© Little Lion Scientific

ISSN: 1992-8645

www.jatit.org



UTILISATION OF DIGITAL FINANCIAL SERVICES BY CUSTOMERS AND ITS EFFECTS

FRANSISKUS FRANKLIN¹, ALLYCIA METTA LIYANTO², DANINDRA RASYAD RABBANI HANARTYO³, GEOVANNI WICAKSONO⁴, DARREN RAFAEL⁵, TANTY OKTAVIA⁶

¹²³⁴⁵Information Systems Department, School of Information Systems, Bina Nusantara University, Jakarta, Indonesia 11480

⁶Information Systems Management Department, Binus Graduate Program – Master of Information System Management, Bina Nusantara University, Jakarta, Indonesia 11480

E-mail: ¹fransiskus.hermanto@binus.ac.id, ²allycia.liyanto@binus.ac.id, ³danindra.hanartyo@binus.ac.id, ⁴geovanni.wicaksono@binus.ac.id, ⁵darren.lumadi@binus.ac.id, ⁶toktavia@binus.edu

ABSTRACT

This study is driven by the advancement of information technology, which has the potential to facilitate many daily chores for a significant number of individuals in Indonesia. Indonesian individuals may conveniently make payments using digital financial services. PT. XYZ developed a smartphone-based application to cater to the requirements of the Indonesian population. The objective of this study is to assess the demand for the MyXYZ application in Indonesian society, to enhance consumer trust and loyalty. This will enable the firm to broaden its prospects and gather customer satisfaction statistics. The study employs both quantitative and qualitative methodologies. Data is obtained by use of surveys and interview methodologies. The sample for this study consisted of 100 individuals who satisfied the established criteria. Incorporating pre-existing theories can facilitate the research process. The program SmartPLS will be used to analyze the results using the selected approach. Out of a total of 119 respondents, this study required a sample size of 100 to analyze the variables. Approximately 50% of the factors examined in this study were found to be statistically insignificant in our research. The questionnaire results indicate that the majority of respondents are MyXYZ users, and the findings demonstrate that they have successfully addressed several concerns. Nevertheless, they advocate for MyXYZ to their colleagues. Merely 10 out of the respondents do not endorse it. As a consequence, users of MyXYZ saw a beneficial influence from their usage of MyXYZ. These data suggest that there is a favorable relationship between User Experience and Functional Values in the MyXYZ application.

Keywords: Digital Financial Services, Payment, Smartphone, User Experience, Functional Value

1. INTRODUCTION

of The integration computers with communication lines to transmit data, speech, and video is commonly referred to as Information Technology. Information technology is a means by which information may be generated, manipulated, stored, communicated, and conveyed. [1]. Information technology in Indonesia is rapidly developing as it is today rapidly developing. To be acknowledged, all Indonesian people use information technology in various ways. The development of technology in Indonesia can help many Indonesian people make it easier to do something [2]. With this information technology development, an investment was made by the XYZ company. Indonesian people can easily make epayments during transactions. Fuel is a daily necessity for the community to use transportation. The largest company in Indonesia that provides fuel, namely PT. XYZ.

In meeting the needs of the Indonesian community, PT. XYZ created an application that can be accessed using a smartphone. This application can help increase a company's credibility in increasing consumer loyalty and expanding markets. To make it easier for consumers to trade PT. XYZ applies to noncash payments or through the MyXYZ application[3]. MyXYZ offers loyalty and e-payment programs at almost all gas stations in various cities and districts that can serve consumers to make fuel purchase transactions through the MyXYZ application. Since 30th April 2024. Vol.102. No 8 © Little Lion Scientific

ISSN: 1992-8645

www.jatit.org

COVID-19 arrived in Indonesia, the XYZ company recommends that consumers use the MyXYZ application to reduce the risk of spreading the coronavirus through cash [4]. In addition to reducing the risk of exposure to the coronavirus, using the MyXYZ application can save consumers' funds when refueling because the MyXYZ application has many attractive discounts so consumers can pay cheaper through e-payment than paying in cash.

By using MyXYZ, PT.XYZ will also get the benefits, it makes it easier to collect data on the consumer so that the distribution of subsidized fuel in the future can be more targeted. This is one of the efforts to prevent the potential fraud or cases or misuse of subsidized fuel in the field which have been regulated in Peraturan Presiden No. 191/2014.

