as another measurement technique to assess how service convenience leads to loyalty patronage intentions in hypermarkets. This is turn helps the retailers to improvise their customer retention strategies and enhance patronage intention behaviour.

Keywords: Retail, Service Convenience, Hypermarkets, Store Loyalty, Jakarta

1. Introduction

1.1 Overview of Retail Sector in Indonesia

Indonesia, a southeastern Asian county[1] is an archipelago and is the fourth most populated country after China, India and US. High industrialization, rising incomes, shifting of socio economic segments, tourism are some of the factors that are driving the economic growth of the nation by offering huge potential base for global investors. The modern retail sector of this country is one such segment that is attracting foreign investors for its huge unexplored potential. Hypermarkets in Indonesia are enjoying growing popularity and now account for over 40% of the sector's sales with. A hypermarket is a big store, which combines the attributes of a supermarkets and department stores. It is usually bigger than a supermarket averaging 150,000 to 300,000 square feet.

1.1.1 Giant Hypermarket

Giant is one of the largest retailers in Malaysia with multiple formats comprising discount stores, grocery stores and hypermarkets. It has more than 85 outlets in Malaysia besides global presence in Indonesia, China, United Arab Emirates, Singapore, Brunei, and Vietnam[2].

1.1.2 Lotte Mart

Lotte Mart, a South Korean hypermarket, has now advanced into overseas markets. Lotte Mart's focus in on VRIC (Vietnam, Russia, India and China). It has 23 branches in Indonesia[34].

1.1.3 Carrefour

Carrefour S.A**.,** a French retailer, has completed 52 years of service and is one of the largest hypermarket chains in the world. It is the second largest in terms of revenue after Wal-Mart, and the third in profit behind Wal-Mart and Tesco. Carrefour presence spans Europe, China, Argentina, Brazil, Dominican Republic, United Arab Emirates, Qatar and Saudi Arabia. The Annual Report 2013 mentions 10,105 stores worldwide[5].The French hypermarket brand 'Carrefour' is the market leader with 64 hypermarket outlets in this archipelago.

Table 1 presents the retail hypermarket scenario in the city of Jakarta.

1.2 Concept of Service Convenience

Majority of research conducted till date in retail sector have been focusing on service quality and improvement in retail service delivery. Dabholkar[6] developed a Retail Service Quality Scale and tested it with US department store customers. The dimensions to exclusively measure retail service quality stemmed from such research. Other researchers investigated on performance of the retail stores, buyer behaviour, determinants of store format choice behaviour, how buyers can more effectively and efficiently utilize technologies[7]. However, critical factors affecting consumers cross shopping in an evolving retail market still needs to be investigated.

One very important factor that has been overseen, repeatedly, in all these research is service convenience, which actually acts as an important determinant of many aspects of shopping behaviours. It can be interpreted as an important element to improve quality of service delivered and for retention of customers for a longer period of time[8].

Service convenience has so far been defined as a construct that consumers try to achieve with minimal time and effort. Most of the prior studies focused only on the time saving aspect. Others mixed concepts of convenience goods and services. It was only in 2002 that Berry et al.[9] came up with a multi-dimensional definition of service convenience. They proposed antecedents and consequences but did not empirically validate the construct. Seiders et al.[10] presented a comprehensive conceptualization of service convenience and validated the subscales, offering comprehensive measures of perceived service convenience. In 2011, Saraswat et al.[11]validated service convenience scale and profiled customers in the Indian retail context. However, so far no serious investigation has been done to validate the scale in the context of hypermarkets.

The concept of organized retailing is all about providing the customers with a convenient and holistic shopping experience and not just offering a wide array of products and services. Researchers also are increasingly interested in comprehending the effects of convenience on consumer behaviour. Recent empirical studies indicate that convenience influences critical marketing consequences, including customer evaluation and purchase behaviour[11]. Although convenience may not be sufficient to ensure customer loyalty, it seems to be a threshold condition for maintaining customer relationships. Seiders et al.[12]

propose four distinct dimensions of convenience relevant to retailers: Access, Search, Possession and Transaction.

