CONSUMER PREFERENCES MODEL IN OFFLINE AND ONLINE SHOPPING BEHAVIOUR ON RETAIL BUSINESS

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Abstract

How do the factors of retail mix and brand image influence consumer preference? How do they affect offline and online shopping behaviour? We survey 300 respondents and, through discriminatory analysis, find the two most important variables both online and offline.

Keywords: Consumer Preferences, Shopping Behaviour, Retail mix, Brand image

1. INTRODUCTION

Retail industry in recent years develops very rapidly. It evolves in parallel with the changes that occur in society. Increasing levels of discretionary income lead to consumers seeking a change in the management of retail industry. Badan Pusat Statistik. (BPS, Indonesian Statistics Department) data in 2016 shows that there are 74 million people of the middle and upper middle classes, a number estimated to be 141 million by 2020. Each year it appears that between eight and nine million new people enter this class. The growth of the middle and upper middle class is widely distributed across many regions in Indonesia. In 2016 there are 25 regions (cities or regencies) whose upper and middle class number above 500 thousand people, and there are expected to be 54 regions by the year 2020.

As always in the development of the modern era, entrepreneurs must innovate to survive. The Association of Indonesian Retailers (Aprindo) states that in 2016, there was a 10% increase in national retail sales. This increase is in line with the overall improvement of the Indonesian economy in 2016. The improvement in that year – the latest for which figures are available – has several long-term trends in its favour, ranging from the national inflation rate that tends to improve, to the stable controlled and supported price of electricity , as well as gas and fuel. BBM, the mobile wallet app (and much else) on a smartphone, remains popular. The Bank of Indonesia's benchmark interest rate fell three times in 2016. Compared to other ASEAN countries, Indonesia's retail growth is good. In Singapore retail business actually decreased.

Based on the 2015 Online Shopping Outlook issued by Brand & Marketing Institute (BMI) Research, the opportunities of online shopping are very big as the number of internet users in Indonesia increases. BMI say that back in 2014, online shopping reached 24% of total internet users in Indonesia. The research was conducted in 10 major cities in Indonesia, and 1.213 people aged between 18 and 45 years were interviewed through a phone survey. The surprising fact is that the value of online shopping back in 2014 reached Rp. 21 trillion with an average spending per person per year of Rp 825,000.

Based on the above matters, this study aims:

1.1 To separate the factors of retail mix and brand image in forming consumer preferences today (2018).

1.2 To investigate the trends of offline and online shopping behaviour.

1.3 To establish a model of consumer preferences in offline and online shopping behaviour and its implications for retail business.

2 LITERATURE REVIEW

2.1.1 Retail mix

Levi., Weitz (2014) define retailing as a business activity that adds value to products or services sold to consumers for the family or for the consumer themself. Retail management needs to build a retail mix that accommodates the needs of the target market better than its competitors. Retail mix is a combination of retail factors that form the basis of consumer decisions to make purchases. The elements of the retail mix are:

2.1.2 Consumer Services.

According to Kotler (2000), service quality is the total effect of the characteristic forms of customer services that demonstrate a supplier's ability to satisfy the needs of the customer, both visible and hidden. Those needs may be for other services after closure. The "service quality" above of Kotler (2000) comes before the closure.

Zeithhaml., Berry., Parasuraman(1996) describe this service quality in five ways, namely: the customer must see the vendor's service as tangible (real), reliable, responsive, certain , and empathetic.

2.1.3 Product diversity

Product diversity is the result of planning to ensure that products in one group or in a number of product groups are in stock at a retail store. Kotler., Keller (2012) revealed that there are four indicators of product diversity, namely: variation of product brand, variation of product completeness, variation of product size, and variation of product quality.

2.1.4 Price

According to Engel., Blackwell., Miniard (1995), price is one of the important factors for consumers in making decisions to buy or not. There are five elements of price, namely: affordability, competitive price, compatibility of price with quality, and discounts.

2.1.5 Promotion

Promotion, say Berman., Evans (2010), is an activity that influences perceptions, attitudes and consumer behaviour towards a retail store with all its offerings. They say there are four measures of promotion, namely: the number of promotional activities, discount pricing, coupons with prizes, and discounts.

