Improving Traditional Market Sustainability in The Industrial 4.0 Era through Impulsive Buying Strategy: A Case in East Java, Indonesia

Wiwik Handayani1,2, Endang Iryanti2, Muchlisin Syafiyah3, Susi Hardjanti4

1,2Faculty of Economics and Business, 3Faculty of Architecture and Design, 4Faculty of Social Sciences and Politics
Universitas Pembangunan Nasional "Veteran", Jawa Timur, Indonesia
*wiwik.em@upnjatim.ac.id

Abstract—In the industrial 4.0 era, the issue of impulsive buying to maintain an increased purchases has become ever more attractive to be explored. The major ground is the existence of technology that stimulates consumer’s interest to products in sight. A more eye-catching display, will escalate consumers’ desire to shop. Many modern markets have applied technology to intensify consumer purchases, however, in traditional markets such practices seem to be unfamiliar. For this reason, this study examined variables that affect impulsive buying behavior in traditional markets, employing factors that encourage impulsive buying in the modern market to the traditional markets. Population in this study was consumers of traditional markets in East Java, with purposive sampling technique, and respondents amounting to 400 people. The first research procedure was an experiment, controlling four variables, namely the environment, discount price, payment procedures and facility, continued by spreading questionnaires to respondents. Afterwards, the data was being analyzed using PLS (Partial Least Square). The results of the analysis displayed that the model was acceptable which explained that variable such as environment, discount price, payment procedures and facility affect impulsive buying in traditional markets. Thus, it may be concluded that impulsive buying behavior in modern markets and traditional markets is similar. When discount prices contributed the greatest influence on the traditional markets, in modern markets, the impact was even more profound.

Keywords—Traditional market, Impulsive buying, Merchant behavior, Customer behavior, Government behavior, Supply chain

1. Introduction

This study is a continuation of impulsive buying research in modern markets. Previous issues about impulsive buying were typically done in modern markets such as malls [1]-[7]. It was mostly caused by the pleasant environment, convenient payment procedures, tempting promotions and complete infrastructure. Customers are feeling comfortable in the mall, therefore the mall often become a place to refresh mind after an absorbing work. This condition also encourages someone to make purchases without prior planning.

However, things will be different when impulsive buying occur in traditional markets, given that traditional markets conditions are significantly differ from modern markets. The difference lies in many elements, such as less attractive environment, payment in cash, lack or occasional promotion and incomplete infrastructures. [8] reinforced this fact, stating that traditional markets are usually dirty, not well ordered, although still visited by many (https://vanadiraha.wordpress.com/2014/01/07/revitalisasi-pasar-tradisional-2/). Knowing that despite traditional markets shortcomings, many people still opt them, it present an opportunity to enhance the development of traditional markets by carrying out better amendments. With numerous inadequacies, traditional markets development are not as fast as modern markets. Supported by the opinion of Arifah Fathia consumer behavior that tends to be consumptive causes them to move on from traditional markets (https://www.kompasiana.com/arifahfathia/perkembangan-pasar-tradisional-setelah-maraknya-pasar-modern_552e472f6ea8344f388b456d). This explains that consumers nowadays prefer shopping in modern markets, which circumstances will have a negative impact if it lasts over a long term,
because it will lower middle low society’s income and consequently, the national economy [9]. The current state of traditional markets previously described, becoming the base of thought for the researcher to pursue deeper regarding factors that might be able to transform traditional markets into a fun and comfortable shopping place, hence it will increase impulsive buying.

Impulsive buying behavior will also be able to boost the sales in store or retail, resulting in growth of people’s income. According to ACNielsen, as much as 85% of purchases in the modern market occur without a plan, with only 15% of spending is rendering to the list or plan [10]. Therefore, undoubtedly impulsive buying is a powerful tool increase sales or number of products purchased. The existence of impulsive buying is an opportunity for marketers to introduce new products, generate an effective communication in promoting products so as to encourage greater spending [10]. It is indeed a serious challenge and homework for the government and researchers to make changes in areas that still have a poor traditional market conditions. Collaboration between researchers and government becomes essential to produce solutions related to social complications. In the same time, the role of higher education is required to explore innovations improving traditional markets competitiveness toward modern markets. Communication technology allows promotion to be made more attractive so that the product appear more valuable and presentable [11].