1.2.1 Access Convenience

Access convenience denotes "the speed and ease with which consumers can reach a retailer"[12].

1.2.2 Search Convenience

Search Convenience denotes "the speed and ease with which consumers identify and select products they wish to buy"[12]. This includes effective interactive customer systems, store design and layout, product displays, store signage and knowledgeable sales personnel. While access convenience reduces the time and effort necessary to reach a retailer, search convenience eases consumers through the shopping process by helping them make their purchase decision.

1.2.3 Transaction Convenience

Transaction Convenience denotes "the speed and ease with which consumers can effect or amend transactions"[12]. Many retailers are now opting for Self-Service Technology (SST) to attract new customers, increase customer loyalty, lower costs and differentiate their offerings from the competition. Opting for SST offers greater transaction convenience as it speeds up the process of billing and check out

1.2.4 Possession Convenience

Possession Convenience denotes the speed and ease with which consumers can obtain desired products[12]. In-stock merchandise, timely production and timely delivery are the key components.

The current research further takes on the existing findings to be validated in the hypermarket settings of Indonesia.

2. Materials and Methods

2.1 Research Framework

The Endogenous (Descriptive) Variables are Service Convenience, Satisfaction, and Loyalty. The Exogenous (Operational) Variables are Shopping enjoyment, Environment quality, Familiarity & Treatment, and Use of Self-Service Technology (SST).

2.2 Proposed antecedents

Proposed antecedents of retail service convenience in hypermarket settings in this research are:

2.2.1 Shopping Enjoyment

Shopping enjoyment refers to a consumer's positive affect towards shopping for items in specific product or service categories, such as apparel or travel services. Hedonic consumers consider shopping an enjoyable and rewarding experience[13], and therefore perceive lower time and effort-costs than consumers who view shopping as unpleasant. Shopping enjoyment is expected to be positively related to each of the four retail service convenience dimensions because shopping enjoyment is an affective state that encompasses the shopping experience and involves positive emotions toward the overall process. A scale was developed for shopping enjoyment based on the scale proposed by Saraswat, Aagja & Mammen[11]. It comprised 5 questions pertaining to the perception of hypermarket customers towards shopping enjoyment, which were measured on a 4-point scale (1=strongly disagree, 4=strongly agree).

2.2.2 Environment Quality

Environment quality in organized hypermarket retail setting denotes offering the customers with a pleasant shopping environment that includes a perfect ambience to shop with free and spacious layout, comfortable temperature, good lighting arrangements, soothing music, attractive architecture, wall and floor colour schemes, and accessible layouts[14]. The most influential store variables in the atmospherics literature are perceptions of ambience, design, layout and retail density[15].An environment quality scale was developed which had 3 questions pertaining to perception of hypermarket shoppers towards environment quality and the responses were measured on 4-point scale (1=strongly disagree, 4=strongly agree).

2.2.3 Familiarity & Treatment

Familiarity and personal treatment by the store positively affect a customer's cognitive assessments of service convenience[15]. A scale was developed for familiarity and treatment which had 4 questions that were measured on 4-point scale (1 = strongly disagree, 4 = strongly agree).

2.2.4 Use of SST

The business processes are changing from one where the retailer serves all customers to one where the customers serve themselves. SSTs are technological interfaces that allow customers to perform the entire service on their own, without direct assistance from service employees[16].A scale was developed for use of SST which had 4 questions pertaining to the perception of hypermarket consumers towards usage of SST and the responses were measured on 4-point scale (1 = strongly disagree, 4 = strongly agree).

2.3 Consequents of Service Convenience

Proposed Consequents of Retail service convenience in the hypermarket settings in this research are:

2.3.1 Satisfaction

Researchers have identified that consumers' satisfaction is highly correlated with the overall convenience which would exert a positive influence on consumers' future purchase behaviour[7].A scale was developed to measure satisfaction with 3 questions pertaining to the hypermarket customers' perceptions towards customer satisfaction and the responses were measured on 4-point scale (1 = strongly disagree, 4 = strongly agree).

