The Strategies to Improve Customer Experience: A Case of Online Shopping Platform

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Abstract

Objective: The objective of this study is three-fold; 1) To analyze the current situation of online customer experience with the preferred online shopping platform among university students, 2) to examine the influence of website design, website security, and customer service towards online customer experience, and 3) To recommend strategies to improve online customer experience with the online shopping platform among university students. The theoretical basis applied in this study is Customer Experience Theory.

Design/Methods/Approach: Adopt the applied research method, information was accumulated through situational analysis before data collection via a survey questionnaire. The unit of analysis is individual university students in Selangor who have at least performed one transaction through an online shopping platform. The final sample size for this study is n=183. For data analysis, this study applied two strategic tools (SWOT Analysis & TOWS Matrix) and analyzed data using regression analysis.

Findings: Results show that to sustain the e-commerce business, customer experience is an issue that must be taken seriously by any online platform provider. Among the factors that should be of concern to the platform providers are; website design, website security, and customer service. In this study, these factors were proven to have a significant positive influence on online customer experience.

Research Practical: This study focuses on three important variables: website design, website security, and customer service. The findings of this study can be used as guidelines for online platform providers to improve their online shop further. Besides, researchers also recommend strategic actions for online shopping platforms to improve online customer experience.

Originality: The value of this study is that researchers have examined the factors that influenced online customer experience and provided recommendations with nine strategies for online shopping platforms to improve their customers' online experience. The strategies are known as best-cost strategies, innovation strategies (live-streaming), improved website design features, improved website security, customer service KPIs, vertical integration strategies, non-equity strategic alliance, offensive strategies, and outsourcing strategies.

Keywords: Online Customer Experience, Website Design, Website Security, Customer Service, Malaysia

JEL Classification: M1, M3, L1

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I. Introduction

Online shopping has become the new way of buying things. It is the process of purchasing goods or services through online platforms. For Malaysia, the two most prominent and popular online shopping platforms are Lazada and Shopee. It has attracted potential buyers from all age groups. According to MCMC (2018), 72.5% of the e-commerce users in Malaysia are dominated by those who belong to the age group of between 20 to 30 years old. It represents the people who grew up in the era of digital progress, where everything is connected via the internet and tech-savvy. Most of them are currently university students. Indeed, those in this age range between 20 to 25 years old prefer to buy online compared to older people who use fewer online shopping platforms (Shanthi & Kannaiah, 2015). Therefore, the first objective of this study is to analyze the current situation of online customer experience with the preferred online shopping platform among university students. Secondly, this study examines the influence of website design, website security, and customer service on online customer experience. As for the third objective, this study aims to recommend strategies to improve online customer experience with the online shopping platform among university students.

With the recent Covid-19 pandemic, e-commerce has gained more popularity and changed how people shop (Revinova, 2021). This shift has threatened conventional shops and urged them to change how they do business (Jain et al., 2021). With the availability of online shopping platforms business, owners can now sell their products without having to develop their online shop from scratch. They can ride on the available platform and start their online business instantly (Aziz et al., 2016). However, some concerns need to be addressed by the platform provider if they wish to position themselves as the preferred platform (Lekh, 2016). This is because the success of an online shopping platform is measured in terms of whether shoppers are happy with their online experience (Sharma & Aggarwal, 2019) while using the platform.

Online platform providers should be aware of the factors that make customers choose them over their rivals. Understanding what matters most to the shoppers when choosing an online shopping platform would be an added advantage. These factors will shape their experience and lead to continuous platform usage. Findings from Trustpilot (2021) shows that 74% of customers have bad experience using online shopping platforms because they have issues navigating the website, lack of trust to share credit card information, and the customer service response to a customer inquiry. Similarly, a study by Deyalage and Kulathunga (2019) identified three factors influencing customer satisfaction with online shopping platforms: website design, website security, and customer service.

Additionally, a study by Gajewska et al. (2020) has proved the significance of quality aspects of e-commerce in the service market, whether before or following a purchase, related to reactivity (efficient and prompt customer service), guarantee/safety (transaction security), empathy (helpful staff), reliability (respond time to a complaint), and tangible outcomes (intelligibility and readability of webpage). In order to maximize consumer satisfaction through a good online purchasing experience and sustain customer loyalty, this service quality is interconnected to website design, security, and customer service (Liu et al., 2017; Longstreet et al., 2022; Sharma & Lijuan, 2015). Thus, this serves as a call and challenge for the platform provider to stay alert about these issues if they wish to remain the preferred platform. On this note, this study aims to understand the current situation of the online shopping landscape in Malaysia by examining the factors influencing online shoppers’ experience with a focus on university students. The study also hopes to suggest possible strategies to benefit online shopping platform providers.

