Factors Affecting the Choice of Supermarket for Shopping by Consumers in Hanoi Capital in Vietnam

Do Hai Hung*    Nguyen Thi Hanh Nguyen
School of Business Management, Hanoi University of Industry, Viet Nam

Abstract
In recent years, the Vietnam's economy has been growing, the demand for shopping and consumption of Vietnamese people has been sharply increased. The boom of branded and prestigious supermarket chains in the market such as Big C, Mobile World, Vinmart, or new retailers entering the organized retail market (supermarkets) in Vietnam has partly met the shopping needs of Vietnamese people. The authors select the scope of the study is Hanoi capital to identify and measure the factors that influence consumers' decisions to choose a shopping supermarket. Through qualitative and quantitative analysis, the research results show that there are 07 factors that influence the consumer's decision of choosing supermarkets to buy goods in Hanoi capital, which are the goods, prices, Convenience, reliability, supermarket staff, communication marketing and shopping environment. In particular, goods have the biggest influence on the consumer's decision choosing the supermarkets to buy in Hanoi,Vietnams.

Keywords: Consumers; Supermarket; Consumer behavior
DOI: 10.7176/EJBM/12-3-06
Publication date: January 31st 2020

1. Introduction
According to Peter D. Bennet (1988) [1], consumer behavior is the study of how consumers exhibit in finding, buying, using, evaluating products and services that they expect will satisfy their individual needs. According to Kotler (2001) [2], in marketing, marketers study consumer behavior in order to identify consumers' needs, interests and habits, in specifically, what consumers want to buy, why they buy the products, why they choose the brands, how they buy them, where they buy them, when they buy them, and how they buy them to build a marketing strategy that drives consumers to buy products and services. Therefore, according to Kotler, businesses and marketers must understand the needs and factors that influence customers' buying behaviors (Figure 1).

Nowadays there have been many studies on consumer behavior, such as: Pugazhenthi (2010) [3] Research on "Factors Influencing Customer Loyalty and Choice of Retailer While Buying Fast Moving Consumer Goods" including food items (fresh food, processed food, technology, food), and non-food items (Personal care products, cosmetics, household cleaners); The research results show that there are 8 factors that influence Customer Loyalty and Choice of Retailer While Buying Fast Moving Consumer Goods which are price, goods, store space, the way of goods arrangement, customer service, parking, quick payment and promotional discounts. The research by Batt and Chamhuri (2010) [4] examined the factors that influenced the choice of distribution channel of fresh meat products in Malaysia. The study was conducted with a sample of 250 people. Research showed that the main factors contributing to the impact of the choice of distribution channel of fresh meat include: Awareness of freshness; Halal guaranteed certification (Halal guaranteed); good relationship with the seller; Competitive price and comfortable environment when shopping. Research by Jaravara & Chitando (2013) [5] on "The Role of Store Location in Influencing Customers’ Store Choice". Research showed that store location played a strategic role on retailing and attracting customers. From ten factors that were taken into account the assessment, only seven factors tended to be inclined to lead customers to decide which store to shop. Of those seven factors, four factors played key role in making decisions about where to shop, including: close to home, good location, free parking, and easily identifiable stores. Three other factors have a weaker impact which is conditions of shopping space, price and service quality. Besides the typical research results, there are also some research results of other scholars such as Ou et al. (2006) [6], Darian et al. (2001 [7], ... Results) Researches have helped retail business managers to have a more comprehensive and thorough view of consumers' habits, behaviors, needs, and beliefs to find out the
appropriate solutions and then met needs, habits and behavior of consumers.

Based on the characteristics of the Vietnamese market, generally, there are few researches about the overall behavior of selecting shopping places, specifically supermarkets. According to the authors' research, up to now, there has not been any research to test the behavior of selecting supermarkets as shopping places of consumers in Hanoi capital in Vietnam, and this is the reason why the authors decided to conduct this study.

2. The research model proposes factors influencing Hanoi consumers' decision to select supermarkets for shopping

2.1. Proposed research model

The authors propose a research model consisting of 08 elements, including: Goods; Price; Personal characteristics of customers, proposed based on the research model of Pugazhenthi (2010) [3]; factor: trust and shopping environment of Batt & Chamhuri’ (2010) [4]; At the same time, the author added 3 new elements to the proposed research model: Marketing communication - promotion, convenience and supermarket staff. The proposed research model is shown in Figure 2.

In this proposed model, the dependent variable is the decision to choose a supermarket for shopping, the independent variables are Price, goods, convenience, shopping environment, service personnel, marketing communication-promotion, trust. The control variables are individual characteristics of the customer.

![Figure 2. The research model proposes factors influencing Hanoi consumers' decision to select supermarkets for shopping](image)

Hypothesis H1: Goods have the same direction influence on the choice of supermarkets for shopping by consumers in Hanoi.

