Implementation of SOR Framework on Omnishoppers’ Loyalty from Channel Integration Quality Perspective

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Abstract. Omnichannel is a retailing model which integrates all available channels to provide customers with a smooth shopping experience. Every omnichannel retail company (i.e., IKEA, Starbucks, Sephora, etc.) tries to keep its customers from turning to competitors. The present research aims to investigate the variables that encourage customer loyalty (i.e., repurchase intention and word of mouth). The data were gathered through a questionnaire filled out by 128 respondents in the Greater Jakarta area. By employing SOR (stimulus-organism-response) framework, the data obtained were then analyzed using SmartPLS 3.0 software and the SEM (Structural Equation Modeling) approach. The results support all hypotheses developed and confirm the positive relationship among channel integration quality, perceived empowerment, trust, commitment, repurchase intention, and word of mouth. All variables have a significant positive relationship, except for the relationship among trust, repurchase intention, and word of mouth, they were insignificant. This is shown by the t-statistic of 1.47 and 1.38 (less than 1.96). This study suggests omnichannel retailers focus on formulating strategies and policies by considering channel integration quality (CIQ), perceived empowerment (PE), and commitment (C) in order to increase omnishopper loyalty.

Keywords: Channel Integration Quality · Perceived Empowerment · Trust-Commitment · Customer Loyalty · SOR Framework · Omnichannel

1 Introduction

The retail industry has evolved over the last several years alongside the swift advancement of information and technology. The internet’s combination with the digitalization trend is driving the emergence of new digital channels including cell phones, tablet devices, and social media. The retail industry is evolving from a single channel to multichannel, and subsequently to omnichannel, as new channels are integrated into current physical and online channels.

Many retailers are trying to transform by providing online sales channels. Indonesian Bank reports that online sales through e-commerce are increasing every year, reaching 63.4% in the first half of 2021 [1]. Seeing this, several retailers in Indonesia have started...
omnichannel adoption by creating their online channels in e-commerce, such as Tokopedia, Blibli, Bukalapak, etc. Other retailers such as Indomaret and Alfamart have also adopted an omnichannel strategy by launching applications called alfagift and klikindomaret. Likewise, Gramedia presents Gramediago services with a pick-up in-store and order from store feature. In addition to the companies already mentioned, many other companies have implemented omnichannel strategies in their business. The chairman of the Indonesian Retail Entrepreneurs Association (APRINDO) stated that 90% of APRINDO members had changed their business model to omnichannel [2].

Many retailers have adopted an omnichannel strategy make the business competition tougher. Moreover, there is a pattern of consumer movement in the digital market, where they can move from one to another when faced with an unlimited choice of stores [3]. The existence of these challenges requires companies to understand consumers and their behavior. The success of the company in competing certainly cannot be separated from the success of the company itself in converting consumers into loyal customers.

Customer loyalty is the tendency of customers toward products and services from certain companies that are expressed with repeat purchase intentions and behavior and recommend to others through word of mouth [4]. When the company succeeds in forming loyal customers, the company’s profit and sustainability will be guaranteed. However, customer loyalty does not just happen, companies need to formulate the right strategy through the factors that encourage customer loyalty.

According to prior studies, perceived empowerment, trust, and commitment are considered as factors that drive customer loyalty. Those factors will be investigated using the SOR framework. The SOR (Stimulus Organism- Response) framework explains how a stimulus can affect an individual’s internal state followed by a response/change in behavior shown [5].

Several studies have been conducted regarding omnichannel and its effect on consumer behavior. A study by [6] investigates the relationship among channel integration quality, customer empowerment, and customer experience which will lead to customer patronage intention behavior. Meanwhile, research by [5] examined customer perceptions of channel integration and how it affects customer patronage through the mediation of customer empowerment with trust and satisfaction. Another study by [7], researched the role of social interaction and concerns over customer privacy in the social commerce aspect based on the trust commitment theory and its consequences for Brand co-value creation on Facebook pages. In addition, [8] discussed how shopping motivation could affect customer loyalty.

Based on the background described, there is a scarcity of research on the quality of channel integration and how it will influence the customer loyalty, utilizing the theory of trust commitment and perceived empowerment as organisms in the SOR framework. On that account, the objective of the present study is to bridge the gap and explore the relationship between these variables through statistical tests. The results found will be later helpful for research in the omnichannel scope, as well as to provide insight to practitioners as consideration in providing services in the retail industry to consumers.
2 Overview

2.1 Omnichannel

Omnichannel defined as integrated selling where the benefits of a physical store (i.e., personal service, the opportunity to touch things directly, etc.) are combined with an information-rich online shopping experience [9]. The word omnichannel comes from Latin, “omni” means all or universal and “channel” means all channel together, so omnichannel means whole/entire channels.

