Marketing Mix to Increase Purchase Intention of Plumbing and Maintenance Services

Thoo Ai Chin, Muhammad Faiz Azman, Huam Hon Tat, Zuraidah Sulaiman

To Link this Article: http://dx.doi.org/10.6007/IJARBSS/v12-i4/13016 DOI:10.6007/IJARBSS/v12-i4/13016

Received: 06 February 2022, Revised: 09 March 2022, Accepted: 29 March 2022

Published Online: 15 April 2022

In-Text Citation: (Chin et al., 2022)


Copyright: © 2022 The Author(s)
Published by Human Resource Management Academic Research Society (www.hrmars.com)
This article is published under the Creative Commons Attribution (CC BY 4.0) license. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this license may be seen at: http://creativecommons.org/licenses/by/4.0/legalcode

Vol. 12, No. 4, 2022, Pg. 911 – 932

http://hrmars.com/index.php/pages/detail/IJARBSS JOURNAL HOMEPAGE

Full Terms & Conditions of access and use can be found at http://hrmars.com/index.php/pages/detail/publication-ethics
Marketing Mix to Increase Purchase Intention of Plumbing and Maintenance Services

Thoo Ai Chin¹, Muhammad Faiz Azman², Huam Hon Tat³, Zuraidah Sulaiman⁴

¹,²,⁴Azman Hashim International Business School, Universiti Teknologi Malaysia, Johor Bahru, Malaysia, ³Putra Business School, Universiti Putra Malaysia, Selangor, Malaysia
Email: acthoo@utm.my

Abstract
Now, the service industry has been impacted by the Covid-19 pandemic with low purchase intention. A sole proprietorship company providing a service in all aspects of plumbing and installation of pipes is affected due to low purchase intention from existing and potential customers. Therefore, the purpose of this study is to investigate the effects of the marketing mix on purchase intentions of plumbing and maintenance services. This is because past research has shown that the marketing mix, including the 4Ps (product, price, place, and promotion), can increase customer intention. This is a quantitative study in which data was gathered through a survey approach. All the items were evaluated on a 5-point Likert scale. This survey used 150 sample data to study the impact of marketing mix on purchasing intention. Results show that product, price and promotion have positive and significant relationships with purchase intention of plumbing and maintenance services. Then the survey result was used to conduct the intervention for the plumbing and maintenance service provider. A Facebook page was created for the as a social media platform to increase their potential customers’ purchase intention. In the two months of intervention, various of contents relevant to product, price and promotion were updated on the Facebook page. The Facebook page successful received 8 potential customers to interact with the company using WhatsApp, 13 potential customers made a phone call asking about the services, and 1 customer purchased the services. Lastly, this study provides useful insights to the plumbing and maintenance service providers on the importance of marketing mix for increased purchase intention.

Keywords: Marketing Mix, Purchase Intention, Service Industry, Social Media, Covid-19

Introduction
The service industry focuses on providing services rather than actual goods. Service industries include banking, wholesale, retail commerce, plumbing, engineering, and non-profit economic activities. Small and medium companies (SMEs) account for most of the services industry, which plays a key role in economic development. Services (87.9%) have the biggest percentage of SMEs in Malaysia, followed by agriculture (7.1%) and manufacturing (5%) (Muhammad et al., 2010). In Malaysia, the statistics performance of the service sector fell 0.3
percent and recorded 123.4 points in the first quarter of 2021 compared to 123.8 points in the previous quarter. The overall performance for total revenue of services industry in first quarter 2021 recorded RM428.5 billion, decreased -1.7 percent compared to the final quarter 2020 (Department of Statistics Malaysia, 2021).

Now, the service industry has been impacted by the Covid-19 pandemic. As a result of such unpleasant occurrences, material shortages and service postponement are noticeable in the downstream supply chain, which has caused a ripple effect and lower performance in terms of services, revenue, and production process (Kumar et al., 2020). Since people are being confined to their homes, this means call volume has essentially increased for the services industry. Now, offering virtual diagnostic processes via video call and skype for easy-to-fix difficulties and serving clients who want information or guidance is the most viable option for the service industry to survive (Askar, 2020).

On the other hand, marketing is one of the techniques to increase purchase intention. Marketing allows individuals to be aware of the products, thus helps to drive purchase intention (Nugroho & Irena, 2017). The marketing 4Ps (product, price, place, and promotion) are designed so that businesses may successfully allocate and manage their marketing resources to meet long-term profit goals (Bakri et al., 2021). Product, price, place, and promotion are important elements to create an effective marketing strategy, with a controllable variable that will assist in creating the intention of the customer (Singh, 2012). In addition, Rust et al. (2004) found that the marketing strategy 4Ps and purchase intention could impact both productivity and consumer decision.

A sole proprietorship company providing a service in all aspects of plumbing and installation of pipes is affected due to low purchase intention from existing and potential customers. Therefore, the purpose of this study is to investigate the effects of marketing mix on purchase intentions of plumbing and maintenance services. This is because past research has shown that the marketing mix, including the 4Ps (product, price, place, and promotion), can increase customer intention. In addition, this study proposed a marketing plan for the plumbing and maintenance service provider to increase the purchase intention of its services.

