BUILDING CUSTOMER RETENTION IN ON-LINE TRANSPORTATION
Simarmata J., Ikhsan R.B. *

Abstract: Customer retention emphasizes on the marketer’s activities to retain customers. Customer retention is the form of loyalty related to the behavior measured on the consumer purchase behavior indicated by the high frequency of buying a service, so that the company which wants to know the level of customer retention must see the customer behavior in using its service. This study describes the results of survey on on-line transportation service, namely Gojek, Grab, and Uber in Jakarta, Bandung and Medan. The research methodology uses a survey on 400 users of on-line transportation service and refers to customer retention modelling. The essence of this research is that customer behavioral intention on the on-line transportation service will determine whether they are retained or not based on the customer characteristics and the perception of service employee’s orientation to customer. Furthermore, the findings in this research indicate that consumer’s behavioral intention becomes necessary to be studied by business players in on-line transportation.

Key words: customer retention; customer behavior; service employee’s orientation to customer; customer characteristics; on-line transportation

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Introduction
The existence of on-line transportation in Indonesia signalizes an industrial revolution where everyone can be connected at the same time. The utilization of communication and information technology has radically changed the business mechanism in products and services. In the context of connecting-generation, producers and consumers can make direct transactions in an efficient, reliable and effective way without any service and business intermediary. Such a revolution has generated new business opportunities which, at the same time, reduces the number of workers who so far are dependent upon conventional businesses.

From the observation, it is seen that the intention of Indonesian people, especially in Jakarta, Bandung and Medan to use on-line transportation such as Gojek, Grab and Uber is very high (regardless the conflict with conventional taxi providers) since it has given convenience and alternatives in using transportation services. However, the service providers are still not able to fulfill the consumer expectation, for example the discrepancy between the pick-up time and the estimated time.

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as mentioned in the application, frequent disruption in the application, driver’s negligence of caring the passengers safety, and driver’s poor knowledge of the consumer’s destination.

The research proposes a customer retention model built on the customer behavior against a company (Ennew and Binks, 1996) regarding the customer characteristics and COSE which is mediated by behavioral intention. Although customer retention is considered as customer loyalty and used interchangeably (Heskett and Schlesinger, 1994) but loyalty and retention are different things (Ennew and Binks, 1996), thus loyalty is very essential but it is not easy to measure and monitor loyalty (Reichheld, 2003). Therefore, it is necessary to measure loyalty from the behavioral aspect of customer retention. Every consumer has different combination of characteristics, and each consumer has uniqueness in their perception, analysis, expectation, and habit (Durukan and Bozaci, 2011). In perceiving a service, differences surely also exist, so that the producers as service providers focus their activities on the consumer need, such as consumer-oriented behavior of the producers (Donavan et al., 2004). The customer behavioral intention in this paper means the customer behavioral intention on the on-line transportation service resulted from the satisfaction process experienced by the customers on the on-line transportation service providers. The satisfaction felt by the customers on the on-line transportation service can impact on the high or low consumer behavioral intention, depending on how much the satisfaction is felt by the customers.

Customer Retention

Customer retention focuses on developing marketing activities which trigger repeat purchase behavior in the managerial aspect of marketers and customers (Hennig-Thurau and Klee, 1997). Some researches indicate that the customers who feel satisfied with a service will make word of mouth communication (Cranage, 2004). The customers who have built long partnership with a company will purchase more frequently (Peterson, 1995). Customers who are loyal will be more responsive to buy each type of product and service provided by the company, frequently pay more to the company, and make demands (Cranage, 2004; Peterson, 1995) as well as cheaper in serving. Finally, the customer will not too sensitive to price so that the margin gained by the company will be higher. Customer retention possesses powerful impact on profit. (Dwyer and Tanner, 2002; Desai and Mahajan, 1998).

