THE MODERATING EFFECT OF AGE, INCOME, GENDER, EXPERTISE, LOYALTY PROGRAM, AND CRITICAL INCIDENT ON THE INFLUENCE OF CUSTOMER SATISFACTION TOWARDS CUSTOMER LOYALTY IN AIRLINE INDUSTRY: A CASE OF PT. X

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ABSTRACT

Customer loyalty has been the end purpose for every company. Researchers have acknowledged that a loyal customer always comes from a satisfied customer. Many companies and researchers alike find satisfied customer still abandon and switch to others. This encourages the notion that satisfaction and loyalty is not a straight forward. This research shows how the relationship between satisfaction and loyalty has advanced into a stage that requires reexamination of moderating variables. The purpose of the research is to present empirical evidence of variables in which the satisfaction and loyalty relationship becomes stronger or weaker particularly in service sector in Indonesia.

Using a sample of 125 customers of airline industry (PT. X) and Moderated Regression Analysis, the researcher examine moderating activity of 6 variables which includes (1) age, (2) income, (3) gender, (4) expertise, (5) loyalty program and (6) critical incident. The results suggest not all variable moderates the relationship. Age, income, expertise and critical Incident are relevant moderators while loyalty program and gender are not.

Keywords: Customer Loyalty, Customer Satisfaction, Moderating, Service, Airline, Indonesia

INTRODUCTION

Customer loyalty is an important aspect for a company in a competitive market. It is generally more profitable for a company to maintain its customers rather than to replace them with the new ones (Hawkins & Mothersbaugh, 2013). Furthermore, customer loyalty will increase the purchasing frequency of certain products or services, which translate into greater profit (Anderson & Mittal, 2000; Hallowell, 1996). Not only that, customer loyalty will also produce a positive word of mouth (Gremler & Brown, 1999; Griffin, 1995). Therefore, without a doubt, loyal customers are important and essential for any business to survive, flourish and grow.

Although customer loyalty is important, companies cannot directly create customer loyalty. Hawkins and Mothersbaugh (2013) argue that creating customer loyalty requires the customer to be satisfied with their purchase of the goods or services. A customer, who is not satisfied, will not likely be loyal to the product or the service. Researchers suggest a strong correlation between customer satisfaction and customer loyalty (Anderson, Fornell, & Mazyancheryl, 2004; Kandampully & Suhartanto, 2000; Hallowell, 1996). However, customer satisfaction will not guarantee customer loyalty. For example, Reichheld (1996) and Jones and Sasser (1996) find evidences of customers, who are satisfied, yet still abandon and move to other firms.
These phenomena may occur because the relationship between customer satisfaction and customer loyalty is not as simple as it used to be. Walsh, Evanschitzky, and Wunderlich (2008) argue that the satisfaction-loyalty model has advanced to a period that highlights the important influence of moderating variables. Moderating variables will modify the traditional relationship of the independent and dependent variable (Sekaran & Bougie, 2016). Hence, there is a need to re-examine the traditional satisfaction-loyalty relationship by exploring the moderating variables that may influence the customer satisfaction-loyalty relationship.

This paper therefore, will use moderating variables adopted from Walsh, Evanschitzky, and Wunderlich (2008). Their model includes six moderating variables which are (1) age, (2) income, (3) gender and (4) expertise, (5) loyalty program, and (6) critical incident.

While the previous research is conducted on the retail industry, this research will be conducted on the airlines industry in Indonesia. Airlines industry is chosen because of the importance of airlines industry in Indonesia. Indonesia is an archipelagic nation that consist of more than 17,000 island spread over 113,700 square miles. As Indonesia tries to increase GDP by linking resources, people and industries, connectivity is becoming more and more important. However connectivity cannot be done by road or rail due archipelagic nature of Indonesia. Also connectivity cannot be efficient using ship or ferry due to the time consumed. Therefore, the next logical answer would be aviation.

This research will use PT. X to represent the airlines industry. PT. X is one of the oldest Indonesia airlines. PT. X is famous for having a very high rating of customer satisfaction. With a high customer satisfaction, the research feels that PT. X is a good object to use in explaining the satisfaction and loyalty relationship. Second, PT. X is the only Indonesia’s airline which has the biggest combined market share in international and domestic flight compared to any other Indonesian airlines (PT.X, 2016). Therefore, with those two reasons, PT. X should be a good start in reflecting the airline industry.

**THEORETICAL BACKGROUND**

**Customer Satisfaction**

Kotler and Keller (2012) define customer satisfaction, as “a person’s feelings of pleasure or disappointment that result from comparing a product’s perceived performance (or outcome) to expectations” (p. 150). Meanwhile, Oliver (2010) states “satisfaction is the consumer’s fulfillment response. It is a judgment that a product/service feature, or the product or service itself, provided (or is providing) a pleasurable level of consumption-related fulfillment, including levels of under-or over-fulfillment” (p. 8). Fornell (1992) on the other hand, defines customer satisfaction as an “Overall evaluation after purchase”.