2.2 Channel Integration Quality

As discussed earlier, the main idea of omnichannel is integration. Channel integration is the coordination of interaction points that used by companies in various forms such as offline stores, social media, website, and other channels to give customers a uniform, smooth, and unified service experience, indicated by the ease of switching from one channel to another [10]. Research by [11] defined channel integration quality by a framework that comprises 4 components as can be seen on Fig. 1.

2.3 Perceived Empowerment

Perceived empowerment means the degree of control that customers perceive themselves to have, how much influence they have over the shopping process such as where, when, and how they will shop [5, 6]. In an omnichannel context, an omnishopper (omnichannel consumer) can switch between channels freely or use the available channels at the same time. Perceived empowerment allows them to gather information in many ways and have the freedom to choose, or have a lot of control over their decision making.

2.4 Trust-Commitment Theory

The theory was introduced by Morgan & Hunt (1994) which explains how long-term relationships that exist between business partners can thrive, succeed or fail [7, 12]. The theory contends that establishing and sustaining effective relationships with customers requires a high level of trust and commitment [12].

The definition of trust is a party’s desire to rely on another party, based on positive expectations of the other party’s acts and intents. Meanwhile, commitment is described as a party’s belief in the importance of maintaining long-term connection with colleagues/other parties, and that it is worthwhile to put up utmost effort to ensure that the relationship can last a long time [7].

2.5 Customer Loyalty

Loyalty is an attitude that shows attachment towards products, services, or even employees of a particular brand or company, marked by the behavior of buying products or services repeatedly from the same company even though there are many other alternatives and recommending them to others [13]. Repurchase intention and word of mouth were identified as components of consumer loyalty by Zeithaml et al. in 1996 [8].
2.5.1 Repurchase Intention

Repurchase Intention described as the willingness of the customers to continue to make purchases from the same retailer or company, based on their previous buying experience [8, 14].

2.5.2 Word of Mouth

WOM is the tendency of consumers to communicate, provide recommendations, or engage in other forms of informal conversation by conveying a positive evaluation of a product or service from a particular company to other consumers [8, 14, 15].

2.6 SOR Framework

S-O-R framework stated that the existence of an external stimulus can cause an individual’s internal state to change, leading to positive or negative behavior that is shown as a form of response to the given stimulus.

The S-O-R framework made up of three components: Stimulus, Organism, and Response. Stimulus is a physical, visual, or verbal variable that can affect an individual’s response [16]. Organisms are a representation of an individual’s internal state which includes internal activities such as perceptions, feelings, and thoughts along with affective, emotional, and cognitive states that are felt by individuals [5]. The last is the response, which is the final decision of the individual which is manifested through approach or avoidance behavior. The approach describes positive behavior toward certain things.

3 Research Model

3.1 Channel Integration Quality and Perceived Empowerment

According to [5], customers will have a more seamless purchasing experience as a result of channel integration, and they will have more shopping freedom. Customers can choose the type of channel to be used, the type of transaction, and the location or delivery method according to their wishes and needs. Customers can also access information about products or services through an integrated communication mechanism, where each available channel can offer various complementary information. For instance, social media serves as a catalog, displaying detailed product information, followed by reviews from various customers on apps or websites. In reference to the explanation above, it is clear that the better the quality of channel integration, the more freedom consumer will have. Hence, we proposed the hypotheses below.

H1a. Channel integration quality positively affects perceived empowerment.

3.2 Channel Integration Quality and Trust- Commitment

According to [11], integration is an important element of service quality. A study from [12] found that high quality services would have affect commitment and trust. The high
quality of integration perceived by customers would increase the customer commitment and trust in retailers. Accordingly, we proposed the hypotheses below.

H1b. Channel integration quality positively affects trust.
H1c. Channel integration quality positively affects commitment.

3.3 Perceived Empowerment and Customer Loyalty

Prior study, [17] proved that customer empowerment significantly affects customer loyalty. If the company can provide good service and opportunities for customers to make their own decisions, the customers will be satisfied [18]. The level of perceived satisfaction will lead to repurchase intentions and customer willingness to recommend the company to colleagues and relatives. In this regard, we suggested the hypotheses below.

H2a. Perceived empowerment positively affects Repurchase Intention.
H2b. Perceived empowerment positively affects Word of Mouth.