| | | CLEAK Made | (Red wa)) | Michard Prov | no das baca | | | | | | | | | | | | | |
|----------------|-----------|--------------|-----------|--------------|-------------|----------|----------|------------|---------|----------|------------|------------|----------|-----------|-----------|----------|------------|--------|
| | Performan | | | | | | Andoraza | | | | | | ounday. | | | | | |
| | 2023 | | | 3032 | | | 2020 | | | 3022 | | | 1003 | | | 2822 | | |
| initial . | | (Servestar 2 | (Tarona) | | flerenn 3 | (Tohurun | | ficenter i | Tcharco | | (Senetter) | 24Tafferar | | Conster 2 | (Conoran) | | (Sevente) | Taisan |
| 10.314 | \$90.15 | 295.47 | | 188.52 | 106.05 | | 641 51 | 654.79 | | 613.45 | 421.52 | | @14.28 | 939 24 | | 806.82 | 618.47 | |
| ANTER: | | 225.04 | | 738.00 | 716.25 | | 283.05 | 141.00 | | 528.33 | \$22.78 | | 1143.84 | 1225.03 | | 1768.19 | 1262-29 | |
| AMATERA | | 156.53 | | 117.61 | 140.33 | | 225.00 | 306.39 | | 142.60 | 21245 | | \$79.47 | 339.55 | | 815.71 | 563.62 | |
| 1142) | 988.25 | 190.99 | | 181.92 | 187.95 | | \$17.06 | 305.67 | | 3012) | 825 17 | | 500.8 | 995.66 | | 445.09 | 289.12 | |
| IAN N | \$17.28 | 12610 | | 137.56 | 177.80 | | 155.61 | 15175 | | 153.08 | 131.00 | | 240,82 | 229.85 | | 354.32 | 283,82 | |
| ARTANLE | | 293.38 | | 37150 | 175,79 | | 21154 | 721.20 | | 472.18 | 171.60 | | 1113.75 | 110643 | | 1164.09 | 1054.99 | |
| 11363678 | | 90.83 | | 100.6% | 00.03 | | 20154 | 142.97 | | 19554 | 141.65 | | 106.00 | 291.74 | | 247.23 | 240.41 | |
| AMPUNA | | 256.48 | | 234.70 | 22411 | | 879.11 | 333.54 | | 2021.63 | 752.48 | | 1063.93 | 1097.02 | | 1000.41 | 005.53 | |
| 11 14454 | 29,81 | 27.28 | | 26-19 | 10.21 | | 12.67 | 42.43 | | -90.10 | 34.66 | | 72.71 | .09.70 | | 66.78 | 69.54 | |
| 1945 12 | 824.90 | 119.1 | | 122.60 | 111.52 | | 28.57 | 18.55 | | 29.04 | 22.17 | | 121.45 | 122.21 | | 151.68 | 140.81 | |
| DAMAN OF | | 190.29 | | 107.01 | 494.43 | | | | | | | | 526.47 | 498.75 | | 10,537 | 261.43 | |
| MAN 2325 | | 2954.07 | (a) | 1010.36 | 1049,48 | | 1164.00 | 1051.79 | 14 | 1000.03 | 1034.22 | 14 | 4195.34 | 4334.02 | 4 | 6070.00 | 1053.02 | |
| AWA TENS | | 1847.09 | | 1018.25 | 1852.12 | | 2201-03 | 3045.52 | 14 | 2012.20 | 2005.06 | 1.0 | 4109.75 | 10,459 | | 1611/44 | 3656.23 | |
| N VOOTAD | 258.00 | 201.72 | | 315.46 | 121.07 | | 147.60 | 142.78 | | 139.32 | 10.07 | | 526-45 | 474.45 | | 454.35 | 263,53 | |
| ANA THE | 1840.21 | 1705.91 | | 1771.46 | 1717.50 | | 2732.51 | 2410,69 | | 2429.83 | 2451.01 | | 4573.23 | 4759.50 | | 4181.29 | 100651 | |
| NAMES N | 553.90 | 576.52 | 2 | 355.49 | 286.21 | | 31637 | 175.66 | 12 | 212.54 | 24145 | | 067.23 | 82.21 | 4 | \$24,62 | 622.03 | |
| LAU. | \$35.58 | 137.00 | | 131.06 | 133.82 | | 22.59 | 72.06 | | 69.12 | 71.55 | | 206.97 | 211.41 | | 215.01 | 205.31 | |
| ALISA TONS | 101.89 | 307.67 | | 141.02 | 164.03 | | 354.77 | 10.64 | | 355.06 | 322.66 | | 745.00 | 735.32 | | 211.99 | 794.03 | |
| ILISA TENS | 318.25 | 120.51 | 4 | 121.60 | 121.35 | | 223255 | 1001.79 | | 1005.11 | 1017.03 | | 1199.11 | 1346.18 | | 1131.62 | 1149.17 | |
| NUMBER OF | 185.93 | 80.04 | 20 C | 85.09 | 40.41 | | 292.50 | 204.96 | 12 | 265 21 | 201.60 | | 367.83 | 354.00 | | 310.25 | 356.53 | |
| ALMANTA | 54,45 | 57.80 | | 19.84 | 52.83 | | 15:56 | #2.17 | | 45.28 | 14.60 | | 148.04 | 141.00 | | 145.00 | 146.12 | |
| ALMANTA | 111.12 | 00.25 | | 22.27 | 87.02 | | 121.50 | 117.41 | | 117.00 | 124.55 | | 306.11 | 197.72 | | 115.70 | 208.05 | |
| ALMENTS | 1127.28 | 121.38 | | 223.55 | 122.35 | | 114.46 | 111.00 | | 112.00 | 113 22 | | 241.77 | 213.22 | | 126.25 | 242.32 | |
| ALMANTA | (25.99 | 23.85 | | 15.55 | 10.34 | | 35.93 | 25.61 | | 22.53 | MID | | 52,60 | 42.42 | | 45,40 | 08.58 | |
| SULAWALLES | 15.27 | 20.14 | | 70.42 | 70.93 | | 12517 | 121.41 | | 114.72 | 110.40 | | 126.25 | 105.11 | | 315.54 | 187.23 | |
| ULKARSI T | 36.35 | 55.57 | | 10.35 | 22.33 | | 310.24 | 224.54 | | 250.00 | 221.57 | | 406.44 | 385.23 | | 388.35 | 3859.75 | |
| USANSIS | \$23.50 | 235.54 | | 208.50 | 100.61 | | 333.46 | 100.02 | | 368.55 | 17458 | | 126.25 | 703.40 | | 372,44 | 762.52 | |
| ULANESI I | 15.03 | 78.02 | | 10.94 | 13.45 | | 24185 | 151.25 | | 233.81 | 241.04 | | 335.70 | 323.25 | | \$5.056 | 304.N | |
| LAT POINT | 22.03 | 23.92 | | 22.85 | 24.43 | | 25432 | 185.00 | | 101.41 | 162 50 | | 186.27 | 159.50 | | 310.44 | 117.55 | |
| ULAMESTE | 27.82 | 27.72 | | 17.99 | 18.93 | | 128.57 | 236.27 | | 137.72 | 142.28 | | 157.15 | L03.22 | | 315.72 | 140.75 | |
| KALUES . | 42.75 | 40.02 | | 45.32 | 48.05 | | 272.00 | 245.06 | | 245.41 | 241.57 | | 523.41 | 234.57 | | 210.57 | 256.55 | |
| NALDED CT | \$5.58 | 17.00 | | 12.00 | 11.94 | | 55 82 | 83.50 | | 00.72 | \$5.15 | | 81.28 | 81.38 | | 15.07 | 80.15 | |
| ALCA BAR | (28.05 | 29.13 | | 22.87 | 28.85 | | 272.06 | 152.10 | | 100 #1 | 287.36 | | 233.07 | 221, 25 | | 255.75 | 222.95 | |
| APLA | 48.35 | 49.21 | | 10.67 | 54.05 | | 872.08 | 855.26 | | 871.45 | 882.25 | | 103.44 | 1984.45 | | 102.12 | 006.12 | |
| NO3NISH | \$3316.50 | 11850.54 | | 22822.00 | 11100.12 | | 2329515 | 14144.30 | | 14391.22 | 1411215 | | 17541.77 | 20503.65 | | 28182.86 | 28580.27 | |