There are two most popular conceptualization of customer satisfaction. First, customer satisfaction is portrayed as an outcome of a certain consumption experience for a particular transaction, encounter or ‘transaction-specific’ satisfaction (Oliver, 1981; Howard & Sheth, 1969). Transaction-specific satisfaction is a post-choice evaluative judgment of a customer on his or her single transaction or consumption (Oliver, 2010). Second, customer satisfaction is portrayed as an outcome of cumulative evaluation of the whole consumption experiences or ‘cumulative’ satisfaction (Oliver, 2010; Fornell, 1992; Tse & Wilton, 1988; Cadotte, Woodruff, & Jenkins, 1987; Kotler & Keller, 2012).

Oliver (1999) suggest that cumulative approach is more appropriate to the analysis of satisfaction loyalty relationship. Cumulative customer satisfaction gives a better predictive power because it aggregates past experiences or other experiences that may lead to a unique and subjective measurement of customer satisfaction (Oliver, 2010). With that line of reasoning, cumulative satisfaction should better predict customer intentions and behaviour. Therefore, this research will adopt the definition from Oliver (2010). This definition follows the concept of cumulative satisfaction, which may give better power in predicting customer loyalty.

The evaluation aspect of the definition focuses on comparing perceived product or service performance with the pre-purchase expectation and desire. This theory of measurement is known as the “Disconfirmation model” which is a popular way to measure customer satisfaction (e.g. Kotler & Keller, 2012; Oliver, 2010; Fornell, 1992; Bae, 2012).

The first component of the disconfirmation is the performance. This research will adopt perceived performance to measure the performances. According to Vavra (1997), perceived performance refers to performance that includes subjectivity of the customer in evaluating the product/service. The second component is the expectation. Oliver (2010) states, “Expectation is an anticipation of future consequences based on prior experience, current circumstances, or other sources of information” (p. 63) The third component of the model is desire which according to Zeithaml, Berry, and Parasuraman (1993), is defined as set of attributes that the customers hope or wish for. Spreng (2003) argues that desire should be added in forming the satisfaction because he believes that only expectation is not enough to capture customer satisfaction. He explained that product and service can be rated as “better than expected” but it might not necessarily meets the customer desired attributes. Therefore, while expectation shows what a customer perceive a product or service “would” be, desire shows
what a customer perceive a product or service “should” be.

The theory approaches customer satisfaction as the comparison between perceived performances of a product or service with what was expected and desired. Positive disconfirmation will occur if the perceived performance (P) is better or the same with what was expected (E) which in the end increases satisfaction. Meanwhile, Negative disconfirmation will occur if (P) falls short then (E) which in the end increases dissatisfaction.

Customer Loyalty

Oliver (2010) defines customer loyalty as “a deeply held commitment to rebuy or re-patronize a preferred product or service consistently in the future, despite situational influences and marketing efforts having the potential to cause switching behavior” (p. 432). Griffin and Lowenstein, (2001) define a loyal customer as “one who makes regular repeat purchases, purchases across product and service lines, refers others, demonstrates an immunity to the pull of the competition and can tolerate an occasional lapse in the company’s support without defecting, owing to the goodwill established through regular, consistent service and provision of value” (p. 23).

In recent literature, customer loyalty is conceptualized as having two dimensions, which are (1) behavioral and (2) attitudinal (Day, 1969; Yi Y., 1990). Behavioral loyalty refers to the actual repurchase behavior of a customer (Griffin & Lowenstein, 2001). The repurchase behavior indicates a loyalty for a brand or service consistently over time. On the other hand, attitudinal loyalty refers to the attitude of a customer towards the product or service in the future (Dick & Basu, 1994). When the customer shows an attitudinal loyalty, they have emotional attachment towards the brand, which signifies, repurchase intentions.

Looking at the two conceptualization, it is desirable to integrate the two dimensions. This will create a construct that covers the disadvantages of adopting only one conceptualizations. Therefore, the research will try to incorporate the two conceptualization of both behavioral and attitudinal loyalty. This integration is reflected by the definition of loyalty by Oliver (2010) that is previously mentioned and will be adopted by this research.

Therefore, measuring customer loyalty should incorporate the two conceptualizations, which are imbedded in the definition. Behavioral and attitudinal loyalty can be measured by looking at the outcome of each loyalty’s behavior. The behavioral loyalty is indicated by (1) repurchasing behavior from the same service provider (Jones, beatty, & Mothersbaugh, 2000), (2) lower switching intentions (Bansal & Taylor, 1999). While attitudinal loyalty is indicated by (1) recommending behavior (Butcher, Ken, Sparkes, & O’Callaghan, 2001), (2) Strong affection with the service providers (Mitra & Lynch, 1995) and (3) repurchase intention in the future (Narayandas, 1997).

The relationship between concepts can be seen in figure 1.

![Figure 1: Relationships between Concepts](image)

Satisfaction and Loyalty

Based on figure 1, it can be seen that customer satisfaction and customer loyalty will be the main link in this research. The relationship between satisfaction and loyalty has been the highlight of many researches. As customer satisfaction increases, the costs of searching and comparing other companies eventually will increase and outweigh the benefits. At some point customers shift from problem solving (searching for the best alternatives) to more routinized behavior where they rely upon a smaller consideration of alternatives based on experience that drive their purchase behavior (Oliver, 2010).