**Case Description and Problem Statement**

The plumbing and maintenance service provider started the business in early January of 2009, and it began to offer plumbing and pipes services. The procedure of starting a sole proprietorship is usually straightforward and inexpensive. In all circumstances, minimal or no expenses are required, as well as minimal paperwork.

In the past 12 years of operation, the plumbing and maintenance service provider has faced a few problems like an unknown brand. This is attributed to the lack of advertising. Most potential customers do not know about the services provided by the company and its location. With limited promotion, it could explain that the company is not attracting enough customers and has no information to convince them to find out more about the company. The company only provides a specific job scope such as plumbing and water pipes services. It limits the types of works for customers to look for its services.

The information such as an address, specification of services, brand name, and certificate of service are very important to gain customer trust and intention to purchase services (Bai et
al., 2015). Obviously, for the plumbing and maintenance service provider, the lack of information in Google or websites has affected the company to gain new potential consumers. The company serves more regular customers rather than new potential consumers. It is due to the company’s owner, has insufficient knowledge to leverage the advantages of social media and the internet.

From marketing theory and purchase intention, the marketing mix combines product, price, place, and promotion to discover the best combination for improved purchase intention (Nugroho & Irena, 2017). The plumbing and maintenance service provider can gain and maintain advantages over competitors by identifying and developing the marketing mix elements. As proven, 4Ps marketing strategy allows a company to make profitable marketing decisions at every level, such as developing strengths and limiting its weaknesses (Kotler & Armstrong, 2020). Moreover, marketing mix 4Ps and purchase intention could help the company to understand the product or service that the company can offer to their potential customers and help the company to plan, develop, and execute effective marketing strategies toward customer intention of the services.

In terms of solution, the 4Ps involve a stronger emphasis on customer intention. The product can lead to customers’ wants and needs (Fuller & Matzler, 2007). For instance, most of the customers prefer maintenance services that the company often provides. This means the company should provide a higher level of service quality to ensure that new and regular customers intend to buy the services in the future. Next, the cost to the customer is referred to as price. It necessitates the organization to analyze the value of the product or service to the target clients (Ibusuki & Kaminski, 2007). Price includes based cost and expenses. The company should always survey the market, and a smart business will tap into what people will pay for it. According to Twin (2021), the full cost may include the time spent purchasing an item or service, as well as the cost of conscience associated with consuming it. It reflects the total cost of ownership. The lower price than competitors and high-quality services will lead to higher purchase intention (Jaafar et al., 2012). Then, advertising, public relations, viral advertising, and other forms of promotion communication should be used between the company and the customer (Mangold & Faulds, 2009). It is time to start a conversation with the customer about the product or service after working on the product and price factors (Martin, 2019). This includes creating and sustaining company brand loyalty as well as generating awareness through various means to improve sales. Lastly, place which is where to distribute product or service. With the advent of the internet, credit cards, and smartphones, regularly, individuals do not need to go to a specific location to fulfill a want or a need (Kietzmann et al., 2011). It is the solution to how the target market chooses to purchase or how to be present and universal to make acquiring services more convenient. Due to the marketing problems faced the plumbing and maintenance service provider, this study proposed a marketing plan for the company to increase the purchase intention of plumbing and maintenance services.

**Research Objectives**

This study listed two main objectives:

RO1: To investigate the influences of marketing mix (product, price, place and promotion) on the purchase intention of plumbing and maintenance services
RO2: To implement marketing mix strategies that can increase the purchase intention for the plumbing and maintenance service provider

**Literature Review**

**Purchase Intention**

Purchase intention refers to the willingness, desire, and preference in opting to buy a product or service (Nasirun et al., 2019). It is the possibility of a customer's willingness to purchase a specific product or service in the future. As a result, marketing researchers are interested in determining or investigating purchase intention because it may be anticipated and linked to purchasing behavior (Gogoi, 2013). Purchase intent is influenced by price, perceived quality, and value (Mirabi et al., 2015). Additionally, purchasers are impacted by both internal and external factors during the purchasing process (Gogoi, 2013). Customer attitudes toward feeling responsible for his or her acts and perceived behavioral efficiency are examples of internal factors. In contrast, external elements are easier to control to change consumer behavior (Pilgrimienė et al., 2020). Before buying a product, there are six steps to consider: awareness, knowledge, interest, preference, persuasion, and purchase (Kotler & Armstrong, 2020). A positive purchase intention is one that encourages customers to make a buy, whereas a negative purchase intention is one that prevents consumers from making a purchase (Arslan & Zaman, 2014). Increased purchase intention indicates a higher probability of making a purchase; it can also be used as a key indicator for predicting consumer behavior. When people have a favorable purchase intention and the services have a beneficial effect on the customers, then will lead to actual buy action (Awan, 2011). Additionally, Kotler and Armstrong (2020) suggested that an individual's emotions and impulsive situation can influence purchase intention. Individual feelings are influenced by personal preferences as well as impulsive situations that can modify buying intentions.