Figure 1 Number of Poor Population (Thousands) by Province and Region 2021-2022 on Statistic Indonesia [25].



Figure 2 Average fuel consumption per month by 2021 on Statistic Indonesia [26].

If you compare Indonesia's poverty rate with data on spending on subsidies for Pertalite fuel which are subsidized by the government, these figures are unbalanced because the government cannot know to whom the government is giving the subsidies. According to the existing data, the richest 10% of the population uses government subsidies on fuel which this group of people should not receive. After looking at the existing data as of now, there are already 10 million users who have already downloaded the MyXYZ application. This data is based on the results of the application install range on SensorTower [5].

| all | rtamina amina[Persero] • > App ID: co | m dafturo munortamina | Country/Region | |
|---|--|---|----------------|--|
| View i | n Google Play | in the second | and during an | |
| Categories | Price | Top Countries / Regions | Install Range | |
| Business | Free | Indonesia, Si US, Malaysia | 10М+ | |
| Developer Website | | | | |
| PT Pertamina(Persero | | | | |
| | ings Organic User Acquisition | Bullion . | | |

Figure 3 Myxyz Application Install Range (10 Million) On Sensortower[5].

Based on references from Kompas.com, 70% of MyXYZ users are Pertalite fuel users, since some parts of Indonesia require MyXYZ to be used as payment when refueling with Pertalite. Based on the results of a survey that has been conducted by LSI, LSI Executive Director Djayadi Hanan states that only 21% of the population agrees with the use of the MyXYZ application. Around 73.2% disagree with the use of the application. Judging from the data, many people disagree with the use of the MyXYZ application, because there are still many people who do not yet know about the benefits of using the MyXYZ Application. By using the MyXYZ application, the public will get many benefits such as promotions, discounts, and interchangeable points, in addition, the government can also organize and can limit the purchase of subsidized fuel to be on target. Personal data used in applications also becomes a very important matter, but until now Indonesia does not have legal arrangements regarding the protection of personal data specifically, so it can also be one of the factors causing people to be reluctant to use BUMN applications. Therefore, XYZ as the developer of MyXYZ must emphasize the security of the application and its legal guarantees so that the use of the MyXYZ application and its trust can increase. [27] The development of gadget use in Indonesian society has been rapidly increasing and has provided opportunities for mobile payment to become larger and more efficient. The increasing number of gadget users means the demand for technological innovations is rapidly increasing to make their lives easier[6]. New solutions such as mobile payments have already been implemented by companies, such as XYZ. XYZ has begun to develop an application called MyXYZ to make payments through mobile devices. Some important attributes underlying mobile payment are the actors involved, the characterization of mobile payment, mobile payment scenarios, and operations

30th April 2024. Vol.102. No 8 © Little Lion Scientific

| | | JITAĽ |
|-----------------|---------------|-------------------|
| ISSN: 1992-8645 | www.jatit.org | E-ISSN: 1817-3195 |

involved in mobile payment[7]. XYZ developed this technology in the MyXYZ application, which will benefit the users and MyXYZ alike in the future. With mobile, making payments and transactions will become far easier for the users.

From the problems and results of research that have been done before that have been reviewed, the specific purpose of this research is the level of need for MyXYZ applications in Indonesian society with the benefits of research to help increase the credibility and loyalty of XYZ consumers so that they can expand the center. This research has the urgency to make it easier for consumers by getting various benefits from MyXYZ with targets that can help the government limit the purchase of subsidized fuel to be on target.

2. LITERATURE REVIEW

2.1 Mobile Payment

Mobile payments are a new trend and a new alternative to replace traditional payment methods. Mobile payments use mobile phones to handle transactions during purchases or money transfers, which refer to mobile wallet services, instead of using bank cards or cash [8].