There are three types of approaches to retention measurement, namely: behavioral, attitudinal and composite (Bowen and Chen, 2001). The problem related to treating retention specifically as repeat buying does not distinguish loyal customers (Dick and Basu, 1994). In addition, behavioral approach focusing on repeat buying does not result in a comprehensive insight to the basic reason for retention (Bloemer and Kasper, 1995). As a sequence, customer retention is an attitudinal construct (Hallowell, 1996) to express the emotional and psychological condition inside retention (Bowen and Chen (2001), for instance, customer’s willingness to recommend the producer to his colleagues (Zeithaml et al., 1996). Nevertheless,
using only attitudinal measurement has been criticized (Dick and Basu, 1994). The third approach integrates three aspects of customer retention: behavior, attitude, and cognition (Bloemer and De Ruyter, 1998). The engagement of attitudinal or psychological construct with repurchase is proven to be essential in obtaining absolute retention (Oliver, 1999). In this case, customer retention is frequently the first thing or choice that comes to customer’s mind when making a buying decision as well as price tolerance (Zeithaml et al., 1996; Dick and Basu, 1994). Mohammad et al. (2009) have adopted the research by Zeithaml et al. (1996) in order to operationalize customer retention. Mohammad et al. (2009) develop a set of antecedents reflecting a wider scope of behavioral intention, attitude and cognition to service providers. The results from theoretical review on customer retention, as done by Mohammad et al. (2009), become a reference for choosing the dimensions of customer retention, namely word of mouth communications, purchase intention, price sensitivity, and complain behavior.

Behavioral Intention

Theoretically, understanding how customers behave will give impacts on the company in developing products or services that fulfill the customer’s need and want. The formation of behavioral intention tends to happen in the condition of high involvement (Mowen and Minor, 1998; Brady and Hult, 2000) state that the customer behavior tendency has relations with the ability of service providers to make their customers: a) state positive things about them (service providers); b) recommend them (service providers) to other customers; c) keep loyal to them (or buy goods more frequently from them); spend more time with them; and pay a premium price. Customer behavior tendency is a set of final results of analyzed items. Various theories state that the lower degree of consumers who stop consuming a good or service is the main key of the service provider’s ability to make profit. The dimensions of behavioral intention as described by Zeithaml et al. (1996) are five, namely: loyalty to company; propensity to switch; willingness to pay more; external response to problems; and internal response to problems.

Service Employee’s Orientation to Customer

Narver and Slater (1990); Jaworski and Kohli (1993) factually strengthen the potential of economy owned by customer-oriented companies. Moreover, researchers have studied the service employee as an element of service quality (Parasuraman et al., 1988; Dabholkar et al., 2000), there are researches which explicitly discuss the construct of service employee’s orientation to customer, namely Kelley (1992), Brown et al. (2002), Hennig-Thurau and Thurau (2003), and Donavan et al. (2004).

Hennig-Thurau and Thurau (2003) define service employee’s orientation to customer as the employee’s behavior in the interaction among individuals, and suggest the conceptualization of the three dimensions of service employee’s orientation
to customer. According to the theory from Von Rosenstiel, a German social psychologist, Hennig-Thurau (2004) distinguishes individual knowledge, personal willingness, and social allowances as the precondition for employee’s common behavior, and also introduces three dimensions of service employee’s orientation to customer, namely: a) employees’ skill in the customer orientation; b) employee’s motivation to serve customers; and c) the authority of employees in the decision making they perceive. Hennig Thurau and Thurau (2003) explain that an employee can only behave totally in a customer-orientation way whenever all the dimensions are present: having motivation, competence, and possibility to treat customers in accordance with their need. Concerning the skill dimension of service employee’s orientation to customer, Hennig Thurau and Thurau (2003) suggest that employee’s social and technical skills are separate dimensions of the service employee’s orientation to customer, beside authority dimension and motivation dimension. Technical skill refers to the knowledge and the motoric skill which the service employee should have in order to meet the customer need in the process of personal interaction (Argyle and Kendon, 1967). Social skill stresses on the ability of service employee in concluding the customer’s opinion along the interaction (Flavell et al., 1968; Mead, 1934). The authority to make decisions concerning the concept of empowerment which is intensively discussed in service literatures (such as Bowen and Lawler III, 1995; Spreitzer, 1995) refers to organization’s “goal” of giving the authority to the employee while authority to make decisions is regarded as subjective. From the perspective of methodology, such a concept indicates that the validity of discriminant is in the dimension of service employee’s orientation to customer (Fornell and Larcker, 1981) where all dimensions significantly relate to the whole construction of service employee’s orientation to customer.