This research makes few significant contributions. Firstly, this study strengthens the overall marketing literature on online customer experience with an emphasis on four main determinants and university students as the focus of the study. Through this study, the researchers have proven that Gen-Z has the buying power which may shape the future online shopping landscape. Secondly, from a practical perspective, this research’s findings provide an avenue for platform providers to better understand the target group’s online shopping behavior and preference in deciding which platform to use in the future. The ability to prioritize what to focus on when developing their website from the university students’ perspective will justify their existence in the effort to sustain their businesses in Malaysia. Indeed, this study is deemed important to Malaysia’s e-commerce business sustainability. According to Revinova (2021), the e-commerce industry has a relatively high contribution toward achieving sustainable development goals. It is known for its positive impacts, such as increasing the labor market’s number of jobs to support Sustainable Development Goal 8 (SDG 8) and providing decent work and economic growth (Revinova, 2021). Lastly, a set of strategies are provided for platform providers as a guideline to strengthen their footing in the online business landscape.

2. Literature Review

Customer Experience Theory

Customer experience concepts are defined as multidimensional constructs which focus on a customer’s behavioral, cognitive, emotional, sensorial, and social reactions to a company’s offerings throughout the customer’s purchase journey, which include the pre-purchase, purchase, and post-purchase phases (Grewal & Roggeveen, 2020; Lemon & Verhoef, 2016; Shavitz & Barnes, 2020). Despite being a crucial marketing concept, the increasing number of studies concentrating on this concept has caused fragmentation and theoretical confusion (Becker & Jaakkola, 2020;
The majority of prior customer experience research has borrowed theories from other domains (Singh et al., 2022; Waqas et al., 2021) and is based on perspectives that evolved from overlapping phases, such as conception, practice, and management to evaluate the further scale of development from the early breakthrough of the findings that attempts in various contexts (Sindhu & Bharti, 2020).

The customer experience model by Schmitt et al. (2015) combines experientialism and materialism dimensions, although their effects on customer happiness are both influenced by the experience brands evoke. A study by Jain et al. (2017) offers a further understanding of the concept of experiential perspectives and service experience, which refers to the customer experience as a holistic interactive process facilitated by emotional and cognitive cues, moderated by the customer and contextual characteristics, and producing unique and pleasant or unpleasant memories. Moreover, Rahimian et al. (2020) have developed a four-stage framework for customer experience management which consists of customer identification, customer experience design, customer experience implementation, and customer experience measurement through complementary reviews and systematic literature reviews. Additionally, a study by Kim et al. (2022) reshaped the idea of the customer experience for hotel in-room amenities in terms of two quality dimensions: tangible (food and beverage, spatial environment, convenient appliances, bathroom products, safety, and security) and intangible (precautionary measures, entertainment services, general services, sensory cues) in the relationship between the customer experience and customer loyalty. According to a study by Olsson et al. (2022) and Behare et al. (2018), customer-centric concepts, including experience visioning, experience mobilization and launch, experience architecture, future state experience design, and experience strategy and outcome, are being reshaped for digitalization business strategy agility.

In addition, a study by Kumar and Anjaly (2017) has examined the post-purchase customer experience in the context of online retailing, measuring it across six dimensions: delivery, product-in-hand, return and exchange, customer support, benefits, and feel-good factors and these factors can help online shopping platforms to enhance the customer experience and boost repeat business. Meanwhile, it was also mentioned that design, ease of use, context information, speed of transactions, security, and customer support systems are crucial elements that will increase the level of customer experience in online shopping platforms (Deyalage & Kulathunga, 2019; and Khotimah & Afit, 2016). Notwithstanding, this study seeks to further determine the constructs of website design, website security, and customer service in the context of online shopping platforms that can contribute to the future development of customer experience theory.

**Online Customer Experience**

Online customer experience is a psychological condition that manifests as a personal reaction to an online retailer’s website (Rose et al., 2012). Determinant online customer experience is crucial to attracting, delighting, and retaining customers with a memorable experience by creating customer value, differentiation, and customer satisfaction towards customer loyalty that can give a competitive advantage to a company to sustain their business (Jain et al., 2017; Mbama & Ezepue, 2018; Rahman et al., 2022). Thus, the company cannot ignore the significance of every single online customer experience, such as transactions, service received for pre-purchase and post-purchase, after-sales service, customer decision to purchase, and whether they truly enjoy the service that will contribute to their spread of good word to other people. This is because every result of customer expectations, customer intent, or perception will affect the relationship between the company and the customer (Ageeva et al., 2019; Deyalage & Kulathunga, 2019).

Moreover, it is vital to determine the factors of online customer experience towards online shopping platforms as it will lead to higher satisfaction, intention to purchase, and spread good word of mouth (Singh & Soderlund, 2020). Kulbyte (2018) pointed out that it is important to measure customer satisfaction because 72% of customers will share their positive experience with six or more people only, while 13% of customers who are not satisfied will tell fifteen or even more people to spread bad word of mouth about their unhappiness. Hence, it is crucial to determine the factors of online customer experience to avoid negative customer perception towards the company by focusing customer-centric strategy to improve the online customer shopping experience and seamless maintaining customer loyalty toward company success (Izogo & Jayawardhena, 2018; Wereda & Graybowska, 2016).