Moderators

Age (A)

This research will define age as in its form of practical definition, which is number of years a person has lived.

In the research conducted by Walsh, Evanschitzky, and Wunderlich (2008), they fail to show age as a significant moderator of the satisfaction and loyalty relationship in the retailing industry. However, age has been argued as one of the variables to influence the satisfaction and loyalty relationship (Mithal & Kamakura, 2001). The argument is based on the information processing theory, which suggest that consumers have limited ability to process information and therefore use heuristics to make decisions (Bettman, 1979). Walsh, Evanschitzky, and Wunderlich, (2008) argue that information processing ability deteriorates with age. Consequently, it suggests that older consumer tend to not as competitively compare price and seek new information in their purchasing process (Lambert-Pandraud, Laurent, & Lapersonne, 2005; Moschis, 1984). Thus, older people will have a more narrow set of consideration compared to their younger counterparts.
Income (I)

Income taken in this research will be defined as an amount of increase in economic benefits in a particular time-period. This definition is adapted from IFRS (2012) to suit the needs of the research.

Walsh, Evanschitzky and Wunderlich (2008) show that income have a significant moderating effect on the satisfaction and loyalty relationship. They suggest that high income consumers will be less loyal than the low income people. The argument for this is that high income people is generally a well educated people (Homburg & Giering, 2001). Thus, based on the information processing theory, they have the ability and capability to seek more information before purchasing a product and service (Mithal & Kamakura, 2001; Walsh, Evanschitzky, & Wunderlich, 2008; Yusuf, Moeljadi, Rohman, & Rahayu, 2015). Whereas low income people will shun the cost of thinking (Shugan, 1980), they will accept lower level of satisfaction rather than the cost of searching and moving to a new service and company.

Gender (G)

According to World Health Organization (WHO) (2016) Gender refers to the socially constructed characteristics (i.e. norms, roles, and relationships) of a person’s biological sex (i.e. man and woman).

Along with age, Walsh, Evanschitzky and Wunderlich (2008) fails to show a significant moderating effect of gender towards the satisfaction and loyalty relationship. However, many research proposed gender as one of the moderating variable (e.g. Srivastava, 2015; Mithal & Kamakura, 2001; Saad & Gill, 2000). This argument is based on the social role theory which suggest that different groups of people behave differently in different situations and take on different roles (Eagly, 1987). Thus, having different social status (i.e gender) will create different roles or behaviour. For example, it is argued that men are more willing than women to take risks because socially men are expected to engage in a risky behavior (Walsh, Evanschitzky, & Wunderlich, 2008). Because it is riskier to switch providers and try something new, men may be less loyal when their satisfaction level decreases.

Expertise (E)

Alba and Hutchinson (1987) defines expertise as “the ability to perform product-related tasks successfully” (p. 411). Thus, in the context of customer expertise, it refers to the level of understanding of what the service should or product needs to be successful.

In the previous research, Walsh, Evanschitzky and Wunderlich (2008) fail to show a significant moderating effect of expertise towards the satisfaction and loyalty relationship. However, with the same argument of information processing theory where information processing ability takes an important role, customer with higher expertise should take a number of information cues or variables into account before evaluating a service or product. Thus, Walsh, Evanschitzky and Wunderlich (2008) suggest that experts will become less emotional and more objective in assessing or comparing service or products. Their information cues will be placed in higher importance to the quality of the product and service. In contrast, non-expert customer will have a non-objective measure when evaluating or comparing service or products. Walsh, Evanschitzky and Wunderlich (2008) suggest novices put more weight in discrete product information cues such as experience.

Loyalty program (LP)

Kotler and Keller (2012) define loyalty program or frequency program (FPs) as a program that is design to reward customers who buy frequently and in substantial amounts. Sharp and Sharp (1997) define loyalty program as “a structured marketing efforts that rewards, therefore encourage loyal behavior” (p. 474). Behavior in the definitions refers to the repeat-purchase pattern that benefits the firm. Oliver (2010) mentions loyalty program as a strategy that firms applies to ensure future purchases. Liu (2007) defines loyalty program as “a program that allows consumers to accumulate free rewards when they make repeated purchases with a firm” (p. 20). The definitions emphasize loyalty program as to (1) foster customer loyalty over-time, which (2) creates future deals and implies a (3) substantial amount. Therefore, in this paper, loyalty program is defined as a program that allows customer to accumulate points, which later can be redeemed as rewards to customer who shows a frequent substantial repurchase behavior.