**Marketing Mix**

Marketing is a set of actions that give value to customers and help the company to build a relationship with them and provide benefits to the company (Kotler & Armstrong, 2020). The component of a marketing mix 4Ps (product, price, promotion, and place) are used to implement the operational phase of the marketing management process (Festa et al., 2016). According to Kotler and Armstrong (2020), a product is anything that can be offered to a market for consideration, acquisition, use, or consumption to satisfy a desire or need. When deciding on a product or service, there are three levels to consider. They are decisions about individual products, product lines, and product mix (Kotler & Armstrong, 2020). Price refers to the amount of money a consumer would pay for a product or service. Kotler and Armstrong (2020) defined price as the amount of money a client pays for a product or service in exchange for the benefits of utilizing it. Promotion is the third tool in the 4Ps marketing strategy. Companies must now get across their value proposition to customers after planning and developing a good product or service, setting a reasonable service pricing, and making it available to customers (Kotler & Armstrong, 2020). The goal is to raise consumer awareness of their products, which results in increased sales and the development of customer purchase intentions. The process of delivering products or services from producers to the intended users is referred to as location in the marketing mix (Martin, 2019). Companies must establish an appropriate marketing channel that corresponds to their aims to operate and manage this process.
With some contextualization, the 4Ps can be used in services industry marketing in terms of methodology and versatility. According to Amofah et al (2016), marketers use many controllable parts of the marketing mix to shape customer perceptions about their company to influence purchase decisions. While Festa et al (2016) explored a service marketing mix as a method to change perception. Today's business environment presents difficulties in the narrow context of promoting or selling, which is too myopic and non-integrative to meet a potential customer's wants and needs (Pahwa, 2022). In the context of the marketing mix, despite the price being an essential consideration, other factors such as product, location, and promotion also play a role in a customer's purchasing decision (Munusamy & Hoo, 2008). Nevertheless, customers in this day are targeted by mass media, which alters their thinking through emotions, needs, wants, and demands (Appel et al., 2020). Therefore, according to Keller (2013), a clear strategy based on a complete understanding of the factors will encourage a consumer to purchase the company's services or brands is required.

Hypotheses Development

Product
A product is a good or service that can be supplied to clients in exchange for their attention, acquisition, or consumption, which fulfils a want or need (Kotler & Armstrong, 2020). According to Mirabi et al. (2015), product quality is crucial when it comes to determining purchase intent. It is a continuous improvement process in which ongoing modifications improve product or service performance and customer satisfaction (Faisal-E-Alam, 2020). According to Kavitha et al. (2012), the quality of a product or service has influenced a consumer’s intention in making the decision process. Customers are more likely to buy a product when a product is higher quality. According to Lew and Sulaiman (2014), compared to a lesser quality product or service, a higher quality product or service promotes a higher purchase intention. Similarly, Tariq et al. (2013) have indicated the impact of product quality on purchase intent. It was discovered that product or service quality had a positive impact on purchase intention. As a result, the following hypothesis is proposed in this study:

H1: Product element has a significant and positive relationship with purchase intention of plumbing and maintenance services.

Price
Price is the amount of money clients pay for a service or a product or the value they receive (Kotler & Armstrong, 2020). Customers are influenced by pricing, and it helps them select whether to acquire a product or service. The quantity of value that customers exchange for advantages and uses is the nominal amount of money that must be spent to obtain a product or service. According to Kotler and Armstrong (2020), product or service pricing significantly impacts customers’ perceptions. Hence, Elvinda et al (2018) described that the only part of the marketing mix that creates sales income is price, whereas the others are cost elements. Customers’ perceptions of product or service value and purchase intent are significantly influenced by price (Kotler & Armstrong, 2020). Customers typically consider the price when evaluating the value of services, they have experienced (Virvilaite et al., 2009). According to Nakhleh (2012), price refers to what is given up obtaining a product or service and how much people are ready to pay to meet their various needs. When it comes to deciding what benefits, they want to gain from purchasing items or services, consumers are quite rational (Albari & Safitri, 2018). A company’s services will provide a good deal at a low price, which will result in
a high purchase intention (Morwitz, 2012). The price policy is closely linked to the consumer’s perception of compliance. Komaladewi and Indika (2017) indicated that most respondents believed that price has a significant impact on their purchasing intention. The following hypothesis is provided based on the above discussion:

H2: Price element has a significant and positive relationship with purchase intention of plumbing and maintenance services.

Place
Place is defined as any method whereby a customer can obtain a product or a service, and it is also referred to as distribution (Sitanggang et al., 2021). It can be both physical and virtual stores. The location is also called a store and includes delivery type, market coverage, product inventory, product transfer type, and distribution location (Nasirun et al., 2019). According to Goi (2011) and Muala and Qurneh (2012), to attract customer intention, the location strategy requires effective distribution of the firm’s products through marketing channels such as wholesalers or shops. Kotler and Amstrong (2020) defined place as a collection of interconnected organizations that cater to the process of making a product or service available to consumers. As a result, the convenient location has a substantial impact on consumer purchase intent. Amofah et al. (2016) defined a distribution channel or place as the set of activities of a company that involves the transmission of goods or services to the final consumer. According to Hopkins and Turner (2015), a strategic location is an important factor in a business, and companies must consider how accessible the venues are for customers and whether they are in a strategic position. According to Dachyar and Banjarnahor (2017), the location has a significant influence on the purchase intention. As a result, the following hypothesis is proposed:

H3: Place element has a significant and positive relationship with purchase intention of plumbing and maintenance services.