3.4 Trust-Commitment and Customer Loyalty

When a customer has already trusts in a retailer, the customer more likely have the intention to purchase there. Moreover, if customers already have or get positive experiences when making purchases, they may have repurchase intentions [19]. Research by [15] stated that, if the trust and commitment felt by customers is high, then positive word of mouth will be more likely to be carried out by customers. Thus, we suggested the hypotheses below.

H3a. Trust positively affects Repurchase Intention.
H3b. Trust positively affects Word of Mouth.

According to [20] loyal feelings owned by customers can increase repurchase behavior because loyal customers tend to be ignorant and insensitive to prices and promotional/persuasion activities from competitors. In addition, his study proves perceived commitment will result in customer loyalty, the stronger perceived commitment, the
more likely people are to spread the news through word of mouth and recommendations. In reference of prior explanation, we proposed the hypotheses below.

H4a. Commitment positively affects Repurchase Intention.
H4b. Commitment positively affects Word of Mouth.

4 Methods

4.1 Data Collection

To collect data, we carried out a survey to evaluate the hypotheses. The sample consisted of 128 individuals from the greater Jakarta area who had ever used both retailers’ online and offline services. Based on our research focus on omnishoppers’ (omnichannel consumer) loyalty, our study setting was created to encourage respondents to think about their shopping process in the omnichannel retailer they had the most frequent transaction. The category of omnichannel retailers that were listed are fashion/apparel, cosmetic, furniture and lifestyle, hypermarkets, and food and beverages (fnb). The respondents were required to choose one of them or fill their answers in the blank column if their retailers were not on the list.

4.2 Measure

All of constructs in the present study were identified and adopted from similar research, with slight adjustment to match the study’s needs. We utilized Likert scale to measure all items on the questionnaire. The channel integration quality construct has 16 items adopted from [6] and [14]. We used 5 items to measure perceived empowerment, those were adopted from [5, 6], and [21]. Another 5 items were adopted from [5] and [7] to measure trust. We also measured commitment using 5 items adopted from [7] and [20]. Lastly, Customer loyalty were conceptualized as repurchase intention and word of mouth. To measure repurchase intention we adopted items from [8] and [14]. And the items for word of mouth was adopted from [14] and [19].

5 Results

The measurement model is employed to confirm construct’s validity and reliability, the hypothesized relationships were then examined in the structural model. The data obtained were analyzed with the SEM-PLS analysis technique utilizing SmartPLS. PLS is suitable for exploratory research to test the predictive relevance in the model [22]. According to [22], PLS-SEM can be used on complex models with small samples and offers more statistical power than CB SEM.

5.1 Measurement Model

In this step, we assessed internal consistency, as measured by CR and α, convergent validity as measured by AVE and factor loading, and discriminant validity, as measured by the Fornell-Lacker criteria (inter-construct). Based on [22] the values of CR and α
are recommended to be greater than 0.7. Same thing goes with factor loading and AVE, which should both be more than 0.7 and 0.5, respectively. The Fornell Lacker criteria will be validated when the value of $R^2$ doesn’t exceed the root of the AVE [8].

The CR, $\alpha$, and factor loading were all met the criteria. In opposite, the Fornell Lacker criterion didn’t met the criteria. So we considered for removal of items on the construct that has lacked value, thus item C3, C5, and RI2 were removed from the model. After elimination of certain items, all values confirmed that the construct in the model was reliable and valid. These results can be seen on Table 1.

5.2 Structural Model

Once the reliability and validity were confirmed, we examined the $R^2$ and path coefficient, along with bootstrapping method to see if the path coefficient was significant. Overall based on the $R^2$ values channel integration quality have explained 43.5%, 24.1%, and 30.2% the variance of perceived empowerment, trust, and commitment, respectively. Which in turn explains 73.8% and 44.6% the variance of repurchase intention and word of mouth.

The results from bootstrapping are shown in Table 2, they supported all the hypotheses proposed in the present study. Channel integration quality positively affects perceived empowerment, trust, and commitment ($\beta > 0$, $p < 0.05$). On top of that, according to the table perceived empowerment significantly impact repurchase intention and word of mouth ($\beta > 0$, $p < 0.05$). Another favorable results were also found among commitment, repurchase intention and word of mouth ($\beta > 0$, $p < 0.05$). Trust also had positively affects repurchase intention and word of mouth, however it was insignificant ($\beta > 0$, $p > 0.05$).

6 Discussion

Based on the SOR framework, our study considers channel integration quality as a stimulus, perceived empowerment, trust, and commitment were identified as an organism, and repurchase intention and word of mouth were identified as a response. The result reveals that channel integration quality strongly and positively influences perceived empowerment (H1a supported). This is in line with [21] which states a positive and significant relationship between channel integration and perceived empowerment. Similarly, study by [5] show that customer empowerment is positively related to channel integration. Consumers will benefit from unlimited information and choices when retailers integrate their channels. The existence of integration makes the boundaries between channels disappear, consumers can easily switch channels and use them interchangeably or simultaneously. That way they will feel they have freedom in every shopping process.