Furthermore, previous studies have identified website design, website security, and customer service are among the factors that help to improve online customer experience and satisfaction, which will then lead to the customer deciding to purchase via an online shopping platform (Srivastava & Thaichon, 2022; Deyalage & Kulathunga, 2019; and Dang & Pham; 2018). According to Daroch et al. (2021) and Yang et al. (2019), to compete in the e-commerce market, a company should understand the type of customers by differentiating the way they treat them based on the level of online customer experience. Thus, in this study, researchers seek to understand further the determinants (website design, website security, and customer service) of university students’ experience towards online shopping platforms as they hold the future buying power.

**Website Design**

The attractiveness of user interface design to customers is defined as website design (Kim et al., 2009). The role of website design becomes paramount for online shopping platforms as the elements of website functionality are expected to generate customer enjoyment, satisfaction, and loyalty (Jeon & Jeong, 2017; Kaabachi et al., 2020; Soni,
2021; Tandon et al., 2017). This is aligned with the study by Raman (2019) and Dang & Pham (2018), where there is a strong positive relationship between customer perception of website design and purchase intention. Thus, it indicates that website design is a very important factor that can influence online customer experience as it determines how a customer feels, perceives, considers and decides to purchase product and service through the online shopping platform.

A good website appearance will evoke customers’ positive feelings when it has greater efficiency and convenience of online shopping, such as free control of time and place to find the information quickly without loading progress (ease of browsing options, search engine, and filter options) that can lead to customer satisfaction and loyalty (Kim, 2019; Sharma & Aggarwal, 2019). Moreover, a study by Shukla et al. (2022) shows relationships between website aesthetics, such as ease of navigation, and interactive and friendly visual with the purchase intention. In addition, the inability of customers to touch physical products through online shopping has led them to have more concern about website structure, such as design, color, and size of some different products (Chen et al., 2019; Ehsani & Hosseini, 2021; Khrouf & Frika, 2021). This is in line with the previous study by Bhatnagar et al. (2019), a consumer with poor navigational ability has a lower purchase probability as they need to spend more time searching on the website. Therefore, website design improvement is crucial for appearance, size, link structure, and the number of graphics. A study by Krasnikolakis et al. (2018) and Camilleri (2022) found that focusing on store layouts with 3D and virtual reality online shopping environments is an influential critical factor in creating strong intimacy with customers as it will be more attractive and enjoyable.

However, studies have shown that website design, a color used for design, information availability, and convenience are not important in modifying the level of online customer experience (Bobalca et al., 2021; Krasnikolakis et al., 2018; and Kumar & Anjaly, 2017). Therefore, the researchers have further investigated how website design determines online customer experience towards online shopping platforms among university students.

**Website Security**

Website security is defined as safety, personal information management, and payment security on websites (Maditinos & Theodoridis, 2010). The electronic payment site functionality, such as privacy, security, speed of service, and customer information, are the factors that lead to customer satisfaction and loyalty for the success of online shopping platforms (Ehsani & Hosseini, 2021; Sanyala & Hisamb, 2019; Tandon et al., 2017). Trustworthy website security features such as general company information as well as the privacy and security policies during online purchase transactions should be provided and well-designed to promote a higher sense of low risks and reduce customer safety concerns (Kim, 2019; Sánchez-Torres et al., 2018; Srivastava & Thaichon, 2022).

According to Sánchez-Torres et al. (2018), it is difficult for customer to make an online transaction especially when it involves personal information or large number of financial sums, as they fear giving financial information and bank account information. Thus, awareness of the proper use of confidential information and highly secure personal access are important to be addressed by online shopping platforms. This is in line with studies by Yang and Babapour (2022) and Sharma and Aggarwal (2019), who coined that it is important to ensure that there is no breach of customers’ data privacy where personal information remains confidential while making a transaction on the online platform.

Past studies have found no relationship between website security, such as privacy and financial security, with customer satisfaction and purchase intention for online shopping (Shukla et al., 2022; Camilleri, 2022; Dang & Pham, 2018). Nevertheless, online shopping platform needs to develop strategies to reduce customer concerns with privacy problems such as: adopting advanced security systems, publicly and declaring formal privacy policies, implementing and guaranteeing a safe payment method with financial security, and providing a method to avoid making a poor purchase decision (Dang & Pham, 2018). Hence, this study has investigated how website security determines online customer experience towards online shopping platforms among university students.

**Customer Service**

According to Kaňovská (2010), customer service is defined as all actions taken to secure a relationship with the customer, from product delivery to various ways of assisting the customer in use it. The most significant factor influencing the online customer shopping experience is customer service and how customer responses will satisfy their online shopping experience with the online platform (Singh & Söderlund, 2020). This is aligned with the previous study by Sharma & Aggarwal (2019) and Cao et al. (2018). In contrast, customer support significantly impacted e-commerce success where customers prefer a website that enables them to keep a check on their status, frequently ask questions and are responsive to their queries, and answers correctly. A lack of online customer support or a service representatives’ ability to communicate with the customers will lead to dissatisfaction (McLean, 2017).