Walsh, Evanschitzky and Wunderlich (2008) also fail to show a significant moderating effect of loyalty program towards the satisfaction and loyalty relationship. However, loyalty program has been used in many researches when talking about loyalty (e.g. Kannan & Bramlett, 2000; Yi & Jeon, 2003; Sharp & Sharp, 1997). Customers obtain and join loyalty programs because they offer utility or additional perceived value. Therefore, when a customer is satisfied, the loyalty program will add additional value to the customers. Customers will get not only value from the business but also value from the loyalty program. This increased value will boost the satisfaction and loyalty relationship. Not only that, when a customer is dissatisfied, the customer will face a utility trade off. The customer can defect to other firm and lose all the accumulated benefits (points) and future benefits (opportunity cost) that the program offer or continue the repurchase action which implies accepting lower level of satisfaction. This creates a situation where the perceived value of the loyalty program is compared to the level of decreased satisfaction.
Critical Incidents (CI)

Bitner, Booms, and Tetreault (1990) defines critical incidents as “a specific interaction between customer and service employees that are very satisfying or very dissatisfying” (p. 73). In this research, critical incident will refer to a successful recovery of a very dissatisfying incident. Successful in the research will be defined subjectively by the customers. In other words, if the customer is satisfied with the recovery attempt, than it is classified as successful.

In the previous research, Walsh, Evanschitzky and Wunderlich (2008) successfully shows critical incidents recovery as a moderating variable. They suggest that a recovered consumers from critical incidents will be more loyal in comparison to customers who has never encountered a critical incidents. This is based on reasoning that the very dissatisfying incidents provide not only risk of losing customer but also an opportunity to satisfy them even more (Hui, Ho, & Wan, 2011). Thus, favourable recovery may often lead to a “service recovery paradox”. Basically, it refers to a phenomena where an excellent recovery may create a more satisfying experience for the customer compared if they were satisfied normally (Michel, Bowen, & Johnston, 2006; Siu, Zhang, & Yau, 2013). Therefore, critical incidents which are very memorable to the customers will have higher weight for customers in their purchasing decision. A negative incident and a successful recovery can contribute in the making of customer loyalty.

Based on the theoretical review of rationalizing relationship between concepts, the researcher would like to proposed several hypotheses:

H1: Age significantly moderates the relationship; specifically, the relationships are stronger for older customer compared to younger customer.

H2: Income significantly moderates the relationship; specifically, the relationships are stronger for low-income customer compared to high-income customer.

H3: Gender significantly moderates the relationship; specifically, the relationships are stronger for male customer compared to female customer.

H4: Expertise significantly moderates the relationship; specifically, the relationships are stronger for novices compared to experts.

H5: Loyalty Program significantly moderates the relationship; specifically, the relationships are stronger for customer that is involved in a loyalty program compared to the ones who is not.

H6: Critical incident significantly moderates the relationship; specifically, the relationships are stronger for recovered customer compared to customer who has never experience a critical incidents.

RESEARCH METHOD

Since the information processing theory recognizes only two sub category and in line with Walsh, Evanschitzky, and Wunderlich (2008), the research classifies the age groups into two which are young adults and adults. Therefore, the research classify young adults as people ranging from 18 until 34 and adults as people above 35 years old.

The information processing theory recognizes only two sub categories and in line with Walsh, Evanschitzky, and Wunderlich (2008) this research only recognizes two sub groups which are (1) middle - high income and (2) middle - low income. Therefore, the research classifies middle-low income as someone whose income is < 3,000,000 and 3,000,000 – 5,000,000 and middle-high income as someone whose income is 5,000,001 – 10,000,000 and > 10,000,000.

Gender is measured directly by classifying as either male or female. After that the research classifies male as one (1) and female as zero (0).

To operationalize expertise, the research adopts Walsh, Evanschitzky, and Wunderlich, (2008) method which is a self-rating. To help in evaluating the respondents, a statement “I understand what PT. X needs to have, show and improve regarding their product and service” is shown. Then, they were asked to rate themselves by picking one of these four sentences: (1) disagree, (2) neutral, (3) agree, (4) strongly agree. Finally, the same reason with age and income, the statements is reclassified into two groups, low experienced and high experienced. Low experienced consists 1 & 2, high experienced consists of 3 & 4.

To measure loyalty program, a nominal variable is constructed. Respondents will be asked if they are involved in a loyalty program where the answer would be either a yes or a no. After that, the respondents will be asked whether they really use the benefit of the loyalty program. If the respondents is involved, but do not use the program, they will be taken out.

To measure Critical incidents, the respondents will be asked two questions. First, whether the respondents has experienced a critical incidents. Second, whether the incidents have been resolved to his/her satisfaction. Respondents will answer with either answer with a yes or a no. Since the theory of the service paradox suggest that a positive recovery from a dissatisfying incident may be more satisfying compared to if customers were satisfied normally, the one who answers that they have experienced a critical incidents but not resolved will be taken out.

The data used for this research will be primary data which is acquired by conducting survey through distributing questionnaires.

The population of this research is the people who have used the services of PT. X that have an Indonesia citizenship aged 18 years old and above. The ideal size of the sample is determined based on the
population size. Since the population cannot be obtained, the size of the ideal sample cannot be known. However, Green (1991) suggests \( N > 50 + 8m \), where \( m \) is the number of predictors, as an adequate number when determining regression sample size. This research will require a minimum of 75 respondents for each moderating model. Each model will have three predictors which are (1) Satisfaction, (2) Moderators and (3) Interaction term. Therefore, using Green (1991), \( 50 + 8 \times 3 \) predictor = 74, so at least 75 respondents for each model.