We also discovered that channel integration quality has a favorable and strong impact on trust and commitment (H1b and H1c supported). This is in line but also contradictory to the findings of [12]. In his study, channel integration quality affects trust, but not commitment. Based on the theory of trust-commitment, the benefits obtained will positively influence commitment [12]. The benefits referred to here are the benefits of channel integration, when consumers receive many benefits from retailers, consumers
will have a sense of commitment in establishing relationships with retailers. Furthermore, [11] stated that integration is one of the most important aspects in service quality. High-quality services will boost consumer trust and loyalty to retailers.

Apart from channel integration quality, we also found that perceived empowerment positively and significantly affects repurchase intention and word of mouth (H2a and H2b supported). It means perceived empowerment can affect consumer loyalty through repurchase intention and word of mouth. These findings align with the results researched by [23] who found that perceived empowerment had a significant impact on customer loyalty. When retailers are able to provide good service and increase the level of control that consumers have, consumers will feel the value of empowerment in every transaction or exchange of services with retailers.

Commitment also discovered to have a statistically strong and beneficial influence on repurchase intention and word of mouth (H4a and H4b supported). The results are consistent with research conducted by [24] which showed that commitment significantly affects consumer loyalty. The idea underlying the influence of commitment on loyalty

### Table 1. Discriminant validity and Fornell-Lacker criterion

<table>
<thead>
<tr>
<th></th>
<th>AVE</th>
<th>CR</th>
<th>α</th>
<th>CIQ</th>
<th>PE</th>
<th>TR</th>
<th>CM</th>
<th>RI</th>
<th>WOM</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIQ</td>
<td>0.520</td>
<td>0.945</td>
<td>0.939</td>
<td><strong>0.721</strong></td>
<td>0.550</td>
<td>0.660</td>
<td>0.553</td>
<td>0.491</td>
<td>0.454</td>
</tr>
<tr>
<td>PE</td>
<td>0.690</td>
<td>0.917</td>
<td>0.887</td>
<td>0.550</td>
<td><strong>0.885</strong></td>
<td>0.558</td>
<td>0.847</td>
<td>0.659</td>
<td>0.599</td>
</tr>
<tr>
<td>TR</td>
<td>0.715</td>
<td>0.926</td>
<td>0.900</td>
<td>0.660</td>
<td>0.558</td>
<td><strong>0.831</strong></td>
<td>0.582</td>
<td>0.479</td>
<td>0.569</td>
</tr>
<tr>
<td>CM</td>
<td>0.784</td>
<td>0.916</td>
<td>0.862</td>
<td>0.553</td>
<td>0.847</td>
<td>0.582</td>
<td><strong>0.823</strong></td>
<td>0.625</td>
<td>0.741</td>
</tr>
<tr>
<td>RI</td>
<td>0.677</td>
<td>0.862</td>
<td>0.762</td>
<td>0.491</td>
<td>0.659</td>
<td>0.479</td>
<td>0.625</td>
<td><strong>0.846</strong></td>
<td>0.496</td>
</tr>
<tr>
<td>WOM</td>
<td>0.827</td>
<td>0.935</td>
<td>0.895</td>
<td>0.454</td>
<td>0.599</td>
<td>0.569</td>
<td>0.741</td>
<td>0.496</td>
<td><strong>0.909</strong></td>
</tr>
</tbody>
</table>

Note: Channel Integration Quality, PE: Perceived Empowerment, TR: Trust, CM: Commitment, RI: Repurchase Intention, WOM: Word of Mouth