According to Kim (2019), online shopping platforms should enhance efficiency and interactive shopping aids with twenty-four-seven (24/7) live chat support services that can solve customer needs with instant access to the website as it is a critical factor that can affect overall customer satisfaction. This is supported by Stoiaan Bobalca et al. (2021) and Kumar & Anjaly (2017), that found that there must be a responsible sale representative to build a good relationship with the customer such as; concern with openness to help, easy to communication, quick solve the problem regarding customer inquiries promptly. Moreover, it is crucial for customer service personnel to have skills and knowledge for online support because it is one of the factors that can affect online customer purchasing.
experiences. Therefore, follow-ups on customer’s feedback after purchasing and obtaining positive feedback leads to a better online customer experience (Camilleri, 2022; Celuch, 2021). The previous study shows that good customer complaint handling can be a determinant for the customer to return once they have a good online shopping experience (Izogo & Jayawardhena, 2018; Singh & Söderlund, 2020).

It is recommended that the company should provide personalized service by using human and technological resources to manage activity with customers, as well as well-prepared customer service representatives to support these activities because customers prefer to be treated as per their expectations, unique and special (Bobalca et al., 2021). Moreover, customers tend to repurchase intention from online shopping platforms when they can easily change or return unsuitable items and quickly get personalization from the company (Raman, 2019). Therefore, researchers have further investigated how customer service determines online customer experience towards online shopping platforms among university students.

3. Methodology

This study is applied in nature and seeks to provide practical solutions for existing problems. Applied research is considered a non-systematic inquiry, and is usually initiated by companies or individuals to address a specific problem (Bajpai, 2011). To help achieve the three objectives of this study, the researchers divided the inquiry process into three steps which are:

Step 1 – Situational Analysis using SWOT

To gain insights into the problems investigated, the researchers interviewed with a representative from a platform provider. This exercise identified and analyzed possible internal and external factors (Musa & Basir, 2021) contributing to the problem. SWOT Analysis was used to analyze the factors identified. Indeed, SWOT is a strategic tool and is effective in helping with situation analysis (Majekodunmi, 2021). It can provide a comprehensive synopsis of the current relevant issues and concerns as well as validated strategic decision making logically (Ali et al., 2022; Harris, 2018; Sciberras, 2019). SWOT analysis is deemed suitable and beneficial for this study as it provides additional information about online customer experience. However, it was also suggested that SWOT should not be used in isolation (Helms & Nixon, 2010). SWOT should be used together with other strategic tools to reap the benefit. For example, SWOT analysis has been applied as a structural approach in setting up the foundation of a balanced scorecard (Lee & Ko, 2000). Thus, in this study, SWOT is used to justify adopting an established research framework. Other than that, SWOT will help the study address Research Objective 1.

Step 2 – Testing of Conceptual Framework

To understand the problem (online experience) from a customer perspective, this study adopts an existing framework by Deyalage and Kulathunga (2019). However, due to the nature of applied research, this study uses the input from SWOT analysis (Step1) and links it to the concepts in the framework. In this study, the framework is complemented with a set of questionnaires which will be empirically tested using regression analysis to address Research Objective 2. This move will address the tautology critique in which the SWOT table is not subjected to any empirical test, and lacks quantifiable validation, which is necessary for theory building (Helms & Nixon, 2010). Thus, the conceptual framework is necessary as it will complement SWOT analysis, providing a stronger foundation for making strategic business decisions.

Step 3 – TOWS Matrix

Finally, to help achieve Research Objective 3, this study applied a second strategic tool: the TOWS matrix. This is in line with earlier studies that have integrated SWOT analysis with other multi-criteria decision-making techniques (Ajmera, 2017; Basset & Mohamed, 2018; Büyüközkan & Ilıcak, 2019; Fares & Lloret, 2022; Khaba & Bhar, 2017). For this study, TOWS helps to visualize how the internal strengths and weaknesses can be matched to external opportunities and threats, thus formulating possible alternative strategies (Dewanto, 2022) for the platform provider. The application of the TOWS matrix in this study will help researchers to prioritize and suggest the most suitable strategy for the online platform provider to implement.

Hence, the Academic Construct (Figure 1) was developed from the research steps above. It comprises two strategic tools and a research framework. The research framework comprises four variables; online customer experience as the dependent variable, website design, website security, and customer service as the independent variables.
Since the study is also set to understand the determinants of customers' online experience, it is very important to ensure that the respondents have prior experience with online shopping platforms. The purposive sampling was applied as the targeted respondents are university students in the urban area of Selangor who have some experience using online platforms to shop. The selection was based on statistics by the Malaysian Communications and Multimedia Commission (2018), where Selangor (40.0%) recorded the highest e-commerce adoption in Malaysia. In contrast, the highest distribution of e-commerce users by age group is among those in the '20s (36.7%) and '30s (35.8%). The study uses a 21-item questionnaire with a 4-point Likert Scale to measure the variables. On top of that, a question on whether they have completed at least one shopping transaction through any online platform is used to screen respondents' eligibility to participate in the study. Table 1 shows the measurement of constructs for the study.