Another study explains that mobile payment is a type of payment for goods or services with a mobile device while utilizing wireless and other communication technologies. Mobile devices can be used for a lot of transaction scenarios, such as digital content, tickets, or others. Payments for physical goods are possible too if there is a terminal to do the payment [9].

According to other studies, any payment where the usage of the mobile device is required to complete the transaction can be considered mobile payment [10]. This means mobile payments can be done with any mobile device, not only mobile phones. Said mobile devices including tablet PCs, PDAs, smartphones, or any mobile payment terminal.

2.2 Functional Value

Functional value refers to the utility perceived from the quality and performance of a product or service ^{[11].} According to another study about perceived customer values, functional value is defined as the advantages or benefits obtained from a product's functionality and the quality of its service, whether that said product can perform its functions or purposes ^{[12].}

2.3 Epistemic Value

Epistemic value refers to the surprise, novelty, or signature aspect of a product or service, which relates to the functionality of an application[11] Another study also states that epistemic value refers to the act of curiosity, the desire to gain knowledge about something, or novelty seeking in products or services related to the functionality of the product[12]

2.4 User Experience

The concept of user experience encompasses several elements, including functionality, system performance, interactive behaviour, assistive capabilities of the interactive system, and the contextual factors surrounding its use. Additionally, it encompasses the whole of users' emotional states, beliefs, preferences, perceptions, bodily and psychological reactions. behaviours. and achievements that transpire prior to, throughout, and subsequent to utilisation. [13].

Another study states that user experience has a connection to the user-centered principle, a principle that is often used in software development. The demands of stakeholders, users, and the organization's executives greatly impact software and product development [14].

3. RESEARCH METHODOLOGY

The research methodology employed in this study will be descriptive in nature. This study seeks to establish a connection between theoretical concepts observations. and empirical The empirical observations in our research pertain to the usage and satisfaction levels of consumers in using the MyXYZ Application. The descriptive model will be employed in this research to ascertain the description, condition, or object by providing a comprehensive and detailed account based on factual information.. Aside from the descriptive model, this research also uses the quantitative research method. By using this method, many respondents are needed to conduct this method. These respondents' data are needed in the form of numbers which will provide the percentages of significant variables of the research. The instrument chosen for this research is a questionnaire because the population chosen for this research the questionnaire

<u>30th April 2024. Vol.102. No 8</u> © Little Lion Scientific

| | | 37111 |
|-----------------|---------------|-------------------|
| ISSN: 1992-8645 | www.jatit.org | E-ISSN: 1817-3195 |

has reached more than 10 million, so the best instrument to be used in this research is a questionnaire to keep the sampling efficient and relevant.

This section provides an overview of several research models, mapping factors, representative qualities of respondents, temporal and objectrelated aspects of the research, research sample, and the technique employed for data collecting..

3.1 Research Model



Figure 5: Hypothesis

H1: Security Values have a positive effect on Functional Values

H2: Epistemic Values have a positive effect on Functional Values

H3: Trust Values have a positive effect on Functional Values

H4: Conditional Values have a positive effect on Functional Values

H5: User Experience has a positive effect on Functional Values

Qualitative research is research that is included in the new method because of its popularity not long ago. This research uses a post-positivistic method because it is based on a post-positivism philosophy. Research with qualitative methods tends to emphasize the observation of phenomena and research into the substance of the meaning of these phenomena. Appropriate and accurate qualitative research analysis will greatly influence the strength of the words and sentences used. Because in this research interviews were conducted directly with consumers, qualitative research methods are more appropriate to match the data.

Not only interviews, this research also gathers the data needed by giving out a questionnaire, where the rights go into the Quantitative research method. Qualitative research is research with inductive and objective methods. The quantitative method is said to be a traditional method because its popularity has been long enough. The quantitative research method is based on the philosophy of positivism, so it is called the positivistic method. This research method is a scientific method because it fulfills scientific tongues.

3.2 Mapping Variable

| Variable | Indicator | Definition | Literature | Code | Statement |
|-------------------|-----------------|---|--|------|--|
| Functional Values | Needs | User needs to use applications installed on their devices | Zolkepli, I. A., Mukhiar, S. N. S., & Tan, C. (2020). [12] | FV01 | I need the MyXYZ application for refueling payments. |
| | Performance | Application performance in running user-directed tasks | | FV02 | MyXYZ's application performance feels good for my daily use. |
| | Purpose | the application by the | Zolkepli, I. A., Mukhiar, S. N. S., & Tan, C. (2020). [12] | FV03 | The MyXYZ application helps me to be able to pay for refueling. |
| Security Values | Confidentiality | Data privacy is maintained from all leaks for user security | Isaak J. & Hanna M. J., (2018). [15] | SV01 | The personal data of MyXYZ application users is guaranteed to be secure from external breaches. |
| | Availability | Limited data access for certain subjects | Drakos K., (2011). [16] | SV02 | MyXYZ application users can get information and data about news or |

Table 1: Mapping Variable

Journal of Theoretical and Applied Information Technology <u>30th April 2024. Vol.102. No 8</u> © Little Lion Scientific