Coupled with the rapid growth of technology that greatly influences consumer behavior, taste and satisfaction demands, 4.0 industrial era requires speed in all actions and decision making, traditional markets must also adjust themselves to technological advances. The changing environment demands alteration of strategies, hence traditional market managers also need to evolve.

The basic question to answer would be whether the significant difference of traditional market conditions will allow possibilities that trigger customer’s impulsive buying behavior like in modern markets. The research attempted to apply impulsive buying behavior model in modern markets to traditional markets, to discover suitable variables to upsurge purchases.

Furthermore, the behavior model of impulsive buying in the traditional market was tested to acknowledge, whether it will generate the same results as in modern markets. Research on the traditional market was carried out after initial research in the modern market, and continued by experimenting variables found in modern markets such as environment (layout), payment procedures (cash and credit), promotions (discount price), facilities (parking arrangements) in traditional markets.

2. Literature Review

2.1. Impulsive Buying

Impulsive buying is a purchase made without planning. [12], [7] Impulsive buying is a purchase that is done spontaneously, considering the needs when a person is at the shopping place, the influence of friends when shopping, planning in shopping. Ambience has a direct effect on the positive emotional response which results in impulsive buying behavior, while the availability of money and task, moderating the relationship between positive emotional response of consumers and impulsive buying behavior [13]. Stated that environment has a negative effect on impulsive buying, while the tendency of impulsive buying, shopping enjoyment, material, personal situation, activity motivation and product attributes affect impulsive buying [14]. Direct-mail marketing and TV Commercial have an effect on in store promotion. In store promotion affects impulsive buying [15]. Argues that packaging affects impulsive buying. By looking at attractive product packaging, there will be an interest to have it. Some of the research above illustrate that there are various factors that inspire consumers to conduct impulsive buying [16].

2.2. Facility

Facility is one of the variables that impact consumers in making purchases. Facility can be access to shopping location, parking, shopping facilities, location which will provide convenience in shopping [17]. Facilities provided by retailers such as proximity of places, types of products sold, speed of shopping, number of purchases, distribution, service processes, are the prerequisite to make a stress-free and quick shopping. These easements will produce a good relation between retailers with consumers.

Relationships established between retailers and consumers must be maintained with commitment to retailer’s responsibility towards
place, area and product quality that consistently exceeds expectations [18]. This means that retailers must have an assurance to provide facilities that are able to deliver satisfaction [19]. Describes consumers buying one, two or not at all, depending on their needs. Retailers must consider travel expenses to reach the store, thus consumers will feel somehow lucky. The amounts purchased will be greatly affected by the facilities provided by retailers.

The shop is also a place to study. Learning process in a shop environment will have a positive influence on consumer perceptions to foster consumer interest. This explains many facilities could be fashioned by retailers to be able to attract consumers increasing their purchase. For example, the facility of speed delivery of products to consumers, parking, transportation access are also a magnetism that marks impulsive buying[20].

2.3. Environment

Consumer behavior in purchasing products is linked to several types of variables: 1) external factors, such as products relation to convenience, price compatibility, and suitability of the store environment; 2) factors related to consumers, such as encouragement from family, consumer attitudes, awareness of product quality, emotions associated with products, consumer experience, health considerations; and 3) decision making process, for example, awareness of problems and search of information [21]. The environment inside the store has an impact on purchasing and consumption [22]. In particular, the retail food store environment is recognized as a determinant of what people eat [23].

Classified store elements into three variables, which are ambience (atmosphere), design, and social factors. Four variations of environmental properties are: 1) variation (diversity and number of alternative choices in the environment; 2) novelty (change and surprise); 3) complexity (variation of stimulation and number of stimuli that able to be distinguished; and 4) conflict (incompatible stimuli)[24].