2.3.2 Loyalty

Customer loyalty has two aspects - behavioural and attitudinal loyalty. Attitudinal loyalty refers to customers' willingness to build relationships with service providers, whereas behavioural loyalty refers to customers' repeated purchasing behaviours. Both kinds of loyalty indicate that customer satisfaction with products and services is crucial to a customer's decision to remain in a buying relationship with a business[7].The scale developed to measure loyalty intentions comprised 3 questions pertaining to the hypermarket customers' perceptions towards loyalty intentions and the responses were measured on 4-point scale (1 = strongly disagree, 4 = strongly agree).

2.4 Service Convenience

The scale for service convenience in retail setting was developed based on the one proposed by Seiders, Grewal, Berry[9] which had five dimensions and also based on the one proposed by Aagja, Saraswat and Mammen[11] which has four dimensions. For this scale further 5 questions were prepared regarding the hypermarket customer's perceptions towards service convenience and the responses were measured on 4 point Likert scale (1=strongly disagree, 4 = strongly agree).

2.5Research Gaps

The concept of retail service convenience is at a nascent stage where only the basic conceptualization and a generalized structural validation have been done. Indonesia is at the peak of a retail revolution and much research has been focused on the service quality and service performance aspects. Negligible work has been done regarding the validation of the dimensions of service convenience and consumption experience in different retail formats.

2.6 Significance of Research

This study alleviates the research gap by validating the proposed antecedents and consequents of Retail Service convenience in the hypermarket settings of Indonesia thereby testing the proposed conceptual framework. This research attempts to benefit all the global investors who plan to venture in Indonesia or the players which are already existing and would like to increase not only their market share but also their heart share because the experiential aspect of "convenience" will add more cognitive value to their offerings which in turn is expected to result in better customer satisfaction and loyalty intentions

2.7 Methodology

2.7.1 Objective of the Research

The prime objective was to develop a comprehensive framework defining the antecedents and consequents of retail service convenience in the hypermarkets of Indonesia. The secondary objective was to suggest measures to the retailers to retain loyal customers for longer time focusing on service convenience.

2.7.2 Sampling Methodology

The population comprised customers shopping at organized retail formats in Jakarta while frame comprised customers shopping at hypermarkets in Jakarta.

Proportionate Stratified sampling has been employed wherein strata comprised customers shopping in respective outlets of each brand of hypermarkets. The list of hypermarkets in the city of Jakarta was compiled including number of branches for each hypermarket. The ratio of each hypermarket to total stores was computed and the estimated sample size

was proportionately distributed amongst these stores. **Table 2** shows the hypermarket-wise distribution of sample size according to proportionate stratified sampling.

In the current study, the population (customers of hypermarkets) in Jakarta is not known. The standard deviation value was ascertained from pilot study comprising 60 hypermarket customers and the value was computed using SPSS. In order to compute the standard deviation value the average standard deviation values of three statements pertaining to retail store loyalty was calculated (0.610).

The estimated sample size was computed using the formula $n = [(\sigma^2 \cdot z^2) / D^2]$[17]. The standard deviation (σ), standard variate (z), level of acceptable error (D) and estimated sample size (n) values were 0.610, 1.96, 0.05 and 572 respectively.

2.7.3 Data Collection

Survey method was employed with the help of structured undisguised questionnaire. The questionnaire was translated into Bahasa (Indonesian language) for greater comprehension and the help of local residents were sought for translation (questionnaire) and to act as interpreters and enumerators (data collection).

2.7.4 Research Questions and Hypotheses

Research Question 1: Do the proposed antecedents have significant influence on Service Convenience in hypermarkets settings?

> H_{01a}: Shopping enjoyment has no significant influence on Service Convenience in hypermarkets

> H_{01b}: Environment quality has no significant influence on Service Convenience in hypermarkets

> H_{01c}: Familiarity and treatment does not have significant influence on retail service convenience in hypermarkets

> H_{01d}: Use of technology/SST does not have a significant influence on retail service convenience in hypermarkets

Research Question 2: Does retail service convenience have significant influence on customer satisfaction in hypermarket setting?