Table 1: Measurement of Constructs

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Constructs Operational Definition</th>
<th>Measurements Items</th>
<th>Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Website Design</td>
<td>The attractiveness that user interface design presents to customers is defined as website design</td>
<td>1. It is easy to search for items on the website</td>
<td>Original scale adopted by Deyalage and Kulathunga's article (2019) for each construct</td>
</tr>
<tr>
<td></td>
<td>(Kim et al., 2009)</td>
<td>2. It is very convenient to order via the website</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. The website is easy to navigate</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. The layout of the website is attractive</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>5. The website uses good color combinations</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>6. It is quick to complete a transaction at this website</td>
<td></td>
</tr>
<tr>
<td>Website Security</td>
<td>Website security is referred to as safety, personal information management, and payment security on websites (Maditinos &amp; Theodoridis, 2010)</td>
<td>1. My personal information is managed securely on the website</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. I feel secure giving credit card information on this website</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. The website has adequate security features</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. I can trust this website</td>
<td></td>
</tr>
<tr>
<td>Customer Service</td>
<td>According to Kaňovská (2010), customer service is defined as all actions taken to secure a relation with the customer,</td>
<td>1. Customer service personnel of the website are always willing to help</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. The website answers customer inquiries promptly</td>
<td></td>
</tr>
</tbody>
</table>
Online customer Experience

The term online customer experience refers to a psychological condition that manifests as a personal reaction to an online retailer’s website (Rose et al., 2012).

1. The website is ready to respond to customer needs
2. The website offers a different forms of contact channels (email, telephone, and others)
3. I can always enquire online about the delivery of my order
4. The website is ready to respond to customer needs
5. The website offers a different forms of contact channels (email, telephone, and others)
6. I can always enquire online about the delivery of my order
7. I have good experience with the way this website has carried out transactions
8. I have good experience with the service I have received from this website
9. I have good experience with the after-sales service provided by the website
10. I have good experience with my most recent decision to purchase from this website
11. I have truly enjoyed purchasing from this website
12. I recommend this website to other people

The online survey form was created and used to facilitate the data collection process for this study. The survey started in November 2021 and ended in December 2021. In total, 266 respondents participated in this study. However, only 183 (68.8%) responses are used in the final analysis. The rest of the 83 responses have been excluded, either due to non-conformance to the criteria set or their responses were in a straight-lining pattern. Despite the exclusion, the 183 responses used in the final data analysis are deemed sufficient, and meaningful, rather than blindly selected large sample size (Memon et al., 2020). Subsequently, all data were analyzed using SPSS version 26.

4. Results and Discussion

The demographic characteristics of the respondents were analyzed using descriptive statistics. According to Table 2, most of the respondents (75.4%) are female, whereas 38.8% of the total respondents are between 21 to 23 years old. A closer look into their profile shows that the majority of the respondents prefer to shop at Shopee (84.7%) over Lazada (13.7%) or other online platforms (1.6%). Results also show that majority of the respondents (65.6%) shop online only when there is the need to do so, while the remaining show either more than three times a month (15.3%), once every two weeks (10.9%), and 8.2% shop once a week.

Table 2: Respondent Profile

<table>
<thead>
<tr>
<th>Items</th>
<th>Level</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>45</td>
<td>24.6</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>138</td>
<td>75.4</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>183</td>
<td>100.0</td>
</tr>
<tr>
<td>Age</td>
<td>18-20</td>
<td>41</td>
<td>22.4</td>
</tr>
<tr>
<td></td>
<td>21-23</td>
<td>71</td>
<td>38.8</td>
</tr>
<tr>
<td></td>
<td>24-26</td>
<td>23</td>
<td>12.6</td>
</tr>
<tr>
<td></td>
<td>27-29</td>
<td>15</td>
<td>8.2</td>
</tr>
<tr>
<td></td>
<td>30 years old and above</td>
<td>33</td>
<td>18.0</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>183</td>
<td>100.0</td>
</tr>
<tr>
<td>How Often Do You Shop Online?</td>
<td>Once a week</td>
<td>15</td>
<td>8.2</td>
</tr>
<tr>
<td></td>
<td>Once every two weeks</td>
<td>20</td>
<td>10.9</td>
</tr>
<tr>
<td></td>
<td>More three times a month</td>
<td>28</td>
<td>15.3</td>
</tr>
<tr>
<td></td>
<td>Only when there is a need to do so</td>
<td>120</td>
<td>65.6</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>183</td>
<td>100.0</td>
</tr>
<tr>
<td>Where Do You Shop Online?</td>
<td>Lazada</td>
<td>25</td>
<td>13.7</td>
</tr>
<tr>
<td></td>
<td>Shopee</td>
<td>155</td>
<td>84.7</td>
</tr>
<tr>
<td></td>
<td>Others</td>
<td>3</td>
<td>1.6</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>183</td>
<td>100.0</td>
</tr>
</tbody>
</table>
This study demonstrated the initial phase of scale development for online customer experiences. As part of the validation process, researchers have conducted the face and content validity of the measuring item scales used in this study, as Taherdoost (2018) recommended to suit the target respondents. First, researchers applied Customer Experience Theory as a fundamental construct and built face validity assessment from post-hoc theory. Secondly, the management of an online shopping platform in the e-commerce sector has evaluated the content validity of the study. Moreover, the measuring elements in this scale were adopted from Deyalage and Kalathunga (2019) and are related to earlier investigations (Camilleri, 2022; Chen et al., 2012; McLean, 2017; Raman, 2019). On top of that, experts from the management of online shopping platforms in the e-commerce industry have modified the final construct for the measurements items scale by examining each item and the overall observation. Finally, the expert’s evaluation of the instrument's structure and content for quantitative results did receive positive feedback.