After getting the data from the questionnaires, the data will then be processed using SPSS (Social Program for Social Science) for windows. The first process is to test the validity and the reliability of the questionnaires.

The validity of the questionnaires is established through a correlational analysis (Sekaran & Bougie, 2016). The indicators can be said as valid when they are strongly correlated with the concept. The reliability of the questionnaires is conducted to measure the level of accuracy and precision of the answers in measuring the concept. The reliability will be established by looking at the Cronbach’s coefficient alpha.

After testing the validity and the reliability, the data have to fulfill the Best Linear Unbiased Estimator (BLUE) classical assumptions. The model needs to pass the assumptions in order for the result to be reliable in explaining the relationships between the variables. The four test will be explained in table 1.

**Table 1 : BLUE classical Test**

<table>
<thead>
<tr>
<th>Assumptions</th>
<th>Elaboration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normality (Kolmogorov-Smirnov Test)</td>
<td>Checks the assumption that the residuals are normally distributed.</td>
</tr>
<tr>
<td>Auto-Correlation (Durbin-Watson Test)</td>
<td>Checks the assumption that the residuals should not be correlated</td>
</tr>
<tr>
<td>Multicollinearity (VIF Test)</td>
<td>The data should have little or no multicollinearity which occurs when the independent variables are not independent from each other</td>
</tr>
<tr>
<td>Heteroscedasticity (Park Test)</td>
<td>The data have to share same variance in terms of error in all level of IV</td>
</tr>
</tbody>
</table>

Source: Ghozali (2004)

Finally, Moderated Regression Analysis (MRA) will be used in testing the moderating effect of the six variables (\( Z_{1:6} \) in altering the influence of customer satisfaction (X) towards customer loyalty (Y). Fairchild and MacKinnon (2010) stated that moderation effects are tested with multiple regression analysis, where the predictors (X, Z) and their interaction term (XZ) are included to improve interpretation of regression coefficients. A single regression equation forms the basic moderation model:

\[
Y = i + \beta_1X + \beta_2Z + \beta_3XZ + e
\]

Where \( \beta_1 \) is the coefficient of the independent variable (X) in predicting the outcome (Y), when \( Z = 0 \). While \( \beta_2 \) is the coefficient of the moderator variable (Z) in predicting the outcome (Y), when X = 0, \( i \) the intercept coefficient in the equation, and \( e \) is the error in the equation. Finally, \( \beta_3 \) will represent the coefficient of the interaction term (X.Z). This \( \beta_3 \) represents the strength of the moderation activity, the effect of X on Y depends on the value of M.

**RESULTS AND DISCUSSION**

There are 25 (20%) respondents in the age between 18-24 years old, 25 (20%) respondents in the age between 25-34 years old, 75 (60%) respondents are in the age between 35-60 years old and 0 (0%) respondents are above 60 years old. In this research, the age range between 18-34 years old will be classified as young adults (40%) while the age range above 34 years old will be classified as adults (60%). Figure 2 will illustrate the age distribution that will be used for this research.

![Figure 2: Age of Respondents](image)

In this research, the respondents with income of < 3,000,000 and 3,000,000 – 5,000,000 will be classified as middle-low income (49.6%) while respondents with income of 5,000,001 – 10,000,000 and > 10,000,000 will be classified as middle-high income (50.4%). Figure 3 illustrates the income distribution that is used for this research.

![Figure 3: Income of Respondents’](image)

From the gender aspect, there are 59 (47.2%) male respondents and 66 (58.8%) female respondents. The percentage of the gender can be seen in figure 4.
This research tries to see the incident by respondents that are involved in the loyalty program that has been reduced. Therefore, this research randomly takes out 42 respondents from a minimum of 30% and an optimum of 50%. Consequently, the power to detect moderating activity is uneven distribution across the ones that are involved in the loyalty program and the ones that are not. Thus, the huge imbalance between the ones that are involved and are using the benefits of the loyalty program but is not using the benefits of the program. From 125 respondents used for the research, 8 respondents that is involved with the loyalty program cannot be reduced only a maximum of 44 because the model needs a minimum sample of 75. The percentage of the respondent’s exposure that has been reduced can be seen in figure 7.

Following Walsh, Evanschitzky and Wunderlich (2008), respondents which are amateur and normal are classified as respondents that have a low experience (44%) and respondents which are advanced and professional is classified as respondents that have a high experience (56%). Figure 5 illustrates the expertise distribution that is used for this research.

From 125 respondents used for the research, there are respondents that are exposed to a critical incident but are not satisfied with PT. X’s effort. Thus, the 6 respondents are classified as non-recovered customers and are taken out. This research tries to balance the sub group by taking out 44 from 119 respondents that have never been exposed to a critical incidents. The research can reduce only a maximum of 44 because the model needs a minimum sample of 75. The percentage of the respondent’s exposure that has been reduced can be seen in figure 7.

The validity of the data is established through a correlational analysis. The data can be considered as valid when they have strong and significant ($p > 0.05$) correlation ($r > 0.475$) with the concept. Table 2 and 3 illustrate the result.