ISSN: 1992-8645

www.jatit.org

E-ISSN: 1817-3195

| Variable | Indicator | Definition | Literature | Code | Statement |
|--------------------|-------------------------|--|---|------|---|
| | | | | | other things contained in the MyXYZ application. |
| Epistemic Values | Test New Technology | Applications allow users to try new technologies. | Zolkepli, I. A., Mukhiar, S. N. S., & Tan, C. (2020). [12] | EV01 | I can try the innovative technology in the MyXYZ application |
| | Experiments | Users can experiment with doing new things with the application. | Zolkepli, I. A., Mukhiar, S. N. S., & Tan, C. (2020). [12] | EV02 | The MyXYZ application has new features and things that I have never seen, and I can experiment with these new features. |
| | Curiosity Appealing | The application has aspects that make users feel curious | Zolkepli, I. A., Mukhiar, S. N. S., & Tan, C. (2020). [12] | EV3 | The MyXYZ application has things that I have never seen in it so it increases my curiosity |
| | Interesting Design | Attractive application design that can attract users. | Zolkepli, I. A., Mukhiar, S. N. S., & Tan, C. (2020). [12] | EV4 | The unique and attractive design of the MyXYZ application makes me continue to use the application |
| Trust Values | Trust | User trust in the application regarding freedom from risk of danger or doubt and safety factors during the service process. | Komiak, SX, & Benbasat, I (2004). [17] | TV1 | The MyXYZ application maintains user confidentiality. At the time of the transaction, it doesn't share personal and other people's information. |
| Conditional Values | Task Completion | The application can be used to complete a special task that the user needs to complete | Zolkepli, I. A., Mukhiar, S. N. S., & Tan, C. (2020). [12] | CV1 | The MyXYZ application can help me complete the tasks that I have. |
| | Features | The application has features that can meet user needs. | Zolkepli, I. A., Mukhiar, S. N. S., & Tan, C. (2020). [12] | CV2 | The features in the MyXYZ application have fulfilled all my needs related to the application |
| User Experience | Interaction Environment | Service capabilities in playing an integral role that allows users to be able to interact with stakeholders | Marlow, J, & Dabbish, L (2014). [18] | UX1 | The MyXYZ application provides information on the location of the nearest gas station and provides price information for fuel. |
| | Simplicity | Models from apps that contain enough components and colors and don't fill the screen. | Chang, A., Gouldstone, J., Zigelbaum, J., & Ishii, H. (2007). [19] | UX2 | The MyXYZ application displays a view that can be enjoyed by various groups of users and uses application components that are not confusing |

| Table 2: | Characteristics | of Respondents |
|-------------------|------------------|----------------|
| 1 <i>uoi</i> c 2. | Character istics | of nesponaenis |

| | Demographic | Frequency | Percentage |
|----------|-------------------|-----------|------------|
| Gender | Male | 71 | 71% |
| | Female | 29 | 29% |
| Age | 18-24 | 99 | 99% |
| 0 | 25-34 | 0 | 0 |
| | 35-44 | 1 | 1% |
| | >45 | 0 | 0 |
| Domicile | Jakarta | 49 | 49% |
| | Bogor | 27 | 27% |
| | Depok | 3 | 3% |
| | Tangerang | 7 | 7% |
| | Bekasi | 7 | 7% |
| | Outer Jabodetabek | 7 | 7% |

30th April 2024. Vol.102. No 8 © Little Lion Scientific

| ISSN: 1 | 1992-8645 |
|---------|-----------|
|---------|-----------|

www.jatit.org

The conclusion from the analysis carried out on the characteristics of the respondents based on Table 2 above shows the results of the questionnaire. Most of the gender demographic of the respondents who filled out this research questionnaire was male with a frequency of 71 and a percentage of 71%. Then, from the age demographic, most respondents who filled came from teenagers and young adults, namely ages 18-24 with a total of 99 respondents and a percentage of 99%. Lastly, in the domicile demographic, most respondents live in Jakarta with a frequency of 49 and a percentage of 49%. These respondents' amounts are very helpful towards the research because to get maximum results, it is needed to get lots of answers from respondents who come from various ages and domiciles so that the results are concrete and by what this research hoped for.

3.3 Time and Object of Research

This research was conducted from September 2022 to January 2023. The target population for this research is people in Indonesian society who have used or still using the MyXYZ application. In terms of the characteristics of the respondents, the minimum age is 18, and no limitations for the gender demographic.

3.4 Research Sample

employs probability This study а methodology known as simple random sampling. In this methodology, each individual is afforded an equitable opportunity to be chosen as a representative sample from the larger population. The selection of data is conducted by the use of a random number table or a computer-generated list of random integers. It may also be accomplished by the lottery technique, utilising cash notes, and so forth. In this approach, the use of a sample frame is necessary. The enumeration of all persons within the research population must be conducted in either ascending or descending order. The benefits of this approach include the low need for demographic knowledge, good internal and external validity, and straightforward data analysis. Nevertheless, there are two drawbacks: the expense is substantial, and a sample frame is necessary. Samples of the same size often exhibit significant sampling mistakes and lower accuracy compared to stratified samples. [20]

The sample of this research is based on the population of the downloaders of MyXYZ. Based on the data provided by SensorTower, MyXYZ has been downloaded more than 10 million times in Google PlayStore. From those downloads, the number of samples for this research can be determined by using Slovin's formula to find the required minimum samples[21].

$$n = \frac{N}{1 + Ne^2}$$

Figure 3: Slovin's Formula

n = sample size/chosen samples N = population size e = margin of error (10%)

With Slovin's formula above, the calculation of the necessary sample to conduct this research can be found:

$$n = 10.000.000/1 + 10.000.000*(0.1)2$$

= 10.000.000/1 + 100.000

= 10.000.000/100.001

= 99,99, rounded up to 100 samples.