Next, the reliability test was performed on the items. Cronbach’s alpha coefficient was used to determine the instrument’s internal consistency. Results for the reliability test show that website design, website security, customer service, and online customer experience has very good reliability (Taber, 2018) with Cronbach’s alpha value of 0.904, 0.871, 0.913, and 0.934, respectively. Therefore, it can be concluded that the instrument can measure what it intends to measure and can be used for further analysis.

Table 3: Reliability Analysis

<table>
<thead>
<tr>
<th>Variables</th>
<th>No. of Items</th>
<th>Cronbach’s Alpha</th>
<th>Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Website Design</td>
<td>6</td>
<td>0.904</td>
<td>Very Good</td>
</tr>
<tr>
<td>Website Security</td>
<td>4</td>
<td>0.871</td>
<td>Very Good</td>
</tr>
<tr>
<td>Customer Service</td>
<td>5</td>
<td>0.913</td>
<td>Very Good</td>
</tr>
<tr>
<td>Online customer Experience</td>
<td>6</td>
<td>0.934</td>
<td>Very Good</td>
</tr>
</tbody>
</table>

To accomplish the first research objectives, a situational analysis was conducted and categorized into SWOT analysis. This is because analysis of the internal and external environments of a company is crucial as a fundamental tool to evaluate the company’s market position, such as company strength, weaknesses, opportunities, and threats analysis that are widely used during times of indecision (Benzaght, et al., 2021; Nur et al., 2018; Wu, 2020).

In this study, the researchers focus on the main important points of strengths, weaknesses, opportunities, and threats of online shopping platforms to improve online customer experience. For strengths, online shopping platforms such as Lazada and Shopee have a strong brand name image in e-commerce across Southeast Asia with strong, distinctive core competencies such as logistics, technology, and payments to keep relevant in this e-commerce industry (Austrade, 2020). Furthermore, online shopping platform can use their capabilities in the technology to improve website design, and payment systems capabilities to balance strong website security and reduce inquiries from customer service regarding late delivery issues by strengthening their logistics. For weaknesses, in May 2021, the researchers found from customers’ feedback on social media that they have bad experiences regarding the issues of lack of website design, such as website design is not easy to navigate, lack of website security where customers still refuse to give their credit card information to the website, and lack of customer service which is customer service representative is not responding to customer inquiries immediately.

In terms of external environment factors such as opportunities, online shopping platform has the potential to rising buyer demand among university students if they overcome their weaknesses and build strategies to improve online customer experience (Mengen et al., 2021). Furthermore, online shopping platforms such as Lazada and Shopee have many experiences serving the e-commerce platforms and have an attractive customer base. Thus, with a strong brand name image and distinctive core competencies such as logistics, technology, and payments system, the online shopping platform can potentially increase buyer demand in the future. Moreover, online shopping platform has the huge potential to serve a new market segment, such as higher learning institutions (Hairuddin et al., 2019). As statistics explained before, most online shoppers are university students. Thus, in this study, online shopping platforms can focus on serving the new market segment among university students as the sample. As for the threats, online shopping platform has a higher intensity of competition in the e-commerce industry. In Malaysia, Shopee has led the market position and is the most preferred online shopping platform among customers because of its attractive website design, secure payments, and efficient customer service (Malaysia, 2022).

Based on data collected in this study, most 155 respondents (84.7%) normally shopped online using the Shopee platform. Thus, online shopping platform that has issues with their sellers and third-party logistics must overcome these issues to improve the level of online customer experience (Majchrzak-Lepczyk & Blašková, 2019). For example, sellers offering counterfeit items, fake promotions, fraudulent and illicit trading of goods, as well as third-party logistics issues such as late deliveries of customer goods, and lack of infrastructure in terms of staff, systems, and transportation.
can affect the level of online customer experience from the bad service that customers received. The SWOT Analysis table (Figure 2) below summarizes the results of the situational analysis conducted for the study.