Promotion
Promotion is explained as a company's efforts to market a product and encourage customers to buy it (Nugroho & Irena, 2017). Promotion is a market exchange process in which a company develops a collection of marketing communication instruments to communicate its product message and brand to potential stakeholders and the public (Duncan, 2005). Because the internal and external environment frequently influences consumers, businesses must utilize a variety of promotional activities to entice them to acquire a product or service right away (Kotler & Armstrong, 2020). Companies can better promote their products or services and allow potential consumers to purchase services with the right marketing strategy (Toor et al., 2017). One of the foremost vital functions of promotion is coordinating all efforts to ascertain channels, deliver, and persuade customers to purchase the services. Even if the product or service produced by the company is the right quality product, if people have never seen and heard of this product or service, they will not be confident of the product (Djatmiko & Pradana, 2016). Promotion serves not only to communicate with customers but also to persuade them to utilize service items that are tailored to their needs and aspirations (Wongleedee, 2015). According to Dash (2012), promotional activities are ranked second among the seven marketing activities that can affect a customer's purchase intention. Shrivastava and Singh (2017) revealed that marketers should focus on these promotional
efforts because societal and regulatory issues influence purchase intention. According to Terkan (2014), the marketing serves not only to communicate with customers, but also to persuade them to use service items that are tailored to their specific needs and aspirations. As a result, the following hypothesis predicts a positive relationship between promotion levels and purchase intent in the services industry:

H4: Promotion element has a significant and positive relationship with purchase intention of plumbing and maintenance services.

Research Framework
Figure 1 shows the research framework for this study. The framework in Figure 1 was adapted from Amofah et al. (2016) and Diallo and Siqueira (2017), who highlighted the product factor, price factor, place factor, and promotion factor have effect on purchase intention.

Research Methodology
Research Design
Research design is an inquiry that offers precise direction for methods in a research project. It is an inquiry that connects conceptual research concerns to relevant and doable empirical research (Jongbo, 2014). According to Syed (2018), a research design is a blueprint or strategy that is built specifically to answer the study question. There are three types of research design accessible are exploratory, descriptive and explanatory. The exploratory research is the most open of the three and is usually the basis for future research. Exploratory research seeks new insight into phenomena and sheds light on ambiguous situation (Mayer, 2015). The aim is not to derive definite evidence but rather to serve as a basis for further research. On the other hand, descriptive research is based on qualitative or quantitative data to describe people or situations. According to Zikmund et al (2009), descriptive research describes the characteristics of objects, people, groups, organizations, or environment by addressing who, what, when, where, and how question. Thus, the explanatory research explains why certain patterns appear and how to predict similar patterns in the future. The study area has its ultimate purpose as each design.

The essence of research design is to transform research questions into data for analysis and provide relevant answers to research questions with minimal cost (Asenahabi, 2019). It always determines the kind of analyses that must be performed to get the intended outcome.
According to Jongbo (2014), the research design must include a strategy for interpreting the examined data to give adequate results and conclusions from the study, that allows the researchers to make suggestions or draw conclusions from the findings. Qualitative data is employed in exploratory research, and the process of collecting and interpreting data is done using mathematical and statistical approaches. According to Naresh (2010), a conclusive research design is used to generate findings that may be used to reach conclusions or make decisions. In most cases, conclusive research entails using quantitative data collecting and analysis methodologies.

Moreover, conclusive research design is more than likely to employ quantitative rather than qualitative methods. As highlighted by Nargundkar (2008), there are two types of conclusive research design that can be identified into descriptive research and causal research. According to McCombes (2019), the goal of descriptive research is to explain the facts and characteristics of a certain population or area of interest in a systematic and precise manner. On the other hand, descriptive research can be divided into cross-sectional and longitudinal designs. According to Cherry (2019), a cross-sectional study collects data from a population at a single point in time, whereas longitudinal studies collect data over a longer period. Therefore, this study evaluated the connections between product, price, location, promotion, and purchase intention of plumbing and maintenance services by employing a conclusive research design that comprises descriptive research and cross-sectional design.

Population and Sampling
Population is understood as a group of people living the same specific life and mixing in each territory (Tarsi & Tuff, 2012). From a research perspective, the intervention's target population is the group of people it plans to conduct research and develop conclusions (Louise et al., 2018). Thus, the study's target population is referred to the Facebook consumers who have intention to purchase of plumbing and maintenance services. Sampling refers to a process used in statistical analysis in which a predetermined number of observations are taken from a larger population (Tuovila, 2020). Delice (2010) suggested that a sample size of greater than 50 is recommended for survey research and is regarded as an appropriate level while doing research. According to Memon et al. (2020), a carefully selected small sample 100 and above is more meaningful than a blindly selected large sample 300 and above. Therefore, the study uses a sample size of 122. Furthermore, the non-probability sampling methodology was used, where judgmental sampling method aimed to collect data from Facebook consumers who had intention to purchase of plumbing and maintenance services, as well as they had a retail store, residential home, restaurant and grocery, public and private institution, warehouse, office, and hotel that require plumbing and maintenance services.

Research Instrument
This study adopted the quantitative methods using a questionnaire survey tool to collect the primary data of online respondents in a Google form format. The questionnaire includes 6 sections, specifically Section A (demographic profile), Section B (product), Section C (price), Section D (place), Section E (promotion), and Section F (purchase intention). Part A contains ten questions about the demographic characteristics of the interviewee, such as age, gender, country of origin, occupation, and income level. In Parts B, C, D, and E, 11 questions related to respondents’ views on possible factors affecting the 4P of the marketing mix; product,
price, location, and promotion. The other four questions in Part F are the customer’s intention to purchase related services.