> H_{02}: Retail service convenience has no influence on customer satisfaction in hypermarket setting.

Research Question 3: Does customer satisfaction have significant influence on loyalty intentions in hypermarket setting?

> H_{03}: Satisfaction has no significant influence on loyalty in hypermarket setting.

3. Statistical Analysis and Results

3.1 Reliability Statistics

The Reliability coefficient Cronbach's Alpha was found to be 0.892 for 31 items, which is well above 0.7 and hence establishes high internal consistency among the measurement items[18].

3.2 Structural Equation Modelling

3.2.1 Measurement Model

The measurement model indicated an acceptable model fit of the data [$x2$= 267.786, df = 137, p<0.001; $x2$ /df = 1.954 (<2); CFI = 0.932; TLI = 0.916; IFI = 0.94; NFI = 0.825; PNFI = 0.71; PCFI = 0.75 and RMSEA = 0.052].

3.2.2 Composite Reliability and Average Variance Extracted

Composite reliability (CR) of all the latent variables is greater than the acceptable limit[19] of 0.70. The average variance extracted for all the factors is greater than 0.5, which is acceptable[20]. **Table 3** shows the values of CR and AVE of all the dependent and independent factors.

3.2.3 Discriminant Validity

Table 4 gives the correlation matrix, which indicates the square roots of the AVE values of all the latent constructs are greater than the inter-construct correlations thereby supporting the discriminant validity of the constructs.

3.2.4 Structural Model & Hypotheses Testing

Structural equation modelling was used to estimate the parameters of the structural model. Goodness of fit statistics of the structural model were acceptable [$x2$ = 329, df = 179, p<0.001; $x2$ / df = 1.84(<2); CFI = 0.943; TLI = 0.916; IFI = 0.92; NFI = 0.84; PNFI = 0.73; PCFI = 0.82 and RMSEA = 0.048].**Table 5** and **Figure 1** present the results of hypotheses testing.
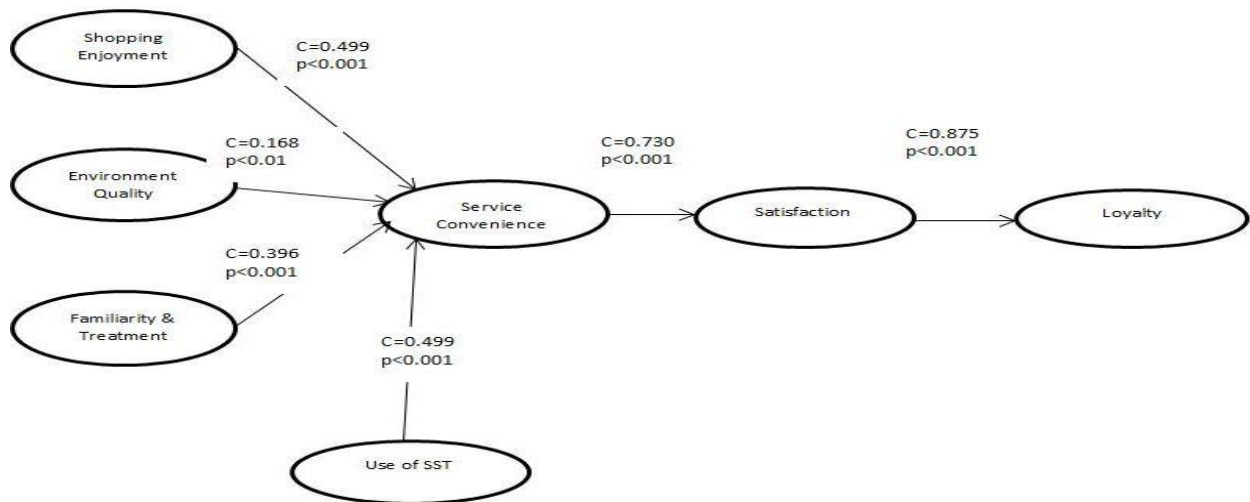
Figure 1: Results of Hypotheses Testing using SEM

4. Discussion and Conclusion

The standardized path coefficients of Shopping Experience (0.499) represents significant influence of this variable on Service Convenience and the coefficients of Environment Quality (0.168), Familiarity & Treatment (0.369) and Self-Service Technology (0.135) represent moderate influence of these variables on Service Convenience.