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Strong brand name image</td>
<td>1. Lack of website design</td>
</tr>
<tr>
<td>2. Distinctive core competencies; logistics, technology, payments</td>
<td>2. Lack of website security</td>
</tr>
<tr>
<td><strong>Opportunities</strong></td>
<td>3. Lack of customer service</td>
</tr>
<tr>
<td>1. Potential of rising buyer demand</td>
<td>1. Higher intensity of competition</td>
</tr>
<tr>
<td>2. Serve new market segment</td>
<td>2. Issues of the seller and third-party logistics</td>
</tr>
</tbody>
</table>

**Table 4: Multiple Regression**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Std Beta</th>
<th>t-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Website Design</td>
<td>0.447</td>
<td>8.078</td>
<td>0.000</td>
</tr>
<tr>
<td>Website Security</td>
<td>0.161</td>
<td>3.010</td>
<td>0.003</td>
</tr>
<tr>
<td>Customer Service</td>
<td>0.355</td>
<td>6.408</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Model R 0.817, R Square 0.667, Adjusted Square 0.662, Std. Error of the Estimate 2.306

To accomplish the third research objective, a TOWS matrix was conducted to recommend strategies to improve online customer experience with online shopping platforms among university students. According to (Thiradathanapattaradecha et al., 2018), the TOWS matrix is an alternative strategy associated with externally-focused which are the external opportunities and threats, with the company's internal strengths and weaknesses which disseminated strategies, improve strategies, preventive strategies, and defensive strategies.

Figure 3 below shows a summary of the TOWS matrix conducted that consists of nine recommended strategies to improve the level of online customer experience with online shopping platforms among university students.
5. Conclusion

Conclusion

Website design, website security, and customer service are the three factors investigated in this study to determine whether they influence the level of online customer experience with online shopping platforms among university students. The study has tested the significant factors that influence the online customer experience level with online shopping platforms: website design, website security, and customer service. Using the TOWS matrix as the strategic tool, the findings from this study recommended nine strategies to improve online customer experience with online shopping platforms among university students. The nine strategies are the best-cost strategies, innovation strategies (live-streaming), improved website design, improved website security, improved customer service, vertical integration strategies, non-equity strategic alliances, offensive strategies, and outsourcing strategies.

In conclusion, this study proves that the importance of the Sustainable Development Goal 9 (SDG 9) can greatly impact the e-commerce industry, where it provides important factors for the further development of online shopping platforms, especially those SME businesses embarking on digitalization business platforms. According to Revinova (2021), infrastructure and innovation are core competencies for the e-commerce industry growth, where without sustainable infrastructure and innovation, the future development of online shopping platform will be weak, and it affects small and medium-sized enterprises (SMEs) business performance that can drop the level of customer experience. For example, to attract more users, OSP should innovatively maximize its infrastructure by implementing electronic customer relationship management (e-CRM) to manage customers properly and improve the functionality of live-streaming features on its website. Furthermore, the findings of this study serve as guidelines for marketers to focus on marketing awareness and campaigns towards the importance of these three factors: website design, website security, and customer service to improve online customer experience in an online shopping environment. The government should also provide incentives to support small and medium-sized enterprises (SMEs) digitization initiatives. Last but not least, this study will also be useful as a reference for business that aspires to improve customers’ online experience on their online platform.

Recommendations

Strengths and Opportunities: Dissemination Strategies

For the dissemination strategies, the researchers found that website design, website security, and customer service have a positive influence on the online customer shopping experience. Therefore, the researchers have recommended best-cost and innovation strategies by strengthening live-streaming features to improve customer experience with online shopping platforms. First, with the best-cost strategies, online shopping platforms such as Lazada and Shopee can serve a new market segment because they have a strong brand name image in the e-commerce industry. In this study, online shopping platforms can be focused on best-cost strategies to serve customers among university students. To serve new market segments, online shopping platforms should identify customer behaviors such as recent customer spending, how much customer spends, and the number of purchases the customer made daily, weekly, or monthly. Most students prefer to buy products or services with budget-friendly prices or discounts. By understanding students’ interests and habits, online shopping platforms can offer the best prices with quality products that give more value for money to satisfy and improve the online customer experience. Secondly, with the innovation strategies such as live-streaming, online shopping platforms can increase the potential buyer demand among university students because they have strength in distinctive core competencies such as technology to adopt marketing opportunities by strengthening features of live-streaming on their online shopping platforms. Nowadays, live streaming with a real-time function is an effective strategy for approaching university students because they are active buyers who spend most of their time online.
Weaknesses and Opportunities: Improve Strategies