One aspect that confuses the buyer is the discrepancy, caused by incompatible in-store elements, which will influence consumers in making purchases. External environment factors of the store include building or physical structures and everything contained in the structure. The retail environment could contribute a negative effect on retail shoppers due to improper store design, highlighting the importance of constructing a harmonious environment with the store's image. In addition, narrow aisles, high shelves and too many display of promotions form consumer’s misperception. This means that store environment could be a source for buyer’s confusion. For that reason, holistically speaking, the way consumers feel and process the store environment, and furthermore leverage the classification of the store environment is fundamental.

Among four internal factors of the store, only music has no relationship with impulsive purchases. While the other 3 factors (sales promotion, friendly employees, and shop environment) have a noteworthy consequence on impulsive buying [25]. Passion instigated by music and aroma yields a rising level of pleasure, which in turn positively influences the approach behavior, and satisfaction in shopping [26]. Indicate that the store atmosphere crafts a positive emotions among buyers, that also escalates enjoyment, mood, and fulfills consumers’ hedonic desires, which in the end moves the tendency of impulsive buying[27]. Various studies have analyzed the effects of the presentation and stated that attractive store displays may considerably affect sales. Explore the effect of store displays and found that it directly influence buyers' impulsive behavior [28]. Stores that have regularity in the arrangement and appearance of products allow customers to find and select products more easily and freely [29].

There is a tremendous impact of the store physical appearance to the behavior of buyers, thus, retailers spend a large amounts of money to be able to create a remarkable shopping experience [30]. Environmental actors do not only affect short-term but also long-term buying actions. The store environment will provide experience to consumers, the good ones will powerfully attract consumers to return again. The longer the good experience is, the stronger is the intention to return [31]. If it is a purchasing experience, buyers will come back to shop for more and this might materialize to various types of stores [32] The impact of the store environment may transpire in various store formats and long experience will be able to create loyalty.

One point that refers to the relationship between store loyalty and its main controller, is
customer satisfaction, that is mainly originate from the store environment and the value perceived by consumers, in which is influenced by decision of various products of the retailer [33]. When customers have a great shopping experience in supermarkets and finding various items, interacting with staff and the store's internal environment, the emotions of consumers in the store have a positive and significant relationship with cumulative customer satisfaction. Customer satisfaction has an affirmative relationship with the interest in re-subscription [34]. Identification of differences in the elements of buyers shopping experience in supermarkets and the role of positive emotions caused by the supermarket shopping environment. The main factors of consumer shopping experience, namely interaction with staff, internal store environment, consumer emotions in the store and various types of products. The major controller of consumer loyalty is satisfaction and, the value for money. Customer satisfaction, driven by the sales people and from the perspective of the value for money. The next determinant is satisfaction, therefore there is an indirect impact on loyalty, by contributing to customer satisfaction. The last contributing factor of customer satisfaction is the store environment. Store loyalty is consumer behavior related to store selection decisions.

Customers who are always making a purchase at a particular store could be worth mentioned to have a loyalty to the particular store [35]. The perceived benefits from the loyalty program will be more attractive to men, while women respond positively to innovative programs [36].

2.4. Price Discount

It has been widely known that discount price is the most powerful element to affect consumers’ impulsive buying, both in traditional and modern markets. Show that the expectations of taste and the intention to pay less become the experience of hedonic consumers or their willingness to pay, especially for millennial generations who have the flair of shopping [37]. Millennial women consumers have a higher perception of risk compared to other demographic groups. This means that women's millennial groups are more likely to be easily influenced by larger discounts than other groups [38]. Every discount price event in a certain period of time aims to increase demand or purchase. At present, demand proliferated along time influenced by the number of discounts [39]. Discounts are employed as initial attraction for customers, and will soon be withdrawn after they have fallen in love and are accustomed to buy and use the goods.