2.1.6 Store Atmosphere

According to Levy., Weitz (2014), the atmosphere of a store refers to the design of an environment through visual communication, lighting, colour, music, and smell to stimulate consumer perceptions

and trigger emotional responses so as to influence their buying behaviour. The store atmosphere depends on five factors, namely: the exterior, the interior, layout, security, and facilities.

2.1.7 Brand image

Brand image is a collection of perceptions that exist in the human mind about a brand (Ouwersoot .,Tudorica, 2001). For Keller (2008), the brand image is a perception represented by the associations that exist in human memory. Keller (2008) also identifies three dimensions of brand image: favourable association, strength of association, and uniqueness of association. Aaker (2010) speaks of four dimensions, namely recognition, reputation, affinity, and domains.

2.1.8 Consumer Value Perceived

Value, according to Gale., Wood (1994), carries four common associations. First, the value placed by the consumer on the value of humanity as living beings with one unified whole. Second, the interpretation of that value as collectively shared and objective. Third, values (plural) as individual and subjective, that is, purely personal. Fourth, value refers to what is obtained from the activity of purchasing, consumption and eventual disposal of products and services. For Zeithaml (1998), value is the result of a consumer's assessment of the whole product based on their perception of what is offered and received. Chen., Dubinsky (2003) define value as a basic advantage that consumers get in return for the costs incurred to obtain the benefits expected.

2.1.9 Desire to Buy

Darden., Howell (1987), Gotman., Mills (1982) and Hawkins., Best., Coney (1989), describe the buying desire as a complex and multidimensional phenomenon (including motives, needs, interests, economic conditions and social class) itself affected by market circumstances (the buyer's information sources, public role models, and store attributes). Babin, Darden., Griffin (1994) define buying intentions as a comfort orientation that emphasizes the value of useful spending – task-related, sensible, cautious and economical.

3 MATERIALS AND METHODS

3.1 Data And Analysis

THE data used in this study comes from a questionnaire. This questionnaire covers six variables of the retail mix: service quality, product diversity, price, promotion, store atmosphere, and brand image. Thirty-two questions, tested for validity and reliability, were put to exactly 300 respondents.

The analytical method is discriminant analysis (below).

3.2 Population And Sample

The population in this study is all consumers who have been shopping in offline stores and online sites on retail business, in Jakarta and Bandung area. Because this immensely large population cannot be counted exactly, we use quota sampling. Hair (2006) defines quota sampling as the technique that determines the sample of a population that has the required characteristics of the population. In this study the researchers determine the sample (quota) size of 300.

Our technique of "accidental sampling" is a random approach to consumers domiciled in the area of Jakarta and Bandung who have been shopping offline and online, and who happened to meet researchers at the site of research.

3.3 Instrument Test (Validity & Reliability Test)

According to Hair (2006), the validity test is by item analysis, where every value that existed in each item is correlated with the total value of all questions for a variable using a product moment correlation formula. The minimum requirement to be considered is the value of r > of r table value. R table at α = 5% (0,05) with degrees of freedom df = N– 2. In this study, the number of respondents is 30, so df is 28, and r table (0,05; 30) is 0.361.

The reliability test is intended to determine the consistency of measuring instruments in its use, or in other words the measuring tool has consistent results when used many times at different times. According to Arikunto (1998), reliability tests use the Alpha Cronbach technique, where an instrument can be said to be reliable if it has a coefficient of reliability or alpha Cronbach of 0.6 or more.

3.4 Data Analysis Technique

The data collected in this study was Analyzed with Discriminant Analysis. This grouping is mutually exclusive, in the sense that if object A has entered group 1, it is not possible to become a member of group 2. Analysis can then be of any variable that makes group 1 different from group 2, to show what percentage goes to group 1, and what percentage goes to group 2. Because there are a number of independent variables, there will be one dependent variable, the characteristic of discriminant analysis is the data type of the dependent variable of nominal type (category), such as code 0 and 1, or code 1, 2 and 3 and other combinations (Hair, 2006). We use SPSS to simplify the calculation process.