The researchers have found that website design, website security, and customer service positively influence online customer shopping experiences. Therefore, the researchers recommended that the provider of online shopping platforms enhance their website design, website security, and customer service to improve their online shopping experience. First, with the improved website design features, online shopping platforms can increase the potential of increasing buyer demand and serve a new market segment among university students by strengthening their website design features such as appearance, professionalism, clarity, load time, and conversions with customers. This is because it takes eight seconds for a customer to capture engagement with the website when they are visiting an online shopping platform. Thus website design features should be more attractive and captivating, especially the website layout design must be easy to navigate to search for products and services on the website. Second, with improved website security, online shopping platforms can increase potential of rising buyer demand and serve a new market segment among university students by strengthening their website security, such as compliance with the Payment Card Industry Data Security Standard (PCIDSS) when handling customers’ payment card data. Thus, the strategic actions must have proper internal control procedures to adopt secure digital payments by providing data security awareness training among the entire organization to make sure they adhere to the best practices when handling customers’ payment card data. In addition, online shopping platforms should adopt omnichannel payment solutions to ease and inform customers to streamline the payment process with any device and real-time updates. This strategy will keep customer trust and feel more secure in giving credit card data information to maintain the online customer experience. Lastly, with the improved customer service KPIs, the online shopping platform can increase the number of potential buyers and serve a new market segment among university students by strengthening their customer service’s key performance indicators (KPIs), such as; measuring the number of support issues and complaints, the percentage of first contact resolution, keeping track of customer satisfaction score and net promoter score, as well as analyze the abandoned rate of calls and chats from customers. Thus, by adopting a successful customer service provision which is strategy, system, and staff, the online shopping platform can also improve customer service’s key performance indicators (KPIs).

Strengths and Threats: Preventive Strategies

For the preventive strategies, the researchers found that website design, website security, and customer service have a positive influence on the online customer shopping experience. Therefore, the researchers have recommended vertical integration strategies and non-equity strategic alliances to improve customer experience with online shopping platforms. First, with vertical integration strategies, online shopping platforms can overcome the issues of sellers and third-party logistics by controlling the whole supply chain, which includes logistics, technology, and payment systems, as they have capabilities in these important components in the e-commerce industry. These strategies allow online shopping platforms to become more efficient when they no longer need to worry about their suppliers, while the buyers no longer worry about any unreliable deliveries. In addition, these strategies also allow online shopping platforms to pass the cost savings to customers by offering lower prices to final customers as they can capture both profits from various supply chains before. Thus, these benefits can support best-cost strategies and improve online customer experience. Secondly, with the non-equity strategic alliance, online shopping platforms can overcome the higher intensity competition with rivals by using their strong brand name image to collaborate with the university to strengthen their new market segment among university students. This is because universities and online shopping platforms can work together by establishing agreements on sharing their resources and capabilities to gain better benefits. For example, universities and online shopping platforms should collaborate to achieve the objective of producing well-balanced entrepreneurial graduates because many universities today are encouraging their students to become entrepreneurs. As one of the benefits to the university, the online shopping platform can support the university by providing business opportunities to their students and exploring their entrepreneurship programs. Meanwhile, for the online shopping platform’s benefits, these non-equity strategic alliances will be one of the opportunities for the online shopping platform to serve new market segments by getting a better understanding of customer segments among university students and strengthening their brand name image and reputation as well.

Weaknesses and Threats: Defensive Strategies

For the defensive strategies, the researchers found that website design, website security, and customer service have a positive influence on the online customer shopping experience. Therefore, the researchers have recommended offensive and outsourcing strategies to improve customer experience with online shopping platforms. First, with offensive strategies, online shopping platforms can overcome the higher intensity of competition by securing their market position to be competitive with the market leader in the e-commerce industry. For example, the online shopping platform provider will have more competitive advantages through the improvement of their website design and website security, making their rivals unable to counter the issues. Embarking on aggressive online advertisements and marketing campaigns with catchy and creative designs will create more customer excitement and improve the experience. Secondly, with the outsourcing strategies, online shopping platforms can improve the lack of customer service response to customer inquiries, especially regarding seller and third-party logistics by hiring another third-party company that provides access to customer service twenty-four-seven (24/7) with efficient customer relationship management. Besides
providing smooth operations, outsourcing strategies also can reduce the costs of hiring in-house staff within the company.

**Research Limitations & Suggestions for Future Research**

The main limitation of this study is the age group of the respondents who participated in the research. They are specifically young participants with higher education, ages 18 to 26 years old. Therefore, the unit of analysis is limited to university students only. Another limitation of the study is the sample size, which analyzes the results of 183 people. In the future, the study sample can be expanded to include participants without formal education from various age groups.

**Author Contribution**

Author 1: Conceptualization, writing original draft, data curation, formal analysis, investigation, methodology.
Author 2: Supervision, validation, visualization.
Author 3: Validation, visualization, supervision.
Author 4: Review and editing, writing review and editing, supervision, validation, visualization.

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**Conflict of Interest**

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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