### Table 2: Satisfaction validity test

<table>
<thead>
<tr>
<th>Correlation</th>
<th>A.I.G.E</th>
<th>LP</th>
<th>CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satis1</td>
<td>.806**</td>
<td>.792**</td>
<td>.822**</td>
</tr>
<tr>
<td>Satis2</td>
<td>.853**</td>
<td>.903**</td>
<td>.849**</td>
</tr>
<tr>
<td>Satis3</td>
<td>.895**</td>
<td>.889**</td>
<td>.890**</td>
</tr>
</tbody>
</table>

### Table 3: Loyalty validity test

<table>
<thead>
<tr>
<th>Correlation</th>
<th>A.I.G.E</th>
<th>LP</th>
<th>CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loyal1</td>
<td>.837**</td>
<td>.848</td>
<td>.834</td>
</tr>
<tr>
<td>Loyal2</td>
<td>.782**</td>
<td>.787**</td>
<td>.797**</td>
</tr>
<tr>
<td>Loyal3</td>
<td>.720**</td>
<td>.782**</td>
<td>.724**</td>
</tr>
<tr>
<td>Loyal4</td>
<td>.836**</td>
<td>.862**</td>
<td>.848**</td>
</tr>
<tr>
<td>Loyal5</td>
<td>.674**</td>
<td>.663**</td>
<td>.681**</td>
</tr>
</tbody>
</table>

The reliability of the data is established by looking at the Cronbach’s coefficient alpha. The data can be considered as reliable when the Cronbach’s coefficient alpha is more than 0.6. Table 4 and 5 illustrate the result.

### Table 4: Satisfaction Reliability Statistics

<table>
<thead>
<tr>
<th>Reliability Statistics</th>
<th>A.I.G.E</th>
<th>LP</th>
<th>CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cronbach's Alpha (Model)</td>
<td>.826</td>
<td>.827</td>
<td>.813</td>
</tr>
<tr>
<td>N of Items</td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 5: Loyalty Reliability Statistics

<table>
<thead>
<tr>
<th>Cronbach's Alpha (Model)</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.I.G.E</td>
<td>LP CI</td>
</tr>
<tr>
<td>0.824</td>
<td>0.849</td>
</tr>
</tbody>
</table>

The first model is explaining loyalty with one predictor which is satisfaction. The second model is explaining loyalty with two predictors which are (1) satisfaction (X) and (2) moderator (Z). The third model is explaining loyalty with three predictors which are (1) satisfaction (X) and (2) moderator (Z) and (3) interaction term between satisfaction and moderator (XZ).

Based on Table 6, model 1 with no interaction produces $R^2$ of 35.8%, this means that satisfaction can explain 35.8% of loyalty, while the other 64.2% is explained by other factors.

Table 6: Moderated Regression (Age)

<table>
<thead>
<tr>
<th>Model</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>F</th>
<th>Sig.</th>
<th>Change Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>R Square</td>
</tr>
<tr>
<td>1</td>
<td>.358</td>
<td>.353</td>
<td>68.701</td>
<td>.000b</td>
<td>.358</td>
</tr>
<tr>
<td>2</td>
<td>.371</td>
<td>.361</td>
<td>35.954</td>
<td>.000c</td>
<td>.012</td>
</tr>
<tr>
<td>3</td>
<td>.392</td>
<td>.377</td>
<td>25.964</td>
<td>.000d</td>
<td>.021</td>
</tr>
</tbody>
</table>

The result in the regression analysis supports the research H1 and successfully answers the research question. The finding may reinforce the information processing theory which suggests that older consumer tend to not as competitively compare price and seek new information in their purchasing process. As people get older, they become more skeptical (Vyse, 1997; Leventhal, 1997). Thus, when an older customer group is already satisfied and trust their current service providers (e.g. airlines) they become reluctant to try finding better alternatives, which makes them more loyal.

Table 7: Moderated Regression (Income)

<table>
<thead>
<tr>
<th>Model</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>F</th>
<th>Sig.</th>
<th>Change Statistics</th>
</tr>
</thead>
<tbody>
<tr>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>R Square</td>
</tr>
<tr>
<td>1</td>
<td>.358</td>
<td>.353</td>
<td>68.701</td>
<td>.000b</td>
<td>.358</td>
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<tr>
<td>2</td>
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<td>.384</td>
<td>39.680</td>
<td>.000c</td>
<td>.036</td>
</tr>
<tr>
<td>3</td>
<td>.449</td>
<td>.435</td>
<td>32.837</td>
<td>.000d</td>
<td>.055</td>
</tr>
</tbody>
</table>

Model 3 with the interaction accounted for significantly (“Sig F change” below 0.05) more variance than model 2 or model 1. $R^2$ change is 0.021 which means the interaction term increases the $R^2$ by 2.1% and increases Adj $R^2$ by 1.1% from model 2 to model 3. Furthermore, the interaction term (XZ) is significantly able to predict or explain loyalty ($p$ is 0.044), indicating a significant moderating activity.

Since there is proof of moderating activity, an interaction plot was conducted. Based figure 8, older group has steeper slope than the younger group which shows that age has an enhancing effect for the satisfaction and loyalty link.