Reduction in price or price discounts, which are widely applied in practice, is usually offered by a supplier or vendor to the customer to persuade them ordering in larger quantities [40]. There are two types of price discounts, all unit discounts, which apply to all items purchased on each order, and additional discounts, which only apply if the customer's order amount is within a certain quantity range. Discounted price is a frequent and common part of the consumer shopping experience [41]. Consumers tend to buy greater amounts during the discount period [42]. The demand curve of buyer is influenced by the retailer's price, the direct sale price, and the waiting time. The demand formulation act as a linear function of selling price, delivery time and product differentiation. The higher the sales price, the more total revenue will be obtained, since buyers tend to look for goods with the same function at lower prices [43]. Price reduction or discount prominently affect the purchasing power of consumers in any case. Discounts will also make consumers buy without prior planning. This explains that discount price have an appeal to the purchase of the main, hedonic consumers. Arranging a discount prices also consider several other factors. Pricing is closely related to suppliers and sellers, so that later it will have an impact on the accumulation of transportation costs [44]. Consumers are very selective in buying a product, they consider prices from one store to another [45]. The purchasing supremacy of consumers is also determined by the surrounding culture or society [46].

analyzes the multi-product retail database from the main shopping chain, which captures the period before and after of the store brand recognition in each product category. This process reflects the retailer's strategic efforts to reshape the price leadership environment in a product category that is assisted by the bargaining power and perfected enhanced managerial that accompanies store brand recognition. This explanation also contains an understanding that when consumers are in a strong traditional market, the lowest prices will be
attained, allowing a grander purchase, which is also a form of consumers’ impulse buying.

2.5. Payment Procedure

Making payments in the process of buying or marketing requires convenience in order to increase sales. Modern society really favor for ease and speed in this digital age. buyers strive for a payment system that is fast and efficient, appropriate merchandise, innovative in-store information boards, and attentive staff. The ease of payment currently present in form of cash payment, credit, debit or online [47]. Payments in purchases can be made using mobile commerce: 1). Pay-to-order (consumers pay for products when making an online order) ; 2) Pay-on-delivery (consumers pay for products after shipping)[42].

The availability of money and credit card usage is believed to have a substantial outcome to impulse purchases [25]. Other examples of factors affecting payment is product quality or safety. the level of willingness to pay will be determined by product quality, distance of residence and security [48]. Consumers will be willing to pay more if the product is qualified, safe and the place to buy is close or they do not even need to leave the house. This clarifies the ease of payment and also the likelihood of having an enlarged purchases. Mobile payments significantly upsurge consumers’ disposition to compensate, compared to cash payments. For that reason, traders should practice mobile payments and encourage the use of online methods [49]. Retail shop should not only be a physical shopping shop but furthermore involves cross-network interaction[50].

The proportion of quality sensitive consumers and price sensitive consumers regulates the balance of three key strategic forces - the strength of market expansion, strength of retail margins, and the strength of consumer profitability [51]. Identify conditions when retailers should offer MBG (Money Back Guarantee) for two brands and express that MBG shrinks price competition between the both brands. MBG was found to rise retailer's profit and reduce the profit of NB (National Brand) factory[52]. Their analysis confirms that the retailer’s decision procedure, not in both decentralized or coordinated simple supply chains. Estimating the level of consumer satisfaction and production costs for each brand, handling product return costs, and consumer expenses for returning products to retailers, are vital features in retailers' decisions on return policies and coordination contracts. Giving examples of providing an in-store experience designed to assess the determinants of consumers’ willingness to pay [53].

2.6. Happiness

Impulse buying in a large part is related to happiness and joy but also correlated to negative emotions and decreased self-confidence [54]. When someone impulsively feel happy and joyful after making a purchase, then it must be a positive emotions at work. But if the case is the contrary, the feel regret, frustrated, and dropped self-confidence arise after piloting impulse buying, it is the negative emotions taking over. Thinking about ease and speed makes impulse buying as a normal or even profitable deed. This is a form of positive emotion and contains cognitive elements, in such, impulse buying is positively bonded to happiness buying [7], [55]. On the other hand, many consumers also sense disappointment, and loss after impulse buying [5]. Impulse buying is negatively related to happiness. In analyzing happiness, the measurement has to be both in a sense ( emotive ) and cognitive way. For this reason, first to be understood is the meaning of happiness according to the grouping.