Research by Hennig-Thurau (2004) becomes reference in selecting the dimension, namely employee’s skill in the customer orientation, and employee motivation to serve customers by eliminating the dimension of employee’s decision making authority because it is not relevant. The reason for dimension selection is that so far customer orientation is measured by service providers themselves (the perception of employees who are customer-oriented) and there are not many researches in Indonesia that measure the customer orientation of service providers (customers give a response to the employee’s customer-oriented behavior and it is a confirmation of the customer’s perception).

**Customer Characteristics**

Kotler and Armstrong (2012); Schiffman and Kanuk (2000) state that understanding the characteristics of individual customer is important for being able to fulfill the customer demand on a marketed product or service. Durukan and Bozacı (2011) say that a company should be able to well understand and implement the characteristics of individual customers in their business so that the company can reach the business objectives more effectively.
Turban et al. (2004), study *e-commerce* by utilizing ten attributes of customer characteristics, namely age, sex, income, education, life style, psychological state, job, values, personality, and marital status. Whereas Solomon et al. (2012) mentioned the most essential demographic dimensions, namely age, sex, structure of family, social class and revenue, ethnicity, geographical location where customers live, and life style. Schiffman and Kanuk (2000) stated that demographical dimensions include age, sex, marital status, family life cycle, income, education and job.

Lovelock and Wright (1999) explain that people with higher social economic state have a higher possibility to deliver their complaint rather than those with lower social economic state. Oly Ndubisi and Sinti (2006) state that banking customers in Malaysia with low income tend not to deliver any complaints. Liu and McClure (2001) state that consumers with different cultures have various complain behaviors and different intentions. Ngai et al. (2007) conclude that a significant relationship exists between the respondent’s nationality and his complain behavior.

**Research Methodology**

This research uses questionnaire as a data collection tool; so it is necessary to test its validity and reliability. The next stage is analyzing and interpreting the data obtained in the field using descriptive statistical analysis and inferential statistics. The total sample of 400 customers is drawn proportionately from each country in Indonesia (Jakarta, Medan and Bandung). The distribution of questionnaire is carried out randomly regarding its composition: Jakarta 200 respondents, Bandung 100 respondents and Medan 100 respondents. The duration of survey is one month (in the period of September 2016) using google form. The items in the questionnaire to measure the construct dimensions are adapted from some previous studies. Customer characteristics are adapted by Kotler and Keller (2011), Solomon et al. (2012), Schiffman and Kanuk (2000), Evans et al. (2009), Turban et al. (2004) for life style, psychology and income. Service employee’s orientation to customer is adapted by Hennig-Thurau (2004) for technical skills, social skills and motivation. Behavioral intention is adapted by Zeithaml et al. (1996) for loyalty to company, propensity to switch, willingness to pay more, external response and internal response. Customer retention is adapted by Mohammad et al. (2009) for word-of-mouth communication, purchase intention, price sensitivity and complain behavior. Eventually, the total number of items is 85. All items are measured by responses in semantic different point scale of 10, ranging from 1 (strongly disagree) to 10 (strongly agree).

Inferential statistical method used in the data analysis is Structural Equation Modeling (SEM). Primary data (obtained from the sample) is analyzed using Structural Equation Modeling based on LISREL 8.72 software. Structural Equation Modeling is used to test the research hypothesis. The pattern of relationship among variables that will be studied is the causal relationship of one or more independent variables and one or more dependent variables. In this study there are some forms
of relationship or equation to be tested. Overall, the SEM model (structural and measurement models) formed in this study are as follows:

Figure 1. Research Model

Results

Confirmatory factor analysis is used for validity and reliability tests. Research model is constructed by 85-item battery and comprises four dimensions of customer characteristics service employee’s orientation to customer consists of three dimension, behavioral intention consists of five dimensions, and customer retention consists of four dimension. All the indicators for the dimension in each construct have resulted in the value of loading factor bigger than 0.5 so there is no indicator excluded from the model.