Figure 8: Interaction Plot (Age)

Since there is proof of moderating activity, an interaction plot was conducted. Based figure 8, older group has steeper slope than the younger group which shows that age has an enhancing effect for the satisfaction and loyalty link.

The result in the regression analysis supports the research H1 and successfully answers the research question. The finding may reinforce the information processing theory which suggests that older consumer tend to not as competitively compare price and seek new information in their purchasing process. As people get older, they become more skeptical (Vyse, 1997; Leventhal, 1997). Thus, when an older customer group is already satisfied and trust their current service providers (e.g. airlines) they become reluctant to try finding better alternatives, which makes them more loyal.

Table 7 shows the result of the moderated regression with Income as the moderating variable.
Since there is proof of moderating activity, an interaction plot was conducted. Based figure 9, higher income group has steeper slope than the lower income group which shows that Income has an enhancing effect for the satisfaction and loyalty link. In other words, the impact of customer satisfaction is greater for higher income group than the lower income group.

The result in the regression rejects the research H2. Apparently, income does moderate the relationship, however in contrast with the hypothesis, income acts as an enhancer where the relationships are stronger for higher income group compared to the lower income group as higher income group has steeper slope than the lower income group (refer to graph 4.13).

The result contradicts with Walsh, Evanschitzky, and Wunderlich (2008) because when lower income group do not shun the cost of thinking, the research predict that price sensitivity theory may be better in explaining the contrast. Soba and Aydin (2012) argue that low income customer will be more sensitive to the price, whereas high income customer will be less sensitive to the price. For lower income people, price will be the main determinants in purchasing behaviour (Sharma & Patterson, 2000). Therefore, when lower income people does not shun the cost of thinking, they would probably be more competitive in comparing price. This is supported by Farley and John (1964) which suggest that high income people perceive higher value of time compared to the lower income groups. Higher income people are willing to trade for time in exchange for limited evaluation. In other words, higher income people are less willing to waste their time in comparing prices, service and products compared to the lower income people.

Table 8 will show the result of the moderated regression with gender as the moderating variable.

Table 8: Moderated Regression (Gender)

<table>
<thead>
<tr>
<th>Model</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>F</th>
<th>Sig.</th>
<th>Change Statistics</th>
<th>Sig. F Change</th>
</tr>
</thead>
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<td></td>
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<td>.348</td>
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<td>.753</td>
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<td>.344</td>
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<td>.000d</td>
<td>.001</td>
<td>.617</td>
</tr>
</tbody>
</table>

Predictors

- Constant
- X
- Z
- XZ

Table 9: Moderated Regression (Expertise)

Model | R Square | Adjusted R Square | F | Sig. | Change Statistics | Sig. F Change |
<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
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<tr>
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<td>.407</td>
<td>29.413</td>
<td>.000d</td>
<td>.042</td>
<td>.004</td>
</tr>
</tbody>
</table>

Predictors

- Constant
- X
- Z
- XZ

Model 3 with the interaction accounted for significantly (“Sig F change” below 0.05) more variance than model 2 or model 1. However, it is not significant ("Sig F change" is 0.617) R² change is 0.001. Furthermore, it actually decreases the Adj R² by 0.4%. The interaction term (XZ) is also not significant at p = 0.617. Therefore, there is no indication of moderating activity.

The result in the regression rejects the research H3. The finding is aligned with Walsh, Evanschitzky and Wunderlich (2008) where they also fails to show a significant moderating activity by gender. The research takes the argument of Kuosuwan (2015) which is conducted in the Thailand’s airline industry using 400 respondents consisting of 52% male and 48% female. The result suggests that price is ranked number 1 as their reason of choosing airlines. In other words, it implies that regardless of males or female, price is still being used as their predominant decision.

Table 9 will show the result of the moderated regression with expertise as the moderating variable.

Model 3 with the interaction accounted for significantly (“Sig F change” below 0.05) more variance than model 2 or model 1, it increases the R² by 4.2% and increases the Adj R² by 3.7%. Furthermore, the predictor of the interaction (XZ) is also significant at 0.004, indicating a significant moderation activity.

Figure 10: Interaction Plot (Expertise)
Based figure 10, lower experienced group has steeper slope than the higher experienced group which shows that expertise income has a buffering effect for the satisfaction and loyalty link.

The result of the analysis supports H4. The findings may reinforce the suggestion made by Walsh, Evanschitzky and Wunderlich (2008) and Bell and Eisingerich (2007) that high experience group (experts) will take a number of information cues into consideration for evaluation of a service. Usually, technical aspect (service quality) will take precedence over relational benefit. Thus, they will be more objective and less emotional in comparing services.

Table 10 will show the result of the moderated regression with loyalty program as the moderating variable.

Table 8: Moderated Regression (Loyalty Program)

<table>
<thead>
<tr>
<th>Model</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>F</th>
<th>Sig. R Square Change</th>
<th>Sig. F Change</th>
</tr>
</thead>
<tbody>
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<td>.409</td>
<td>18.081</td>
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<td>.004</td>
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</tbody>
</table>

Model 3 with the interaction accounted more variance than model 2 or model 1, R² change is 0.004. However, it actually reduces the Adj R² by 0.4% and the change is not significant. Sig F Change is at 0.490 which is above 0.05. Furthermore, the interaction term is also not significant at 0.490. Therefore, there is no indication of moderating activity. Since there is no significant moderation activity, further analysis will not be conducted.