2.7. Regret

After purchasing a product, the consumer evaluates the product purchased in accordance with the necessity or according to the product objectives [56]. If the evaluation results o are not in line with the expectation or needs, regret will follow. Impulse buying has an effect on increasing anxiety. If someone feels mistakenly making a decision it will cause feelings of discomfort or nervousness. Impulsive purchases are mostly done by women and teenagers, thus, regrets are also experienced by them [57]. Remorse for impulsive buying is greater for women aged between 20-35 years, since during that age, they really fond of shopping[58]. Impulsive buying that taken place because of low control will surely resulted in remorse [59]. Regret also often happens to someone who buys a product without having a proper information concerning the product or the purchase process is done too fast. Some studies
have also expounded that spontaneous purchase will cause remorse effect.

3. Research Methodology

3.1. Sampling and Data collection

In the preliminary study, research on impulsive buying behavior has been carried out on women who are shoppers of daily supplies in modern market in Surabaya and Malang. The results demonstrated that the impulsive buying was done with pleasure and therefore, without remorse. Furthermore, the model, result of the first year research, was being verified through the experimental method in traditional markets with the variables to be engineered (arranged by the researcher to fit the variables in the modern market) are: environment, facility, procedures and prices. The data was collected from four traditional markets in Surabaya (Wonokromo, Dukuh Kupang, Pegirian and Pacar Keling) and four traditional markets in Malang (Oro-oro Dowo, Bunulrejo, Madyopuro, Sawojajar). Prior to questionnaire distribution, the experiment was carried out by having the shop engineered through product display settings or store layout, parking, and payment. Afterwards, questionnaire were spread out to 400 respondents that make purchases at those engineered stores in the traditional market.

3.2. Measurement

The measurement of facilities, environment, discount price, payment procedures, and regret variable, each by means of three indicators with a five-point Likert scale. 1 for strongly disagree to 5 for strongly agree. Indicators of impulsive buying and happiness variable mobilize five indicators with a five-point Likert scale.

3.3. Data Analysis

This study employed Structural Equation Modelling (SEM) with analysis model Partial Least Square (PLS) to test the hypotheses that have been previously formulated. PLS analysis is used to assess the effect between environment, discount price, payment procedures, facilities on impulsive buying and the brought about effect, happiness or remorse. As for those being analyzed include: Outer Model Measurement Estimation, data validity and reliability test (AVE), Inner model estimation, model fit test (average path coefficient (APC), average R-squared (ARS), average adjusted R-squared (AARS) and average block variance inflation factor (AVIF)). APC, ARS, AARS are employed to quantify the average path coefficient value, t-test.