Hypothesis H2: The reasonable price of goods has the same direction influence on the decision to choose a supermarket for shopping by consumers in Hanoi.

Hypothesis H3: Convenience has a positive influence on consumers' decision to choose a supermarket for shopping in Hanoi.

Hypothesis H4: Shopping environment factors influence the decision to choose supermarkets for shopping by consumers in Hanoi.

Hypothesis H5: Supermarket employees have the same direction influence of the supermarket's choice of shopping for consumers in Hanoi.

Hypothesis H6: Communications - promotion - sale promotion have the same direction influence on the decision of supermarkets to buy from consumers in Hanoi.

Hypothesis H7: Confidence of customers has the same direction influence on the choice of supermarkets to buy goods for consumers in Hanoi.

Hypothesis H8: There is a difference in the decision to choose a supermarket to shop among customer groups with different personal characteristics in terms of gender, age, education level, occupation and income.

3. Research method

3.1. Preliminary research

The preliminary research phase is a qualitative research using a focus group discussion technique consisting of 3 groups (each group of 06 loyal customers of supermarkets), in order to both discover and confirm the elements that influence the choice of supermarket, and the observed variables measure these factors on the basis of a discussion outline drafted by the authors. Focused discussion results are the base to adjust the theoretical model.
proposed by the authors and the draft scale 1 to draft scale 2 used for the trial interview period of 18 regular customers shopping in the supermarket in Hanoi. On that basis, it is revised into an official scale and designed the questionnaire used for the official research phase.

The members of the three discussion groups agreed: affirming the factors according to the author's research model (Figure 2) are the main factors affecting the decision to choose a supermarket as a shopping address of consumers in Hanoi. The evaluation scale is built by the authors based on the form of a five-level Likert scale from 1-5 (1 is completely disagree; to 5 is totally agree).

3.2. Official research
The sample was selected using a convenience sampling method. In this study, the scale consists of 6 independent variables, the expected number of samples according to the formula Tabachnick and Fidell (1991) [12] is n ≥ 98 samples, according to Harris RJ. Aprimer (1985) [13] n ≥ 111 samples; according to Hair et al (2009) [14], n ≥ 145 (29 x 5). However, in principle, the bigger the sample size is, the better this research is done on the difference testing of supermarket selection decisions as shopping addresses according to customers' individual characteristics (i.e. overall study into small groups according to qualitative variables). Therefore, the author determined the sample size to be 550. Samples were collected by the convenience non-probability sampling method by direct interview with supermarket customers through the questionnaire. The total number of votes issued was 550, collecting 500 valid votes, ensuring the sample size conditions was determined and distributed as follows (Table 2)

| Characteristics | Research sample |
|-----------------|----------------|
|                 | Quantities | Rate (%) |
| **Supermarket** |            |          |
| Vinmart         | 150 | 33,3 |
| Mobile World    | 50  | 10,0 |
| T-Mart          | 50  | 10,0 |
| Big C           | 150 | 33,3 |
| Viettel Store   | 50  | 10,0 |
| Điện Máy Xanh   | 50  | 10,0 |
| **Gender**      |            |          |
| Male            | 211 | 42,2 |
| Female          | 289 | 57,8 |
| **Age**         |            |          |
| From 18-22      | 103 | 20,6 |
| From 22-30      | 149 | 28,2 |
| From 30-40      | 116 | 23,2 |
| From 40-50      | 77  | 15,4 |
| > 50            | 63  | 12,6 |
| **Education level** |      |          |
| High school     | 151 | 30,2 |
| Vocational training and College | 142 | 28,4 |
| Undergraduate   | 177 | 35,4 |
| Postgraduate    | 30  | 6,0  |
| **Average Income** |      |          |
| < 5 million VND | 82  | 16,4 |
| 5-10 million VND | 173 | 34,6 |
| 10-20 million VND | 130 | 26,0 |
| 20-30 million VND | 66  | 13,2 |
| > 30 million VND | 49  | 9,8  |

(Source: Based on the survey results of the authors)

After collecting and processing the data, the authors analyze the reliability of Cronbach's Alpha scale and EFA factor analysis through using the SPSS23.0 software to measure the investigated variables to ensure no errors, determine the answers from the investigators is accurate and true to reality. In particular, through these coefficients to test statistics on the degree of rigor that the questions in the scale correlate with each other and check the unidirectional of the scales. When assessing Cronbach's Alpha coefficients that have a variable correlation coefficient (Item -Total Correlation) less than 0,3, they will be disqualified and the criteria for choosing a scale are Cronbach's Alpha coefficients of the component greater than 0, 8.