The result in the regression rejects the research H5. The result questions the effectiveness of loyalty program in retaining customers. Apparently, loyalty program does not moderate the relationship. The result fails to significantly show any difference between the one who is involved in a loyalty program and the one who is not.

This may be explained with the perception of value that the customer have on their loyalty programs. The theory suggest that people involved in a loyalty program is faced with higher benefit and increased switching barrier. However, how big is the additional benefit and how high is additional switching barriers depends on how good the customers perceive the loyalty program. This research fails to capture the value given by the loyalty program. In other words, the insignificant of the moderating activity may be caused by the low perception of value of the loyalty program.

The non-moderating impact of Loyalty program on the satisfaction and loyalty link suggest that PT. X may need to reassess or abandon their PT.X’s Loyalty Program.

Table 11 will show the result of the moderated regression with critical incident as the moderating variable.

Table 9: Moderated Regression (Critical Incidents)

<table>
<thead>
<tr>
<th>Model</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>F</th>
<th>Sig. R Square Change</th>
<th>Sig. F Change</th>
</tr>
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<tbody>
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<td>.301</td>
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<td>.006d</td>
<td>.065</td>
</tr>
</tbody>
</table>

Model 3 with the interaction accounted for significantly ("Sig F change" below 0.05) more variance than model 2 or model 1 (p is 0.011). The interaction term increases the R² by 6.5% and the Adj R² by 5.7%. Furthermore, the predictor of the interaction is also significant at 0.011, indicating a significant moderation activity.

Figure 11: Interaction Plot (Critical Incident)

Since there is proof of moderating activity, an interaction plot was conducted. Based figure 11, recovered customer has steeper slope than the unexposed group which shows that Critical Incident has an enhancing effect for the satisfaction and loyalty link.
The result of the analysis support our H6. It is worth mentioning that the data was not of equal size between the moderator sub-groups with the majority of non-exposed customer (76.25%). However the result is still significant and critical incident acts as an enhancer to the relationship. Therefore, adding to the mindset that the impact of customer satisfaction will be higher for recovered customer compared to the unexposed group. In other words, recovered customer are far more loyal than customers who have never been exposed to a critical incidents.

A negative critical incident would pose an opportunity to satisfy customer even more. This is because intense consumer complaints enables consumers to vent their anger and negative feelings (Nyer, 2000). Thus, when a staff successfully listens and give satisfactionary alternatives to the customer, not only does the customer can relinquish their anger, but they also can experience the extra hardwork the company puts to re-satisfy them. This will make them feel as if they are important and creates a more staisfying experience.

CONCLUSIONS

The Objective of the research was to provide additional insight to the traditional consumer satisfaction and consumer loyalty relationship. First, in contrast with our prediction, gender does not moderate the relationship between satisfaction and loyalty. The findings of gender is align with the research conducted by Walsh, Evanschitzky, and Wunderlich (2008) where they also fail to show significant difference between male and females. Second, Loyalty porgram also does not moderate the relationship between satisfaction and loyalty. The findings is contrast to the preveious research where they found a loyalty program as a buffer in the relationship. However, sufficient evidence supports the notion of a less straight forward relationship between satisfaction and loyalty. The other 4 variables (Age, Income, Expertise, and Critical Incident) significantly moderate the relationship between satisfaction and loyalty. The finding implies that that the effect of customer satisfaction on customer loyalty is not the same between different groups.

As with all empirical studies, the research will acknowledge some limitations. First, the research is conducted to explain the airline industry, however because of the limited resources, the research were only able to research one particular airlines which decreases generalizability of the findings. Second, the research assumes that there is no lag time between satisfaction and loyalty. In other words the research did not conduct a longitudinal analysis using the same respondents. Therefore the research recognize that the satisfaction have lag effect on loyalty. Third, the research fails to show actual loyalty behaviour which is by getting actual repurchase data of the customers. Fourth, the measurement of expertise is also may not be good because it is measured subjectively by the respondents. Finally, critical Incident does not have optimum propotion to be compared. Customers who has positive recovery from have only 25.3%. while 74.7% is not exposed to the critical incident. The unbalanced proportion may reduce the moderation activity of the variables.

These limitations also suggest further research opportunities. First, future research should incorporate other airlines operating in Indonesia. Second, future research may conduct a longitudinal analysis to address the lag effect of the satisfaction and loyalty link. Third, future research may want to include other moderating variable such as education. Since the theory uses processing capability, adding education as another variable does make sense. Fourth, measurement of expertise might be changed into how many times the respondents have used an airlines services. The more they experienced an airline service, the more familiar they are with the service and what to expect from certain airlines. Fifth, future research may want to try other industries such as the (FMCG) Fast Moving Consumer Goods. Since the industry offers goods instead of service, this would offer additional insight on whether the six variables are still relevant.

BIBLIOGRAPHY


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