4. Results and Discussion

Outer measurement model in this study measured reflection of indicators assessed based on the correlation between item scores or component scores, which estimated by the value of outer loading factor. The outcome exhibited in table 1. Estimated Outer Loading Factor that describes the reflective value of indicator valid for each indicator of each variable:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Indicator</th>
<th>Outer Loading Value</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facility</td>
<td>X1.1</td>
<td>0.860</td>
<td>Significant</td>
</tr>
<tr>
<td></td>
<td>X1.2</td>
<td>0.860</td>
<td>Significant</td>
</tr>
<tr>
<td>Environment</td>
<td>X2.1</td>
<td>0.857</td>
<td>Significant</td>
</tr>
<tr>
<td></td>
<td>X2.2</td>
<td>0.884</td>
<td>Significant</td>
</tr>
<tr>
<td></td>
<td>X2.3</td>
<td>0.799</td>
<td>Significant</td>
</tr>
<tr>
<td>Price</td>
<td>X3.1</td>
<td>0.839</td>
<td>Significant</td>
</tr>
<tr>
<td></td>
<td>X3.2</td>
<td>0.839</td>
<td>Significant</td>
</tr>
<tr>
<td>Payment Procedure</td>
<td>X4.1</td>
<td>0.799</td>
<td>Significant</td>
</tr>
<tr>
<td></td>
<td>X4.2</td>
<td>0.799</td>
<td>Significant</td>
</tr>
<tr>
<td>Impulsive Buying</td>
<td>Y1</td>
<td>0.772</td>
<td>Significant</td>
</tr>
<tr>
<td></td>
<td>Y2</td>
<td>0.849</td>
<td>Significant</td>
</tr>
<tr>
<td></td>
<td>Y4</td>
<td>0.754</td>
<td>Significant</td>
</tr>
<tr>
<td></td>
<td>Y5</td>
<td>0.668</td>
<td>Significant</td>
</tr>
<tr>
<td>Regret</td>
<td>Z1.1</td>
<td>0.907</td>
<td>Significant</td>
</tr>
<tr>
<td></td>
<td>Z1.2</td>
<td>0.907</td>
<td>Significant</td>
</tr>
<tr>
<td>Happiness</td>
<td>Z2.1</td>
<td>0.816</td>
<td>Significant</td>
</tr>
<tr>
<td></td>
<td>Z2.2</td>
<td>0.901</td>
<td>Significant</td>
</tr>
<tr>
<td></td>
<td>Z2.3</td>
<td>0.857</td>
<td>Significant</td>
</tr>
<tr>
<td></td>
<td>Z2.4</td>
<td>0.893</td>
<td>Significant</td>
</tr>
<tr>
<td></td>
<td>Z2.5</td>
<td>0.873</td>
<td>Significant</td>
</tr>
</tbody>
</table>

As seen in Table 1, the Outer Loading Factor estimation results of all proxies shows value of outer loading factor greater than 0.5. It indicates that all proxies are capable of being used as indicators.
4.1. Variable Validity Test and Reliability Test

Discriminant validity is measured by comparing the square root average value of each construct with the correlation between other constructs in the model which has AVE value greater than 0.5, with a p value smaller than the significance level. The results of discriminant validity measurements in the study can be seen in Table 2. AVE Measurement Results.

Table 2. AVE Measurement Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facility</td>
<td>0.740</td>
</tr>
<tr>
<td>Environment</td>
<td>0.718</td>
</tr>
<tr>
<td>Price</td>
<td>0.704</td>
</tr>
<tr>
<td>Payment Procedure</td>
<td>0.639</td>
</tr>
<tr>
<td>Impulsive Buying</td>
<td>0.583</td>
</tr>
<tr>
<td>Regret</td>
<td>0.822</td>
</tr>
<tr>
<td>Happiness</td>
<td>0.754</td>
</tr>
</tbody>
</table>

Source: Data processed

Based on Table 2, noted that all results of the validity are above 0.5, thus all variables are valid and able to provide confidence. Moving on to the reliability testing with composite reliability techniques. The reliability coefficient should be more than 0.7 to be valid, as appear on Table 3 below:

Table 3. Reliability Measurement Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Composite Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facility</td>
<td>0.851</td>
</tr>
<tr>
<td>Environment</td>
<td>0.884</td>
</tr>
<tr>
<td>Price</td>
<td>0.826</td>
</tr>
<tr>
<td>Payment Procedure</td>
<td>0.779</td>
</tr>
<tr>
<td>Impulsive Buying</td>
<td>0.847</td>
</tr>
<tr>
<td>Regret</td>
<td>0.903</td>
</tr>
<tr>
<td>Happiness</td>
<td>0.939</td>
</tr>
</tbody>
</table>

Source: Data processed

Table 4 clearly described that impulsive buying has Adjusted R-square value (adjusted R^2) of 0.256 (25.6%). This illustrated that the impulsive buying variable is able to be predicted by variables of facility, environment, prices and payment procedures amounting to 25.6%. While the rest may be forecasted by other variables which are not being employed in this study.