3.5 Data Collection Method

For collecting the required respondents' data, this research utilized an online-based questionnaire form made in Google Forms. This form is used as a main tool for collecting the data needed. This questionnaire is specified for Indonesian people since MyXYZ was only released in Indonesia in hopes for the people to utilize modern mobile technology to change the way of transactions and help XYZ to achieve the best customer satisfaction. The variables of this research that will be compared to each other are functionality, security, epistemic, trust, conditional, and user experience.

The distribution of said questionnaires to the public is done by using social media such as Line, Instagram, and Discord. Since it's an online-based questionnaire, respondents can fill out the form anytime, anywhere. The questionnaire was opened until the required samples were met, in it was opened

30th April 2024. Vol.102. No 8 © Little Lion Scientific

| ISSN: | 1992-8645 |
|-------|-----------|
|-------|-----------|

www.jatit.org



for a month and a half, from October 2022 until December 2022. In that time, 119 data were collected and 100 of them were randomly chosen with a simple random sampling method to determine which respondents will be the sample of this research ^[22].

The questionnaire was divided into 10 main parts. The first part includes a brief description and the goal of this research and the demographic questions. Also, in this part, respondents were asked if they have used or haven't used MyXYZ at all. If they haven't, the form will jump to the last part and give a question about factors regarding respondents who haven't used MyXYZ yet. If they have, they will proceed to continue to the second part.

The second part includes the frequency of respondent's MyXYZ usage and their issues regarding the application. For the third to eighth part, the form gives out questions about this research's variables, which are functionality, security, epistemic, trust, conditional, and user experience. Respondents need to determine their opinions on the questions using a Likert scale from one to four ^[23]. Then comes the last part for respondents who have used MyXYZ. In this part, respondents were asked about their critiques and advice for the MyXYZ application's future developments and their recommendations for the MyXYZ application towards their colleagues.

4. RESULT AND DISCUSSION

The data that has been collected will be this research material data and tested through three stages. The first stage is a readability test to check if all the questions of the questionnaire are understood by the respondents. After the readability test, two other tests were conducted to check the significance of this research. The tests were validity tests and reliability tests of this research variables. By using SmartPLS and SEM-PLS methods, the variables included in this research can be decided if they are significant or not.

The following diagram shows the variables included in this research and their calculations. The variables namely are Functional Values (FV), Security Values (SV), Epistemic Values (EV), Trust Values (TV), Conditional Values (CV), and User Experience (UX). To know how those variables affect each other variables, this research framework below will show the calculations of the algorithm.



Figure 4: SmartPLS-Sem Algorithms Calculations

4.1 Data Collection Method

The readability test was conducted to test all questions if they are understandable by the respondents of this research or not. The test results were favorable, as all questions are readable and can be easily understood by the respondents of this research.

| No | Questions | Yes | No |
|----|---|-----|----|
| 1 | Full Name | | |
| 2 | Gender | | |
| 3 | Age | | |
| 4 | Domicile | | |
| 5 | Do you use the MyXYZ application for transactions at XYZ? | | |
| 6 | How often do you use the MyXYZ application to make transactions at XYZ? | | |
| 7 | What are the most used features in the MyXYZ application? | | |
| 8 | Have you ever experienced problems using the MyXYZ application? | | |

Table 3: Readability Test

30th April 2024. Vol.102. No 8 © Little Lion Scientific



www.jatit.org

ISSN: 1992-8645

E-ISSN: 1817-3195

| No | Questions | Yes | No |
|----|---|-----|----|
| 9 | If yes, can you describe the problems you have experienced in using the MyXYZ application? | | |
| 10 | If yes, how many times have you experienced problems using the MyXYZ application? | | |
| 11 | FV01. I need the MyXYZ application for refueling payments. | | |
| 12 | <i>FV02. The performance of the MyXYZ application feels good for my daily use.</i> | | |
| 13 | <i>FV03.</i> The MyXYZ application helps me to be able to pay for refueling. | | |
| 14 | SV01. The personal data of MyXYZ application users is guaranteed to be secure from external breaches | | |
| 15 | SV02. MyXYZ application users can get information and data regarding news or other things contained in the MyXYZ application. | | |
| 16 | EV1. I can try the innovative technology available in the MyXYZ application | | |
| 17 | <i>EV02. The MyXYZ application has new features and things that I have never seen and I can experiment with these new features.</i> | | |
| 18 | <i>EV03. MyXYZ application has things that I have never seen in it so it invokes my curiosity</i> | | |
| 19 | <i>EV04. The unique and attractive design of the MyXYZ application makes me want to continue to use the application</i> | | |
| 20 | <i>TV01. The MyXYZ application maintains user confidentiality. At the time of the transaction, it doesn't share any personal or other people's information.</i> | | |
| 21 | CV01. The MyXYZ application can help me complete the tasks I have | | |
| 22 | <i>CV02. The features in the MyXYZ application have fulfilled all my needs related to the application</i> | | |
| 23 | UX01. The MyXYZ application provides information on the location of the nearest gas station and provides information on fuel product prices | | |
| 24 | UX02. The MyXYZ application displays a view that can be enjoyed by various groups of users and uses application components that are not confusing | | |
| 25 | Do you have any criticisms or suggestions you can provide for the future development of the MyXYZ application? | | |
| 26 | Would you recommend the MyXYZ application to your colleagues? | | |
| 27 | Please explain your reasoning for the answer before | | |
| 28 | Are there any internal and external factors that make you reluctant to use the MyXYZ application? | | |

After the questionnaires have been distributed, the responses from the respondents are collected to be processed as this research data. The data are analyzed with SmartPLS with SEM-PLS method to test the hypotheses of this research. The analysis was carried out in two stages, the Outer Model (Measurement Model) and the Inner Model (Structural Model).