These items are adapted from existing literatures that measure product, price, location, advertising, and purchase intention (Saaty & Ansari, 2011). The objective of this measure is to investigate the impact of 4P marketing mix on consumers’ purchasing intentions. The 5-point Likert scale was used in Part B of the questionnaire, ranging from 1 (strongly disagree, 2 (disagree), 3 (neutral), 4 (agree), and 5 (strongly agree) using Statistical Package for the Social Science (SPPSS) for processing and analysis information.

**Data Analysis and Results**

Data analysis was conducted through collected questionnaire and 122 questionnaires were distributed to the target respondents using Google form. SPSS was used to analyse the data collected by using the technique such as normality test, descriptive analysis, reliability test and multiple regression.

**Response Rate**

The online questionnaire was created using Google forms and sent to the respondents via multiple social media platforms. The target respondents were selected based on the requirement for those who have a retail store, residential home, restaurant and grocery, public and private institution, warehouse, office, and hotel that require plumbing and maintenance services. However, this study adopted a judgmental sampling technique to collect the data. A total of 173 sets of questionnaires were sent out, and 122 sets of questionnaires were returned. Therefore, the usable questionnaires were 122 sets with a response rate of 70.52%.

**Profile of Respondents**

Most of this study was from male respondents (50.8%) than female respondents (49.2%). The ranges of the respondent ages were 18 to 30 years old (25.4%), 31 to 40 years old (35.2), 41 to 50 years old (30.3%), and over 50 years old (9%). Regarding educational level, the higher percentage was from bachelor level (30.3%) and the lowest percentages were from Master/MBA (13.9%), PhD/DBA (9.8%), and other (1.6%). Most respondents were employee (47.5%), then unemployed (4.1%), self-employed (26.2%), retired (7.4%), and a full-time student (14.8). The ranges of the respondent income level were: below RM2,000 (27.9%), RM2,001 to RM4,000 (34.4%), RM4,001 to RM8,000 (33.6%), and above RM8,000 (4.1%). For the property type, most of them owned housing (58.2%) than rental housing (35.2), and the less were business premise (3.3%) and tender (3.3%).

**Descriptive Analysis**

Table 1 shows the descriptive analysis of this study which consists of a minimum, maximum, mean, and standard deviation. The Table 1 indicates that the highest mean value is purchase intention (4.06). Besides, the second highest mean value is product (3.96), and the third-highest value of mean is the price (3.83). On the other hand, there are two variables with the lowest means value: promotion (3.73) and place (3.63). Meanwhile, for the standard deviation, the highest dispersion was attained by promotion which is 1.14. This is followed by place (0.73), price (0.72), purchase intention (0.70), and product (0.63).
Table 1: Descriptive Analysis

<table>
<thead>
<tr>
<th>Variables</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product</td>
<td>122</td>
<td>1.50</td>
<td>5.00</td>
<td>3.96</td>
<td>0.63</td>
</tr>
<tr>
<td>Price</td>
<td>122</td>
<td>1.00</td>
<td>5.00</td>
<td>3.83</td>
<td>0.72</td>
</tr>
<tr>
<td>Place</td>
<td>122</td>
<td>2.00</td>
<td>5.00</td>
<td>3.63</td>
<td>0.73</td>
</tr>
<tr>
<td>Promotion</td>
<td>122</td>
<td>1.00</td>
<td>5.00</td>
<td>3.73</td>
<td>1.14</td>
</tr>
<tr>
<td>Purchase Intention</td>
<td>122</td>
<td>1.00</td>
<td>5.00</td>
<td>4.06</td>
<td>0.70</td>
</tr>
</tbody>
</table>

Normality Test

The normality test is used to evaluate a data set that is normally distributed (Schmidt & Finan, 2018). Besides, the skewness and kurtosis values must be between -2 and +2 to achieve acceptable results during the normality test. As shown in Table 2, all the skewness values of each variable are within an acceptable range between -2 and +2, which product -0.637, price -0.564, place -0.205, promotion -0.464, and purchase intention -0.692. Hence, it can be assumed that the data set for this study is normally distributed. The kurtosis value also showed that the data were normally distributed: product 1.126, price 0.922, place -0.747, promotion -1.075, and purchase intention 1.672 with all the ranges in -2 and +2.

Table 2: Normality Test

<table>
<thead>
<tr>
<th>Variables</th>
<th>N</th>
<th>Skewness Statistics</th>
<th>Skewness Std. Error</th>
<th>Kurtosis Statistics</th>
<th>Kurtosis Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product</td>
<td>122</td>
<td>-0.637</td>
<td>0.219</td>
<td>1.126</td>
<td>0.435</td>
</tr>
<tr>
<td>Price</td>
<td>122</td>
<td>-0.564</td>
<td>0.219</td>
<td>0.922</td>
<td>0.435</td>
</tr>
<tr>
<td>Place</td>
<td>122</td>
<td>0.205</td>
<td>0.219</td>
<td>-0.747</td>
<td>0.435</td>
</tr>
<tr>
<td>Promotion</td>
<td>122</td>
<td>-0.464</td>
<td>0.219</td>
<td>-1.075</td>
<td>0.435</td>
</tr>
<tr>
<td>Purchase Intention</td>
<td>122</td>
<td>-0.692</td>
<td>0.219</td>
<td>1.672</td>
<td>0.435</td>
</tr>
</tbody>
</table>