Regret has a R-square Adjusted (Adjusted R^2) value of 0.049 (4.9%). This shows that the regret variable can be predicted by the impulse buying variable by 4.9%. While the rest can be predicted by other variables not used in this study. Happiness has a R-square Adjusted (Adjusted R^2) value of 0.093 (9.3%). This shows that happiness variables can be predicted by impulse buying variables by 9.3%. While the rest can be predicted by other variables not used in this study.

4.2. Inner Model Estimation

This test was implemented to measure the relationship of the overall variables in the study to determine the level of influence of the relationship between variables and the level of influence of the connection of all variables built. This measurement examines the influence between variables via adjusted R Square which is classified into a model. The influence between variables in the system that was constructed in the study was calculated by means of predictive relevance, aims to evaluate effective validity on independent variables with the following results:

Table 4. Adjusted R-square Value (adjusted R^2)

<table>
<thead>
<tr>
<th>Endogenous variable</th>
<th>Adjusted R-square value(adjusted R^2)</th>
<th>Q-square (Q^2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impulsive Buying</td>
<td>0.256</td>
<td>0.253</td>
</tr>
<tr>
<td>Regret</td>
<td>0.049</td>
<td>0.049</td>
</tr>
<tr>
<td>Happiness</td>
<td>0.093</td>
<td>0.099</td>
</tr>
</tbody>
</table>

Source: Data processed

4.3. Fit Model Test

The fit model test aims to find a model that is fit with the original data so that it can determine the quality of the model. This study uses four fit model
measures, including average path coefficient (APC), average R-squared (ARS), average adjusted R-squared (AARS) and average block variance inflation factor (AVIF). APC, ARS, AARS is used to measure the average path coefficient value.

Table 5. Fit Model Test Result

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>APC</td>
<td>0.218 ; P &lt;0.001</td>
<td></td>
</tr>
<tr>
<td>ARS</td>
<td>0.137 ; P =0.002</td>
<td></td>
</tr>
<tr>
<td>AARS</td>
<td>0.133 ; P =0.002</td>
<td></td>
</tr>
<tr>
<td>AVIF</td>
<td>1.139</td>
<td></td>
</tr>
</tbody>
</table>

Source: Data processed

Table 5. The Fit Model Test results show that the model in this study is declared fit. APC, ARS and AARS have a p-value of less than 0.05. While the value of AVIF <3.3 indicates that there is no multi co-linearity problem between the indicator and the variable used.

4.4. Hypothesis testing

This study has six hypotheses. The results of each test are presented as follows:

The influence of variables on impulse buying in this study was calculated using the t-statistical test analyzed using a partial least square model with a significance level of 5%. The results of the calculation of the t-statistical test of the variables on impulse buying can be seen in Table 6 the results of the t-statistical test means against impulse buying below.

Table 6. Results of the t-Test of Variables Influencing Impulsive Buying

<table>
<thead>
<tr>
<th>RELATIONSHIP BETWEEN VARIABLES</th>
<th>Original Sample</th>
<th>p Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facility -&gt; Impulsive Buying</td>
<td>0.06</td>
<td>0.13</td>
</tr>
<tr>
<td>Environment -&gt; Impulsive Buying</td>
<td>0, 11</td>
<td>0.01</td>
</tr>
<tr>
<td>Price -&gt; Impulsive Buying</td>
<td>0, 40</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>Payment Procedure -&gt; Impulsive Buying</td>
<td>0, 20</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>Impulsive Buying -&gt; Regret</td>
<td>-0.23</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>Impulse buying -&gt; Happiness</td>
<td>0.31</td>
<td>&lt;0.01</td>
</tr>
</tbody>
</table>

Source: Data processed

Based on the results in table 6. The statistical test results of variables that affect impulse buying, it can be concluded that the facility variable has an indirect positive effect on impulse buying. This is revealed from the p-values 0.13 in which it is > 0.05. Based on the estimated regression coefficient (original sample) produced, which is equal to 0.06. P values and regression coefficients to examine the effect of facility, without a doubt, this variable has a positive effect, but not significant to impulsive buying.