4 FINDINGS AND ARGUMENT

4.1 Finding

4.1 Test Validity

Results are valid if the r-count value is greater than r-table (<0,361) with 30 respondents, then results of the calculation of 32 questions are all declared valid because each has a number greater than 0.361 – all are between 0,592 and 0,796.

4.2 Test Reliability

Based on the reliability coefficient of 0,968, all 32 items are reliable because 0,968> 0,6.

4.3 Discriminant Test

The first stage in the discriminant analysis determines which variable will be included in the discriminant equation and this can be seen in the variables entered table.

Table 1: Variables Entered

Step	Entered	Min. D Squared

		Statistic	Between Groups	Exact F			
				Statistic	df1	df2	Sig.
1	ATMOS	0.110	0.00 and 1.00	7,882	1	298,000	0.005
2	PRODDIVER	0.167	0.00 and 1.00	5,946	2	297,000	0.003

In the analysis of the six variables (consumer service, product diversity, price, promotion, store atmosphere and brand image) there are only two variables with sig numbers below 0,05. They are the store atmosphere variable at 0.005 sig, and product diversity at 0.003 sig. They are the only two significant variables. Or, it could be said, the store atmosphere and the range of products are what affects retail consumers whether offline or online.

The next step is to analyze the two variables that have been selected.

4.3. 1 We perform a significant test of the discriminant function.

From the calculation results obtained – Chi-square value of 11,660 with sign <0.05, then H0 rejected – we conclude that the average value of store atmosphere variables and product diversity of two groups of consumers offline shopping and online shopping together have differences between groups.
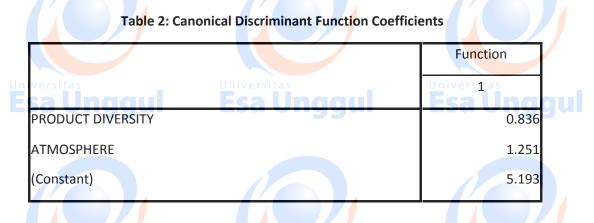
4.3.2 We test the strength of the discriminant function relationships.

Based on the analysis of eigenvalues we obtain a canonical correlation value of 0.596, or squared canonical correlation (CR2) = $(0.596)^2$ equal to 0.351.

So we conclude that the consumer's decision to buy offline or online can be 35 % explained by the store atmosphere and product diversity , and 65% explained by outside variables.

4.3.3 Discriminant Function

The display of canonical discriminant function coefficients shows the product type coefficient of 0.836 and the store-or-website atmosphere coefficient of 1.251.

Table 2: Canonical Discriminant Function Coefficients

	Function 1
PRODUCT DIVERSITY	0.836
ATMOSPHERE	1.251
(Constant)	5.193

Standardized coefficients are used to assess the importance of discriminant variables relative to the formation of discriminant functions. The higher the standardized coefficients, the more important the variable is to the other variables and vice versa.

The variable of store atmosphere is relatively more important than the variable of product diversity in forming discriminant function. The discriminant function follows:

$$z\ Score = 5.193 + 0.836\ product\ diversity + 1.251\ site\ atmosphere$$

4.3.4 Classification

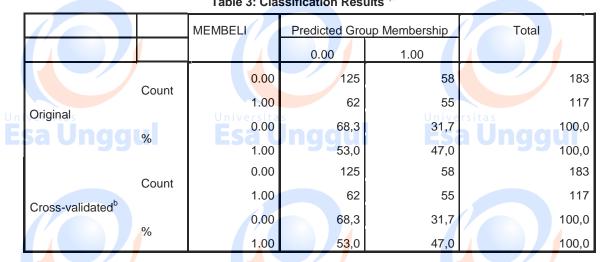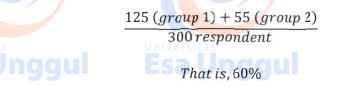The original value indicates that group 1 is the offline shopper and group 2 is the online shopper.