4.2 Outer Model (Measurement Model)

The Outer Model (Measurement Model) test is conducted in this research to specify the

relationship between latent variables and their indicators. Both tests, validity, and reliability, will be tested using the Outer Model. Convergent and Discriminant Validity will be used to test the validity of each variable of this research. The reliability of the variables will be tested by using Cronbach's Alpha and Composite Reliability.

30th April 2024. Vol.102. No 8 © Little Lion Scientific

ISSN: 1992-8645

www.jatit.org



| Table 4: Convergent Validity Based on Outer Loading | | |
|---|----------------|--|
| Indicator | Outer Loadings | |
| CV01 <- CV | 0.862 | |
| CV02 <- CV | 0.935 | |
| EV01 <- EV | 0.842 | |
| EV02 <- EV | 0.861 | |
| EV03 <- EV | 0.876 | |
| EV04 <- EV | 0.801 | |
| FV01 <- FV | 0.853 | |
| FV02 <- FV | 0.838 | |
| FV03 <- FV | 0.818 | |
| SV01 <- SV | 0.880 | |
| SV02 <- SV | 0.857 | |
| TV01 <- TV | 1.000 | |
| UX01 <- UX | 0.883 | |
| UX02 <- UX | 0.889 | |

To see which indicator fulfilled the Fornell-Larcker Criterion, the correlation value of each variable must be higher than other correlation values for other variables. As shown in Table 5, the correlation value of each variable is higher than the correlation of other variables.

 Table 5: Discriminant Validity Based on Fornell-Larcker Criterion

| | CV | EV | FV | SV | TV | UX |
|----|-------|-------|-------|-------|-------|-------|
| CV | 0.899 | | | | | |
| EV | 0.659 | 0.845 | | | | |
| FV | 0.558 | 0.637 | 0.836 | | | |
| SV | 0.447 | 0.709 | 0.578 | 0.869 | | |
| TV | 0.540 | 0.593 | 0.525 | 0.742 | 1.000 | |
| UX | 0.421 | 0.507 | 0.564 | 0.598 | 0.510 | 0.886 |

To see which indicator fulfilled the Fornell-Larcker Criterion, the correlation value of each variable must be higher than other correlation values for other variables. As shown in Table 5, the correlation value of each variable is higher than the correlation of other variables.

Table 6: Value of Cronbach's Alpha, Composite Reliability (rhoa_a & rho_c), and AVE

| | Cronbach's alpha | rho_a | rho_c | AVE | R ² |
|----|---------------------|-------|-------|-------|----------------|
| CV | 0.770 | 0.838 | 0.894 | 0.809 | |
| EV | 0.867 | 0.871 | 0.909 | 0.715 | |
| FV | 0.785 | 0.788 | 0.875 | 0.700 | 0.515 |
| SV | 0.676 | 0.679 | 0.860 | 0.755 | |
| UX | 0.725 | 0.726 | 0.879 | 0.785 | |

By finding the value of Cronbach's Alpha and Composite Reliability, each indicator can be concluded as a reliable or non-reliable indicator for this research. With Cronbach's Alpha values, all indicators are found reliable in this research. But, considering Composite Reliability values, one indicator, SV, is non-reliable as the value is under 0.7. Not only that, but Table 6 also shows all indicators have an AVE value greater than 0.5, and each indicator can explain 50% of the construct they create, except for TV, which is not included in Table 6. TV only has one indicator which calculates AVE impossible ^[24].

4.3 Inner Model (Structural Model)

The R2 values and the significance level of the path coefficients are applied in this research as the main evaluation criteria for the SEM-PLS method. R2 values are an assessment used to determine the accuracy of a research model that is being used [24]. Table 6 shows the R2 value of FV, which is 0.515. This value represents that indicator CV, EV, FV, SV, and UX explain 51.5% of the variance in FV. R2 values of 0.2 or greater are included as satisfactory, although higher values are preferable. This shows that the research models in this research are quite predictive.

| Tuble 7. 1 un Coefficient una 1-statistics | | | | |
|--|-------------------|-----------------------------|---------------|--|
| | Path coefficients | T statistics (O/STDEV) | Information | |
| CV -> FV | 0.198 | 1.559 | Insignificant | |
| EV -> FV | 0.272 | 1.771 | Insignificant | |
| SV -> FV | 0.113 | 0.627 | Insignificant | |
| TV -> FV | 0.043 | 0.312 | Insignificant | |
| UX -> FV | 0.253 | 2.513 | Significant | |

Table 7: Path Coefficient and T-Statistics

To find the significance of path coefficients, this research uses bootstrapping analysis in SmartPLS to calculate the path coefficients of the inner model. The test was set to be two-tailed with a 0.05 significance level. If the value of T statistics of the variable is greater than 1.96, the path coefficient will be different in a significant way from zero. Therefore, the hypotheses can be accepted ^[24].

Table 7 shows that only one hypothesis is significant because the T statistics of the said hypothesis are higher than 1.96, which is UX to FV. On a side note, the other four hypotheses are insignificant because their T statistics are lower than 1.96. From these findings, it can be concluded that User Experience positively influences the Functional Values of the MyXYZ application.