The environment has a positive influence and is proven to be significant towards impulsive buying. It is seen from the p-values of 0.01. Based on the estimated regression coefficient (original sample), which is equal to 0.11.

Price impacts positively and significantly on impulsive buying, which shown from the p-values <0.01. Based on the estimated regression coefficient (original sample), which is equal to 0.40. Grounded on p values and regression coefficients to understand the effect of price, it can be determined that price has a positive and significant effect on the impulsive buying.

The payment procedure has a positive and significant influence on impulsive buying. It is indicated by the p-values of <0.01. Based on the estimated regression coefficient (original sample) produced, which is equal to 0.20. Grounded on p values and regression coefficients to examine the effect of payment procedures, it is certain that the payment procedure has a positive and significant result on impulsive buying.

Impulsive buying has a negative and significant outcome on regret. It is observable from the p-values <0.01. Based on the estimated regression coefficient (original sample), which is equal to -0.23. Constructed on p values and regression coefficients to judge the impact of impulsive buying, it is assured that impulsive buying has a negative and significant effect on regret.

Impulsive buying has a positive and significant effect on happiness. This can be seen from the p-values <0.01. Based on the estimated regression coefficient (original sample) produced, which is equal to 0.31. Grounded on p values and regression coefficients to reveal the effect of impulsive buying, obviously impulsive buying has a positive and significant consequence on happiness.
Subsequent to the experiment on traditional markets with controlled variables which are facilities, environment, discount price and payment procedure, supported by the results of data analysis, displayed the results of research that modern markets and traditional market was differ in facilities. Environment, discount price and payment procedures impacted impulsive buying. These results specify that if traditional market situations are the same as in modern markets, impulsive buying in traditional markets could be high, so as to intensify purchases. Alteration for improvement has to be made in accordance to customers’ expectations. The environment must be clean, neatly arranged, with wide aisles and freshly smelled. Discount price campaign events should be executed to attract the attention of consumers to come and shop in traditional markets. Flexibility of payment in credit or cash will be a great addition to allow shopping ease for customers.

Referring to the above findings, the government already obtained in hand, some pinpoints to revitalize traditional markets by taking into account the afore mentioned factors. An intergovernmental supply chain network has to be assembled among governmental bodies, as the manager of traditional markets, traders, consumers, investors, ensuring all parties will be able to understand each other’s desires to escalate the value of traditional markets. Traders must also transform their behavior or habits by supporting government programs and preserving the traditional market environment.

5. Conclusion

The study revealed that variables such as environment, discount price and payment procedures affect impulsive buying. Meanwhile, variable of facility has no impact on impulsive buying. Impulsive buying is influential towards happiness, however in contrast, impulsive buying has no positive power on regret.

This research is limited in a sense that the engineering process on the facilities observed could not be conducted thoroughly, due to inadequate space and facilities provided.

The similar results of this study with previous research could prompt more curiosity to explore the background motive, given the fact that the environment has reformed.

Moreover, the relationship between impulsive buying and regret becomes an intriguing pros and cons. Future research might will be able to answer the question of disparity on the relation between impulsive buying and regret.

Acknowledgement

Unmentionable praise of thankfulness for the blessing to be able to complete the grant bestowed by the Ministry of Research, Technology and Higher Education. Highest appreciation conveyed to the Ministry of Research, Technology and Higher Education for the support in this research. I also would like to express my gratitude to the Institute for Research and Community Service of Pembangunan Nasional University "Veteran" East Java as the organizer of research and community service activities, for the contribution allowing this research to run smoothly and successfully

References


[44] Liying Li a, Yong Wang, and Wei Dai. 2016 . Coordinating supplier retailer and carrier
with price discount policy. Applied Mathematical Modelling, 40; 646–657
[58] Jain and Khanna, V.T. 2015. Assessing and comparing the internal and external factors affecting offline impulsive consumer buying behavior in India. International Journal of research – Granthaalayah, 3 (6); 33-44