Table 1. Results of Confirmatory Factor Analysis First Order

<table>
<thead>
<tr>
<th>Construct</th>
<th>Dimension</th>
<th>( \lambda )</th>
<th>CR</th>
<th>VE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer Characteristics</td>
<td>Life style (Ls)</td>
<td>0.940</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Social (Soc)</td>
<td>0.910</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Income (Inc)</td>
<td>0.890</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Psychological (Ps)</td>
<td>0.970</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service Employee’s Orientation to Customer</td>
<td>Technical skills (Ts)</td>
<td>0.970</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Social skills (Ss)</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Motivation (Mot)</td>
<td>0.970</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Behavioral Intention</td>
<td>Loyalty to company (loy)</td>
<td>0.900</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Propensity to switch (Pr)</td>
<td>0.910</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Willingness to pay more (Pay)</td>
<td>0.970</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>External response (Exs)</td>
<td>0.960</td>
<td></td>
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</tbody>
</table>
The model structure illustrates the relationship among constructs. The value of $X^2$ 215.28 with df 98 (Good), Sig. Probability 0.000 (poor), GFI 0.94 ≥ 0.90 (Good) RMSEA 0.05 ≤ 0.08 (Good), Normed $X^2$ 2.19 < 5 (Good), NFI 0.98 > 0.90 (Good), NNFI 0.98 > 0.90 (Good), CFI 0.99 > 0.90 (Good), RFI 0.97 > 0.90 (Good), AGFI 0.91 (Good) and PNFI 0.80 (Marginal) are in the range of 0 – 1.

From the structural model, customer characteristics influences behavioral intention with the coefficient value 0.24 and t-value 4.83. Service employee’s orientation to customer influences behavioral intention with the coefficient value 0.27 and t-value 5.35. Customer characteristics influences customer retention with the coefficient value 0.22 and t-value 4.09. Service employee’s orientation to customer influences customer retention with the coefficient value 0.16 and t-value 3.12. Behavioral intention influences customer retention with the coefficient value 0.18 and t-value 3.42. It means all the inter-construct relationships are significant because the t-value is bigger than the cut off 1.96. Based on the structural equation of behavioral intention the value of $R^2$ is found 0.17 meaning that customer characteristics and service employee’s orientation to customer contribute 17% to the creation of behavioral intention. Whereas from the structural equation of customer retention the value of $R^2$ is found 0.18 meaning that the customer characteristics, service employee’s orientation to customer, and behavior contribute 18% to create customer retention. Behavioral intention becomes a mediating variable in the relationship of customer characteristics and service employee’s orientation to customer toward the customer retention because the value of direct relationship, which is initially significant, the value is still significant but decreasing after being added behavioral intention. See Table 2.

<table>
<thead>
<tr>
<th>Construct</th>
<th>Dimension</th>
<th>$\lambda$</th>
<th>CR</th>
<th>VE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer Retention</td>
<td>Internal response (Int)</td>
<td>0.870</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Words of mouth (Wom)</td>
<td>0.800</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Purchase intention (Pi)</td>
<td>0.950</td>
<td>0.913</td>
<td>0.762</td>
</tr>
<tr>
<td></td>
<td>Complain behavior (Cb)</td>
<td>0.810</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Price sensitivity (Prs)</td>
<td>0.860</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2. Single Mediation Test through Behavioral Intention

<table>
<thead>
<tr>
<th>Influence</th>
<th>Direct</th>
<th>Indirect</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coef</td>
<td>t-val</td>
</tr>
<tr>
<td>Customer characteristics $\rightarrow$ Behavioral Intention $\rightarrow$ Customer Retention</td>
<td>0.26</td>
<td>4.96</td>
</tr>
<tr>
<td>Service employee’s orientation to customer $\rightarrow$ Behavioral Intention $\rightarrow$ Customer Retention</td>
<td>0.21</td>
<td>4.11</td>
</tr>
</tbody>
</table>