Reliability Test

The purpose of the reliability test is to determine the consistency and reliability of measurement items. Cronbach’s Alpha was employed to assess the consistency. According to Nawi et al. (2020), there are few reasons to adopt the rule-of-thumb that Alpha should reach 0.70 for an instrument to have an acceptable level of self-consistency. In support, Hajjar (2018) stated that a Cronbach’s alpha value between 0.6 and 0.8 is acceptable. The Table 3 shows the highest scores of reliability test among the variables was purchase intention (Cronbach’s Alpha = 0.921), followed by promotions (Cronbach’s Alpha = 0.892), product (Cronbach’s Alpha = 0.783), place (Cronbach’s Alpha = 0.680), price (Cronbach’s Alpha = 0.659). Cronbach’s alpha values for all the items are more than 0.6. Therefore, all the variables are well-established with an acceptable level of reliability.
Table 3: Reliability Test

<table>
<thead>
<tr>
<th>Item</th>
<th>Number of Items in Scale</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product</td>
<td>4</td>
<td>0.783</td>
</tr>
<tr>
<td>Price</td>
<td>3</td>
<td>0.659</td>
</tr>
<tr>
<td>Place</td>
<td>2</td>
<td>0.680</td>
</tr>
<tr>
<td>Promotion</td>
<td>2</td>
<td>0.892</td>
</tr>
<tr>
<td>Purchase Intention</td>
<td>3</td>
<td>0.921</td>
</tr>
</tbody>
</table>

Multiple Regression Analysis
The results from the Table 4 shows that product, price, and promotion were significantly and positively related to purchase intention. However, the p-value of place (p=0.428) was greater than 0.05 and was not significantly related to purchase intention. The beta value for product was 0.309, price was 0.276, and promotion was 0.289. Product variable had the highest beta value (0.309) among all the independent variables. Therefore, product is considered as the important predictor in this study.

Table 4: Multiple Regression Analysis

<table>
<thead>
<tr>
<th>Mode</th>
<th>Coefficients</th>
<th>Standardized Coefficients</th>
<th>Beta</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>1.261</td>
<td>0.327</td>
<td>3.861</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>Product</td>
<td>0.346</td>
<td>0.097</td>
<td>0.309</td>
<td>3.554</td>
</tr>
<tr>
<td></td>
<td>Price</td>
<td>0.270</td>
<td>0.108</td>
<td>0.276</td>
<td>2.511</td>
</tr>
<tr>
<td></td>
<td>Place</td>
<td>-0.75</td>
<td>0.095</td>
<td>-0.078</td>
<td>-0.795</td>
</tr>
<tr>
<td></td>
<td>Promotion</td>
<td>0.178</td>
<td>0.057</td>
<td>0.289</td>
<td>3.135</td>
</tr>
</tbody>
</table>

Dependent Variable: Purchase Intention

Marketing Intervention
The marketing intervention in Facebook Page for the company was conducted from September 2021 to October 2021. Based on the findings from survey, it was proved that using social media marketing strategy can increase the consumers’ purchase intention. Thus, the Facebook page was created for the plumbing and maintenance service provider as reason to increase their potential customers’ intention to know and purchase the services. The Facebook page was created on 5th September 2021 as the beginning of the intervention.

During the intervention’s first two months, various of content regarding to marketing mix 4Ps were updated according to the survey results. From the survey conducted it was proved that product’s posting brings the strongest effect on consumers’ purchase intention. As prove by Pütter (2017), it is important to recognize the views of business about the information products and business in creating a consumer engagement and intention to influence consumer to purchase the product. So, the business details such as business types of products, business name, contact number, address, and business description were updated on the created Facebook page. Besides, from the survey it was found that price posting can
increase the consumers’ purchase intention. According to Kim et al. (2005), the impact of perceived price in purchase intention is a stronger for repeat customers than for potential customers. Hence, to increase the consumers’ perceived price, some of the posters regarding the price of services were posted on the page to inform the potential consumer about the competitive pricing that the company offers.

Furthermore, frequent interaction through promotion poster and offer for the first-time user on Facebook page was conducted. According to Ghafran Ashraf et al. (2014), a discount rate plays a more significant role in the development of consumer intention. Therefore, the promotion such as 15% discount for all services to the first user were also updated frequently on the page and other media social. Thus, from 1st September to 30th October 2021, all the content was updated to the page at least once per week.

Finally, observation and evaluation were conducted on 16th October to 31st 2021. At the end of the two months interventions, the page was successfully gained 25 page likes and page followers. Hence, the post on Facebook page obtained a page engaged users up to 93. During the intervention, the Facebook page also received 8 customer requires about the services, which will have big impact on purchase intention for the company.