After obtaining the official scale and identifying the main factors that influence the decision on supermarket selection, the authors conduct multiple correlation analysis and multiple linear regression analysis to measure the extent of factors affecting on the choice of supermarkets to buy by consumers in Hanoi

4. Research results
4.1. Verify the reliability of the scale
The reliability of scales is assessed by Cronbach’s Alpha coefficient. Results of calculating Cronbach’s Alpha
coefficients with each concept indicate that 8 groups of research elements have Cronbach’s Alpha coefficient greater than 0.6 (Table 3). All observed variables have varied-total correlations meeting the requirement of > 0.4. Therefore, the factor scales affecting the decision of consumers to choose supermarkets for shopping in Hanoi - Vietnam are eligible for EFA analysis.

4.2. Exploratory Factor Analysis EFA

According the results of the EFA discovery factor analysis, all factors influencing the consumers’ decision to select supermarkets for shopping in Hanoi-Vietnam Capital for KMO value (Kaiser-Meyer-Olkin) = 0.829 > 0.6. Therefore, factor analysis is consistent with the research data obtained. The Bartlett’s test value with the hypothesis (H0) is "non-correlated variables" with the value Sig = 0.00 < 0.05.

| Factors |  Factor Loading |
|---------|----------------|
| Cronbach’s Alpha | 0.786, 0.718, 0.798, 0.810, 0.815, 0.796, 0.785, 0.746 |
| MTST3   | 0.811          |
| MTST4   | 0.765          |
| MTST2   | 0.755          |
| MTST6   | 0.713          |
| MTST5   | 0.695          |
| MTST1   | 0.668          |
| MTST7   | 0.645          |
| STT4    | 0.734          |
| STT3    | 0.715          |
| STT2    | 0.701          |
| STT5    | 0.667          |
| STT1    | 0.623          |
| STT6    | 0.610          |
| NVST5   | 0.838          |
| NVST4   | 0.822          |
| NVST2   | 0.775          |
| NVST1   | 0.661          |
| NVST3   | 0.624          |
| TT2     | 0.837          |
| TT1     | 0.802          |
| TT5     | 0.780          |
| TT3     | 0.752          |
| TT4     | 0.696          |
| SP2     | 0.847          |
| SP1     | 0.812          |
| SP4     | 0.785          |
| SP3     | 0.725          |
| TC3     | 0.839          |
| TC4     | 0.801          |
| TC5     | 0.736          |
| TC1     | 0.698          |
| TC2     | 0.626          |
| GIA5    | 0.838          |
| GIA3    | 0.781          |
| GIA4    | 0.651          |
| GIA1    | 0.658          |
| GIA2    | 0.602          |
| QĐ1     | 0.766          |
| QĐ2     | 0.756          |
| QĐ4     | 0.688          |
| QĐ3     | 0.586          |

(Source: Results of data analysis through SPSS 23.0 of the authors).

The data processing result in the value of Eigenvalues = 1,184 > 1, so it can be confirmed that the number of
factors extracted is appropriate. Total Variance Explained of factor analysis is 60.125% > 50%. This means that the extracted factors that explain 60.125% of the observed variables are included in the EFA analysis. Thus, after conducting EFA discovery factor analysis, research model and research hypotheses, the scale of the research concepts (independent and dependent variables) is preserved.

4.3. Regression analysis
The regression analysis result for adjusted R = 0.685 and R² value is 0.596, this means that the relationship between the independent variables explains 59.6% of the dependent variable as “The decision on supermarket selection for shopping ” by consumers in Hanoi-Vietnam capital. Thus, 1-R² adjusted by 0.404 is explained by factors not included in the model, which is considered as one of the limitations of the study. With Durbin-Watson coefficient = 2.016, it can be confirmed that the model has no autocorrelation phenomenon (Table 4).

| R | R squared | R squared corrected | Standard error of estimation | Durbin-Watson Index | Validation value F | Level of significance Sig |
|---|-----------|---------------------|----------------------------|---------------------|-------------------|--------------------------|
| 0.685 | 0.618 | 0.596 | 0.689 | 2.016 | 62.582 | 0.000 |

(Source: the data processing results of SPSS23.0 of the authors).

Through ANOVA analysis results, the value of F = 62.582 with statistical significance Sig = 0.000 <0.05 (Table 4), this can confirm the existence of the relationship between the independent and auxiliary variables. Thereby, showing that the research model ensures reliability.

4.4. Test of statistical assumptions
Using Anova's variance analysis to determine the difference in supermarket choice for shopping by Hanoi consumers, according to the individual characteristics of the survey participants. In this analysis, the coefficient of concern is the Sig coefficient. The H0 hypothesis poses that there is no difference in the decision to choose a supermarket to shop by gender, income, age, education. If the Sig coefficient is <0.05, rejecting the H0 hypothesis means that there is a difference in the evaluation results of the subjects on the decision to select supermarkets for shopping by personal characteristics. If Sig <0.05, accept the hypothesis H0.