Table 3: Classification Results[a,c]

		MEMBELI	Predicted Group Membership		Total
			0.00	1.00	
Original	Count	0.00	125	58	183
		1.00	62	55	117
	%	0.00	68,3	31,7	100,0
		1.00	53,0	47,0	100,0
Cross-validated[b]	Count	0.00	125	58	183
		1.00	62	55	117
	%	0.00	68,3	31,7	100,0
		1.00	53,0	47,0	100,0

The classification results show that out of 183 consumers in group 1 (offline shopping), 58 of them fall into group 2 classification (online shopping) because the average value on the discriminant variable is closer to group 2 (online shopping). Of the 117 consumer group 2 (online shopping), 62 of them fall into group 1 (offline shopping) because they have an average of discriminant variables closer to group 1 (offline shopping). Based on the original total score obtained for 300 respondents, as many as 183 respondents shop offline and 117 respondents shop online. We conclude that consumers tend to shop in the retail market more than offline. So from a sample of 300 consumers we have an accuracy of classification of:

$$\frac{125\ (group\ 1) + 55\ (group\ 2)}{300\ respondent}$$

$$That\ is, 60\%$$

The prediction accuracy of the discriminant model is 60%. Santoso (2002) says that accuracy above 50% is considered high. Therefore the above discriminant model can be used to classify consumer shopping preferences in the retail market, offline or online.

4.2. Argument

4.2.1 *The store atmosphere affects the number and value of retail purchases offline and online.*

Our results confirm this, and indicate that the more attractive the mood of a store (or site), the better, as stated by Levy., Weitz (2001). Consumers not only respond to the variety of goods and services offered by retailers, but also respond positively to a pleasant purchasing environment.

Knowing and understanding the atmosphere of the store is not easy because the atmosphere of the store is a combination of things that are emotional.

According to Kotler., Keller (2009), the mood of a store is planned to suit the target market and attract customers to buy. Maintaining a good store atmosphere will create a comfortable and enjoyable shopping experience, so consumers will have a good perception of the store and will be more likely to make a purchase.

4.2.2 Product diversity impresses customers both offline and online

The more diverse products there are on display, the more likely it is that browsers will buy. What's more, the buyer wants a product that is always in stock, available in quantity, and complete. In short, buyers do not need to look elsewhere for anything they need. Kotler (2012) describes "completeness" of the product as the availability of all products produced by a manufacturer. Engels., Blackwell (1995) defines product diversity as the demonstrable availability at all times of a complete range of products in all their depth, breadth and quality. Retailers need to offer products that are diverse because different customers want different things. Diversity also encourages consumers to purchase complementary products, frequently on impulse. It follows that a good store atmosphere in accordance with consumer tastes is very important to maintain consumer buying interest over time, with repeat visits.

4.2.2 Retail shopping leads to offline shopping systems.

Our results indicate that retail consumers are more likely to shop in offline stores than online. This is because when they shop offline they can feel and see the product directly (55,7%). They can handle a physical product or judge face-to-face the sincerity of an offer of service. This increases shopping satisfaction (30,7%).

An article in the Wall Street Journal in 2014 reveals why Indonesians still shop offline: they can check the goods directly, they will not be fooled, there will be no booking errors, they can ask advice of the seller when buying a product, they can bargain on price, and they do not have to wait for delivery.

Our results, however, differ from those of Levin, AM., Levi, IP., Weller JA (2005), who finds that the tendency of retail shopping is more and more towards online.

5. CONCLUSIONS

5.1 Store atmosphere and product diversity affect spending offline and online.

This means that if the store (or website) blends product placement, graphics and interiors that look cheerful, warm, and interesting, it will attract consumers who are interested in buying. Likewise, a diversity of products increases sales.

5.2 People are more likely to shop retail in offline stores rather than online.

When they shop offline they can feel and see the product directly (55,7%), and can try the product so as to increase their post-sale satisfaction.

5.3 The formulation of the discriminant

z Score= 5.193+0.836 product diversity+1.251 site atmosphere

This means that consumer shopping behavior in offline shop is more influenced by Store atmosphere and product diversity variables.

6. ACKNOWLEDGMENT

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