**Impact of Marketing Intervention**

Figure 2 illustrates the form of action taken for the plumbing and maintenance service provider on the Facebook page based on the variables (product, price, promotion, and purchase intention) and as well as the outcomes of each action been taken. First, product content was updated with purpose to grab potential customer attention and increase conversion rate using the useful information about each services poster and video. To accomplish this, some of contents included the photo of services and video were updated in the Facebook page of the company. Based on the Facebook insight, it was found that more than 18 people reached the post of services, 5 users were engaged, and 5 people reacted to the post. Moreover, price posting on Facebook page was achieved by defining the values that makes it worth for the customers to use the services. From the price post updated, it was found that there the number of Facebook users reached to 17, more than 6 users did the engagement, and 6 users reached to the post.

On the other hand, the page content update is vital to allow potential customers could easy and conveniently access the information regarding the location of the plumbing and maintenance service provider. The most important initiatives took was the update of the contact number, address, and business background on the Facebook page. In addition, the content posting of promotion could form positive intention of consumer especially in increasing call-traffic and number of engagements. For example, the company offered redeem price-off voucher (15%) for the first-time user. These initiatives had resulted more than 22 Facebook users reached the post, 8 of them engaged with the company, and 8 users reacted to the post.

Lastly, it is important for potential customers to contact the plumbing and maintenance service provider for any inquiries of services. By linking to WhatsApp and Facebook Messenger, it helps potential consumers to easily direct contact with the company. Thus, some of relevant post regarding the services had increase the customer intention such as
discount poster, detail types of services, and reasonable price offering. Therefore, the page successful received 8 potential customers to interact the company using WhatsApp, 13 potential customers made a phone call asking about the services, and 1 customer purchased the services.

Figure 2: Impact of Marketing Intervention

Discussion and Conclusion

Discussion of Findings based on Research Objectives

**RO1: To investigate the influences of marketing mix (product, price, place and promotion) on the purchase intention of plumbing and maintenance services**

Based on the findings, it shows that three out of the four hypotheses are supported. First, it has been proved that product factor has the greatest impact on purchase intention of plumbing and maintenance services. This finding is in line with the previous studies of Mirabi et al (2015); Rehmani and Khan (2011); Thangam et al (2018) which concluded that product factor is the first factor that affect the customer’s purchase intention, and this reveals that product variable is a key factor in influencing the purchase intention of plumbing and maintenance services customers. As a result, hypothesis 1 is supported in this investigation.

Besides, the result of this study found that price factor directly affects the consumers’ purchase intention as it is considered a high involvement of the product. This result supports that price factor is important attributes for customers’ consciousness, as it enhances their purchase intention. Thus, hypothesis 2 is supported in this study. Price factor is proved to bring a strong effect on consumer’s intention which is aligned with previous studies of (Herrmann et al., 2007; Alfred, 2013). In addition, this study discovered that place factor had no significant and positive effect on purchase intention, then, hypothesis 3 in this study is not supported. However, this finding is aligned with the previous studies of (Richard and Guppy, 2014; Zhu et al., 2019; Younus et al., 2015). The insignificant relationship can be explained that place is not significant when customers search for plumbing and maintenance services.
This is because plumbing and maintenance services should be conducted in the place of customers, instead of the company.

Moreover, this study indicates that there is a positive and significant relationship between promotion and purchase intention. This study proved that promotion brings a strong effect on consumers’ intention which is aligned with the previous studies of (Zoellner and Schaefers, 2015; Dash, 2012; Mahmoud, 2018; Bues et al., 2017). Hence, hypothesis 3 in this study is supported. In overall, it is proved that product, price, and promotion are significant for purchase intention of plumbing and maintenance services. The plumbing and maintenance service provider can use the findings to create interesting contents to increase purchase intention via Facebook users.

RO2: To implement marketing mix strategies that can increase the purchase intention for the plumbing and maintenance service provider

The findings of the study revealed that using social media adaption is a key factor to consider that can increase consumer purchasing intention. Based on the findings, an intervention was conducted by creating a Facebook page for the company. During the two-month intervention period, content relevant to the product, price, and promotion were updated on the page. It was proved that product factor could drive consumers’ purchase intention of the company. According to Grewal et al (2019), product posts can act as a substitute for purchase when those post enables consumers to sufficiently signal identity-relevant information and allow them to coopt the identity-signaling value of the product or service without actual purchase. Thus, many photos and videos regarding the plumbing and maintenance service at the company were updated as this content that can create consumer intention effectively.

Besides, the survey result discovered that price factor could build consumers intention. According to Kotler and Armstrong (2020), price posting is an important component of product advertisements. Therefore, the plumbing and maintenance service provider posted detail about price such as listing every services price, and customer feedback were updated once the page was created to gain their consumers’ intention. Thus, the content such as company details and company image were posted on the social media page of the company. Some of users require information to build consumer’s intention to purchase the services (Chen et al., 2011). So, the company basic details about business background, phone number, email, and company picture were updated to increase the customer intention.

On the other hand, promotion factor has proved to bring customer purchase intention in this study. Thus, promotion such as price-off voucher for the first-time user were updated through poster and posting. Hence, during the intervention, the Facebook page of the company could encourage followers to interact with one another by incorporating additional interactive features such as connecting post to WhatsApp and Facebook Messenger. By regularly updating the Facebook page with variety of content, Facebook users will gain a better understanding of the company and as a result their purchase intention can be increased.