The standardized path coefficient of Service Convenience (0.734) represents significant influence of this variable on Satisfaction. The standardized path coefficient of Satisfaction (0.875) represents significant influence of this variable on Store Loyalty.

The top five variables (highest rating) influencing Service Convenience were (i) Convenience due to SST, (ii) preference to shop at stores with SST, (iii) shopping enjoyment at stores due to convenience and fun, (iv) courteous and helpful hypermarket personnel and (v) attractive architecture of the store with good lighting arrangements. The bottom five variables (lowest rating) influencing Service Convenience were (a) SMS promotion alerts, (b) regular shopping at the outlet makes it more convenient, (c) free and spacious layouts (d) less overcrowding and (e) feeling apprehensive using SST while shopping at hypermarket.

It is found that the calculated p value was greater than 0.05; Goodness of Fit index (GFI) value, Adjusted Goodness of Fit Index (AGFI) value and Comparative Fit index (CFI) value were greater than 0.9 indicating a very good fit. It was found that Root Mean Score Error of Approximation (RMSEA) value was minimal.

This research has helped to assess the antecedents influencing Service Convenience and its consequents in the hypermarkets retail service escape of Indonesia. It has served as measurement technique to assess how service convenience management leads to loyalty (patronage) intentions in hypermarkets.

5. Acknowledgement

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APPENDIX

Table 1 Retail Hypermarket Scenario in Jakarta

S. No.	Hypermarket	No. of Stores in Jakarta
1.	Carrefour	16
2.	Lotte Mart	6
3.	Giant Hero	3
	Total Outlets	25

Table 2 Proportionate Stratified Sampling

Hypermarket	No. of Stores in Jakarta	Number of Respondents
Carrefour	16	366
LotteMart	6	137
Giant Hero	3	69
Total Outlets	25	572

Table 3 Composite Reliability & Average Variance Extracted (CR & AVE Values)

Constructs	Composite Reliability (CR)	Average Variance Extracted (AVE)
Shopping Enjoyment (SE)	0.79	0.52
Environment Quality (EQ)	0.87	0.67
Familiarity & Treatment (FT)	0.86	0.54
Self Service Technology (SST)	0.80	0.50
Service Convenience (SCON)	0.84	0.53
Satisfaction (Sat)	0.78	0.55
Loyalty (Loyal)	0.74	0.58

Table 4 Correlation Matrix for Discriminant Validity

	SE	EQ	FT	SST	SCON	SAT	LOYAL
SE	0.72						
EQ	0.586	0.81					
FT	0.566	0.71	0.74				
SST	0.585	0.689	0.628	0.70			
SCON	0.715	0.617	0.674	0.602	0.73		
SAT	0.654	0.658	0.584	0.567	0.72	0.74	
LOYAL	0.678	0.448	0.476	0.347	0.745	0.733	0.76

Table 5 Hypotheses Testing Results

Hypothesis	Hypothesized Paths	Standardized Path Coefficients	p Value	Results
H_{1a}: Shopping Enjoyment/Service Convenience	SE=>SCON	0.499	***	Accept
H_{1b}: Environment Quality/Service Convenience	ENQ=> SCON	0.168	0.006**	Accept
H_{1c}: Familiarity & Treatment/ Service Convenience	FT=> SCON	0.396	***	Accept
H_{1d}: Usage of SST/Service Convenience	TECH=> SCON	0.124	0.038*	Accept
H_2: Service Convenience/Satisfaction	SCON=>SAT	0.740	***	Accept
H_3: Satisfaction/Loyalty	SAT=>LOYAL	0.857	***	Accept

Notes :*Implies significant at $p<.05$; ** Implies significant at $p<.01$; *** Implies significant at $p<.001$; NS Implies "not significant"