### Table 2. Hypotheses testing

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Path Coefficient (β)</th>
<th>T-statistic</th>
<th>P Value (p)</th>
<th>Hypotheses</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIQ &gt; PE</td>
<td>0.660</td>
<td>13.957</td>
<td>0.000</td>
<td>H1a. Accepted</td>
</tr>
<tr>
<td>CIQ &gt; TR</td>
<td>0.491</td>
<td>6.885</td>
<td>0.000</td>
<td>H1b. Accepted</td>
</tr>
<tr>
<td>CIQ &gt; CM</td>
<td>0.550</td>
<td>8.112</td>
<td>0.000</td>
<td>H1c. Accepted</td>
</tr>
<tr>
<td>PE &gt; RI</td>
<td>0.144</td>
<td>2.879</td>
<td>0.004</td>
<td>H2a. Accepted</td>
</tr>
<tr>
<td>PE &gt; WOM</td>
<td>0.323</td>
<td>3.460</td>
<td>0.001</td>
<td>H2b. Accepted</td>
</tr>
<tr>
<td>TR &gt; RI</td>
<td>0.090</td>
<td>1.474</td>
<td>0.141</td>
<td>H3a. Accepted</td>
</tr>
<tr>
<td>TR &gt; WOM</td>
<td>0.117</td>
<td>1.381</td>
<td>0.167</td>
<td>H3b. Accepted</td>
</tr>
<tr>
<td>CM &gt; RI</td>
<td>0.706</td>
<td>12.676</td>
<td>0.000</td>
<td>H4a. Accepted</td>
</tr>
<tr>
<td>CM &gt; WOM</td>
<td>0.341</td>
<td>2.942</td>
<td>0.003</td>
<td>H4b. Accepted</td>
</tr>
</tbody>
</table>
is that consumers who have a strong commitment will strive with maximum effort to maintain relationships with retailers, thus the loyalty will manifest.

Another interesting finding is trust positively affects repurchase intention and word of mouth (H3a and H3b supported), but it was found to be insignificant. This is also in line with the findings [24], which stated that trust and loyalty have no significant relationship. Consumers may trust retailers, but it does not mean they will be loyal to them. Other factors outside of trust have a more dominant influence in shaping consumer loyalty. Trust cannot be used as the primary benchmark to make consumers loyal.

7 Conclusions

Our findings indicated that channel integration quality significantly affects perceived empowerment, trust, and commitment. Consequently, retailers should provide more channels and integrate them. In addition, retailers must assist consumers in understanding the use of each of these channels to access certain services needed by consumers. The consistency between channels is also critical, including the consistency of processes, services, and available information. All information about the product or service offered by retailers must be uniform and complementary to each available channel, which aims to reduce confusion that consumers may face.

Our results indicated that perceived empowerment significantly influence repurchase intention and word of mouth. In that respect, retailers need to formulate strategies to promote perceived empowerment; Retailers should try as much as possible to meet the different needs of their consumers by providing alternatives, such as shopping and payment methods. Retailers may also consider providing self-service machines such as those implemented by McDonald’s, and online database-connected devices such as those implemented by Gramedia and Zara. Similarly, retailers should enrich online channels with offline stores activities, such as Augmented Reality (AR) by IKEA, which allows consumers to simulate furniture arrangements in various corners of the house. In this way, the retailer can indirectly limit the consumer’s intention to seek alternatives elsewhere because the retailer has tried to provide all the other options and options.

The impact of trust on repurchase intention and word of mouth was shown to be insignificant in our study. Therefore retailers do not need to focus on making strategies to increase trust. The findings of [25] show that trust in elderly consumers (on average 64 years) only slightly increases customer loyalty. The results in this study provide additional information that even young consumers (the majority aged 18–25) give the same results. In other words, consumers will still remain loyal even though they do not fully trust the retailer.

Lastly, this study demonstrated that commitment is the dominant factor in creating customer loyalty. A strategy that might help is a consumer personalized guide. For instance, when they visit a physical store, retailers can guide and serve consumers to choose the product they need without discriminating against consumers based on status, appearance, or racial reasons. And then, retailers must provide instruction to help consumers understand what channels are available and how the characteristics of each channel are. Retailers can also provide customer service on online services to help consumers with problems. Offers and recommendations for certain products and services
that are explicitly sent through consumers’ contacts such as email, based on consumer transaction data and history can also be considered by retailers as a strategy to increase commitment. Another strategy that can be applied is to provide rewards in the form of loyalty points (in applications or cards) for each transaction, which can be exchanged for free or discounted products used for future transactions. In addition, retailers can carry out an offline or online event or create community forums on social media and websites that allow consumers to be connected with retailers and other consumers. By leveraging consumers’ enthusiasm, this forum can be used as a tool to gather feedback and suggestions for the products and services offered. That way, there will be more frequent interactions between consumers and retailers; the more interactive the retailers are, the consumers will feel closer and familiar with the business they are running. Moreover, consumers may try to have long-term relationships with retailers when the services provided are good and by consumer expectations.

8 Limitation

This research has certain drawbacks. To begin with, this research was carried out in the Jakarta metropolitan region. Thus, customer’s views and comprehension of integrated channels may differ. It is strongly advised to broaden the scope by including data from other areas. Second, the category of omnichannel retailers was not specified. In this sense, further research might look into analyzing certain types of omnichannel retailer, as different types of retailers may have distinct features depending on their industry. Future studies might look at those topics.

References