Research Implications
The research findings found some of theoretical and practical implications. In terms of theoretical implications, this study focused on investigating the relationship between
marketing mix (product, price, place, and promotion) and consumers’ purchase intention of plumbing and maintenance services. The findings indicate that product, price and promotion factors have a positive and significant influence on purchase intention. However, the finding shows that the place factor has insignificant relationship with purchase intention that needs further empirical investigations.

In terms of practical implications, this study is important because it will provide some effective marketing strategies for businesses, particularly plumbing and maintenance service providers. This study discovered that there a significant and positive relationship between product, price, place, promotion, and purchase intention of plumbing and maintenance services. Hence, a plumbing and maintenance services marketers need to focus on these variables and update social media content accordingly. Based on the result of the survey, product factor was determined to be the most important factor in increasing consumers’ purchase intention of plumbing and maintenance services. In addition, it is important for plumbing and maintenance service providers to provide a detail price of every services. It is because most of the customer choose the certain services based on price offer by the company. In addition, providing reliable information regarding the background of plumbing and maintenance services is vital to enhance the interaction with their page followers for purchase intention. The promotion content of plumbing and maintenance services is important tools to build consumer intention among Facebook users. Therefore, the product and promotion of plumbing and maintenance services could drive purchase intention.

The intervention could be further used by the company management and marketing team to further adjust their marketing strategy throughout the Covid-19 pandemic and natural disaster. With a well-thought-out marketing strategy, the company can increase their potential customers rather than current customer. From the intervention, it was proved that frequent updates of content on the Facebook page was able to enhance the consumers’ purchase intention. Thus, it is critical to keep information about the company and its services up to date, as it acts as a basis for consumers to evaluate the company’s services. Furthermore, the intervention gave a greater understanding of the appropriate content to be put on the company social media to improve engagement with potential customers. For instance, from the intervention, it was discovered that promotion and video posting had a higher engagement rate than photo posts.

**Limitations and Future Recommendations**

This study has some important implications in today’s business environment, it also has a several limitations that should be clarified and improved for future studies. Firstly, the study mainly limited to the Facebook users. There are other plumbing and maintenance services who promote their services on other social media platform such as Websites, Mobile Application, and YouTube. As a result, the perception of users of other social media platforms must be discussed in detail. Thus, future researchers are recommended to investigate users from other social media platforms such as Mobile Application, YouTube, Twitter, and Websites who have the intention to purchase the plumbing and maintenance services.

Secondly, the survey strategy of the study is also considered a limitation. A questionnaire was used as the instrument to collect the primary data for the research, namely as a Google form that can be completed online. Even though Google Form is easy to be done and delivered to
respondents, there are certain downsides of questionnaire that cause it becomes limitation of the study such as untruthful responses, imbalances in understanding and interpretation of the questionnaire items. As a result, future researchers should consider using different data gathering methods, such as an interview-based survey, to gain a deeper knowledge of purchasing intention for plumbing and maintenance services. Thirdly, the study’s sample size was limited, resulting in a lack of generalizability. The limited sample size may not be representative of plumbing and maintenance service customers. For a better consumer understanding, future studies should use a larger sample size with more representatives from other states in the country and age categories.

Lastly, the current study’s finding of the relationship between place and purchase intention was insignificant, irrespective place’s content was proven as a strong association for purchase intention by past researchers such as Wekeza and Sibanda (2019), Guan et al. (2020), Hussain and Ali (2015), and Ariffin et al. (2016). Future studies can use larger sample sizes, different ages of respondents, improved a measurement item, and using different data collection methods to investigate the relationship between place and purchase intention.

**Conclusion**

In conclusions, this survey using 150 responses show that product, price and promotion have positive and significant relationships with purchase intention of plumbing and maintenance services. Further, the findings were significant to drive the intervention for the plumbing and maintenance service provider. Firstly, a social media presence using Facebook was created to increase potential customers’ purchase intention. The content marketing developed in the Facebook was able receive 8 potential customers to interact with the company using WhatsApp, 13 potential customers who made a phone call asking about the services, and close one business deal. This study will help plumbing and maintenance service providers to better understand how to increase their customers’ purchasing intention. It was proved that there is relationship between product, price, promotion and purchase intention of a plumbing and maintenance services. There are various social media marketing strategies can be implemented such as variety of contents, posting daily on Facebook page, using video as promotional tools, and using hashtags for every posting as way to interact and engage with the potential audience. Nevertheless, the result was proved that no significant result was found for place and purchase intention, and for further investigation is required for the relationship.

This study is important to plumbing and maintenance services because it gives them a better insight into how to manage their social media accounts and take advantage of the benefits of social media in this age of rapid technology advancement, when most people use social media to not only communicate with friends, but as a shop, make sales, discover new businesses and services. In addition, this study can inspire marketers to generate engaging, attractive, and interactive content that will engage customers and spread a positive of information regarding the services in the social media community. Additionally, purchase intention is also important for businesses to know why customers choose to buy from a particular service. In overall, the intervention was effective to plumbing and maintenance service providers to increase their customers’ purchase intention.
References
Department of Statistics Malaysia. (2021). Retrieved from Revenue for Services Sector First Quarter 2021: https://www.dosm.gov.my/v1/index.php?r=column/cthemeByCat&cat=398&bul_id=QjJINVh4ODZ1ZzJCTmZ2cGJMMWxlZz09&menu_id=b0pIV1E3RW40VWRTUkZocEhyZ1pLUT09#


929