Discussion

Overall, the hypothesis developed from the research model proves to have significant influence. Service employee’s orientation to customer becomes the most
dominant variable in creating customer retention through behavioral intention. It means, customers will be retained if they have a positive behavior intention toward the company which has employees with customer-oriented behavior. In this research, customer retention is resulted from the impact of satisfaction they have felt. However, Climis (2016) explains that from the customers using the aviation service in North Cyprus, those who are satisfied do not impact the retention because they have planned to move to other service providers. This research is in line with Lai and Chen (2011) who explain that it is necessary for public transportation companies in Taiwan to enhance their customer satisfaction level in order to give positive impacts on the behavioral intention. Furthermore, Ambak et al. (2016) explain that the attitude against public transportation in Malaysia is a dominant factor in generating the intention to behave. It means that the companies providing public transport services should pay attention to customer satisfaction and how to generate customer’s behavioral intention so that they are willing for retention.

Conclusion

From the research, a conclusion can be made that the characteristics of customer and service employee’s orientation to customer significantly influence behavioral intention and customer retention. Furthermore, behavioral intention influences customer retention. Behavioral intention is an intervening function between customer characteristics and Service employee’s orientation to customer toward customer retention. This study explains that the customer behavioral intention on the on-line transportation services will determine whether they will be retained or not depending on the characteristics of customer and the perception of service employee’s orientation to customer. For the companies who provide public transportation services (both on-line and off-line), their employees with orientation to customer in delivering services will become a reference for creating satisfaction which finally can generate the behavioral intention in a positive direction and give impacts on the behavior of customer retention.

References


Mead G.H., 1934, Mind, self and society, Chicago University of Chicago Press, 111.
Schiffman L.G., Kanuk L.L., 2000, Consumer behavior, 7th. NY, Prentice Hall.
BUDOWANIE RELACJI Z KLIENTEM W TRANSPORCIE ON-LINE

Streszczenie: Utrzymanie klienta podkreśla działania marketingowe mające na celu zatrzymanie klientów. Utrzymanie klientów, to forma lojalności związana z zachowaniem mierzonym na podstawie zachowania kupujących konsumentów, wskazanym przez wysoką częstotliwość zakupu usługi, a więc firma, która chce poznać poziom utrzymania klienta, musi widzieć zachowanie klienta w korzystaniu z usługi. W niniejszym opracowaniu przedstawiono wyniki badania usług transportowych on-line: Gojek, Grab i Uber w Dżakarcie, Bandung i Medan. Próbę stanowi 400 użytkowników usługi transportowej on-line, metodologia badawcza wykorzystuje kwestionariusz ankiety i odnosi się ona do modelowania zachowań klientów. Istotą niniejszych badań jest to, że intencja behawioralna klienta w usłudze transportowej on-line określa czy są zachowane, czy nie, w oparciu o charakterystykę klienta i postrzeganie orientacji pracownika usługi na klienta. Ponadto wnioski z niniejszych badań wskazują, że intencja behawioralna konsumenta staje się konieczna do przebadania przez osoby zajmujące się biznesem w transporcie on-line.

Słowa kluczowe: utrzymanie klienta; zachowanie klientów; orientacja pracownika serwisu na klienta; cechy klienta; transport on-line

建立客戶在線運輸中的保留

摘要：客戶保留強調營銷人員的活動來保留客戶。客戶保留是與購買服務頻率高的消費者購買行為測量的行為相關的忠誠度的形式，以便想要了解客戶保留水平的公司必須看到客戶使用其服務的行為。本研究描述了雅加達，萬隆和棉蘭在線運輸服務的調查結果，即Gojek, Grab和Uber。研究方法對400名在線運輸服務用戶進行了調查，並指客戶保留建構。這項研究的本質在於，在線運輸服務的客戶行為意圖將根據客戶特徵和服務員對客戶的定位感知來決定是否保留。此外，研究結果表明，消費者的行為意圖成為業務運營商在線運輸研究的必要條件。

關鍵詞：顧客保留；客戶行為；服務員工對客戶的定位；客戶特點；在線運輸。