The test results of all target groups by education level, gender, income and age all gave Sig values of <0.05. Specifically, testing the difference by sex value Sig = 0.015; Test the difference by income with value Sig = 0.003; According to education level, Sig value = 0.001 and according to age, Sig value = 0.018. Therefore, reject the H0 hypothesis.

5. Conclusion
The research results show that there are 07 factors affecting the decision to choose supermarkets for shopping by consumers in Hanoi - Vietnam, of which commodities has the biggest impact, environmental factor has the weakest impact on the choice of supermarkets to shop. The determination of factors influencing Hanoi consumers' choice
of supermarkets as shopping places, together with their importance and actual value is a scientific basis for managers to plan development policy of the supermarket system in Hanoi. Through this research result, the authors propose and recommend a number of the main solutions to promote Hanoi consumers to choose supermarkets for shopping, specifically as follows:

Firstly, improving the quality of goods and services at the supermarket system. Supermarkets need to focus on improving the quality of products and creating trust to give consumers have the "perceived quality" they most want and this is also a strategic and imperative task not only to compete in the present, but also to meet the long-term and sustainable development strategy such as: Paying attention to the source of goods sold at supermarkets, always choosing manufacturers and supplying prestige, need QC, QA (product quality control) to ensure the best quality of goods; Improve storage process; Complete and improve the quality of information on product packaging; Restricting no branded products on the market.

Secondly, regularly updating information and listing prices clearly, not to confuse consumers. Implementing the program "sales stabilization price" with reasonable and competitive prices for Mini supermarket stores. In addition, attention should be paid to the maintenance and development of large-scale supermarkets in the city center, or places with convenient traffic connections between residential areas; Focusing on developing the medium-sized supermarket model and mini supermarket in new urban areas and residential areas. Supermarkets need to evaluate the potential, weave and expand more Mini supermarket system for consumers to shop the most convenient way. Thereby improving the convenience for consumers, creating convenience to make consumers the "convenience" they most desire

Thirdly, improving the quality of training and encourage employees to process transactions accurately to avoid errors and comply with the promises to gain consumer trust. Supermarkets should focus on managing the quality of goods and services, building trustworthy images, implementing many marketing programs to develop the brand to consumers. At the same time, supermarkets should always make a good impression and imprint the image of the supermarket brand in the minds of consumers

Fourthly, developing a widespread distribution system which closes to consumers. Implementing promotion and discount strategy to attract consumers. In order to improve the competitiveness and rationality of selling prices, prices must be clear and comparable. Carry out honest, attractive and impressive advertising programs. Especially not fictitious, fake the uses of the product when advertising and letting consumers know that the supermarket sells quality products. Carrying out a lot of social activities, this not only helps consumers know the brand of the local supermarket system, but social activities will help consumers more trust in the way supermarkets do their business activities.

References
Bennet,P. (1988), Marketing. McGraw-Hill, 560-668.
Pugazhenthi. (2010). Factors Influencing Customer Loyalty and Choice of Retailer. Master's Thesis.
Batt & Chamhuri. (2010). Exploring the Factors Influencing Consumers’ Choice of Retail Store When Purchasing Fresh Meat in Malaysia. International Food and Agribusiness Management Review, 16(3).
Jaravaza.D. (2013). The role of Store location in influencing customer’s store choice. Journal of Emerging Trends in Economics and Management Sciences (JETEMS) 4(3): 302-307.
Ou, W., Abratt, R. & Dion, P. (2006). The influence of retailer reputation on store patronage. Journal of Retailing and Consumer Services, 13(3), pp. 221-230.
Darian, J. C., Tucci, L. A. & Wiman, A. R. (2001). Perceived salesperson service attributes and retail patronage intentions. International Journal of Retail & Distribution Management, 29(5), pp. 205-213.
Nguyễn Lê Bảo Ngọc. (2013). Nghiên cứu các yếu tố tác động đến sự lựa chọn mua sắm ở chợ truyền thống của người tiêu dùng Thành phố Hồ Chí Minh, Đại học Kinh tế Hồ Chí Minh.
Phạm Tấn Nhật. (2013). Các yếu tố ảnh hưởng đến quyết định chọn kênh siêu thị kinh nghiệm của người tiêu dùng TP. HCM, Đại học Kinh tế Hồ Chí Minh.
Nguyen, N. & Leblanc, G. (2001). Corporate image and corporate reputation in customers’ retention decisions in services. Journal of Retailing and Consumer Services, 8(4), pp. 227-236.
Tabachnick B.G. & Fidell L.S. (1996). Using Multivariate Statistics, HarperCollins College, New York.
Richard J.Harris. (1985). A Primer of Multivariate Statistics, New York: Academic Press, 546.
Hair Jr, J. F., Babin, B. J. & Black, W. C. (2009). Multivariate Data Analysis.