<u>30th April 2024. Vol.102. No 8</u> © Little Lion Scientific



ISSN: 1992-8645

www.jatit.org

5. CONCLUSION

According to the findings of this study, the majority of the factors selected from a range of scholarly publications and research papers published in the 2000s have demonstrated a lack of substantial influence on consumers' utilization of the MyXYZ application. There is a single variable that exerts a substantial influence on consumer usage of the MyXYZ application, namely User Experience. The characteristics that have been gathered are utilized to ascertain if consumers' usage will yield a favorable or negative influence on their contentment.

Based on the findings of this research survey, the majority of respondents are MyXYZ customers. The results demonstrate that they have successfully addressed several concerns. Notwithstanding, they continue to endorse MyXYZ to their colleagues. A mere 10% of the entire sample population does not endorse it. The users of MyXYZ saw a favorable outcome as a consequence of their engagement with the platform.

Further investigation is necessary to enhance the advancement of the MyXYZ application based on the findings of this research. Given the unsuitability of the variables for this research, further investigation in this sector is necessary to support the advancement of MyXYZ. The objective of this study is to contribute to the advancement of MyXYZ, but it may not have been fully realized. Other researchers may find it advisable to utilize this work for future research. To enhance their studies, it may be necessary for them to employ the methodologies employed in this research. While largely inconsequential, the findings can be utilized to formulate further ideas for future research.

REFERENCES

- [1] Putra, D. & Setiawan, A. (2020). The Importance of User Experience Analysis in the Design of an Education Information System Application.
- [2] Okamoto, Y. & Sjöholm, F. (2003). Technology development in Indonesia.

- [3] Tee, H., & Ong, H. (2016). Cashless payment and economic growth. Financial Innovation, 2(4), 0–9.
- [4] Odeh, M. & Yousef, M. (2021). Effect of Covid-19 on the electronic payment system: usage level trust and competence perspectives. Indonesian Journal of Electrical Engineering and Computer Science.
- [5] SensorTower. (2022). MyXYZ Overview -Google Play Store - Indonesia. SensorTower.https://app.sensortower.com/over view/com.dafturn.myXYZ?country=id
- [6] Choudry, S, Qureshi, I, & Rizvi, ST (2020). The Effect of Subjective Norms on Desire to Purchase Through Applications: The Moderating Role of Electronic Word-of-Mouth. RADS Journal of Business
- [7] McKitterick, D., & Dowling, J. (2003). State of the Art Review of Mobile Payment Technology. Department of Computer Science, Trinity College, Dublin, Technical Report.
- [8] Narayan, S. (2013). Mobile Payments: Comparison of Mobile Wallet Concepts. KTH Information and Technology.
- [9] Dahlberg, T., Mallat, N., Ondrus, J., & Zmijewska, A. (2008). Past, present, and future of mobile payments research: A literature review. Electronic Commerce Research and Applications, 7(2), 165–181.
- [10] Karnouskos, S. (2004). Mobile payment: A journey through existing procedures and standardization initiatives. IEEE Communications Surveys & Tutorials, 6(4), 44– 66.
- [11] Wang, Y., Po Lo, H., Chi, R. and Yang, Y. (2004). An integrated framework for customer value and customer-relationship-management performance: a customer-based perspective from China. Managing Service Quality: An International Journal
- [12] Zolkepli, I. A., Mukhiar, S. N. S., & Tan, C. (2020). Mobile consumer behavior on apps usage: The effects of perceived values, rating, and cost. Journal of Marketing Communications, 1–23.
- [13] ISO (International Organization for Standardization) (2010). Ergonomics of humansystem interaction — Part 210: Human-centered design for interactive systems. ISO 9241-210:2010
- [14] Nugraha, I., & Fatwanto, A. (2021). User experience design practices in industry (Case Study from Indonesian information technology companies). Elinvo (Electronics, Informatics, and Vocational Education), 6(1), 49–60.



E-ISSN: 1817-3195

[15] Isaak, J., & Hanna, M.J. (2018). User Data Privacy: Facebook, Cambridge Analytica, and Privacy Protection. Computer, 51, 56-59.

ISSN: 1992-8645

- [16] Drakos, K (2011). Security economics: A guide for data availability and needs. Defence and Peace Economics, Taylor & Francis.
- [17] Komiak, SX, & Benbasat, I (2004). Understanding customer trust in agentmediated electronic commerce, webmediated electronic commerce, and traditional commerce. Information technology and management, Springer.
- [18] Marlow, J, & Dabbish, L (2014). When is a picture not worth a thousand words? The psychological effects of mediated exposure to a remote location. Computers in Human Behavior, Elsevier.
- [19] Chang, A., Gouldstone, J., Zigelbaum, J., & Ishii, H. (2007). Simplicity in interaction design. 135-138.
- [20] Noor, S., Tajik, O., & Golzar, J. (2022). Simple Random Sampling. 1. 78-82.
- [21] Stephanie, E. (2020). Slovin's Formula Sampling Techniques.
- [22] Taherdoost, H. (2016). Sampling Methods in Research Methodology; How to Choose a Sampling Technique for Research. International Journal of Academic Research in Management. 5. 18-27.
- [23] Joshi, A., Kale, S., Chandel, S., & Pal, Dinesh. (2015). Likert Scale: Explored and Explained. British Journal of Applied Science & Technology. 7. 396-403.
- [24] Wong, K. (2013). Partial least square structural equation modeling (PLS-SEM) techniques using SmartPLS. Marketing Bulletin. 24. 1-32.
- [25] Badan Pusat Statistik [BPS] (2022). Number of Poor Population (Thousands) by Province and Region 2021-2022. URL : <u>https://www.bps.go.id/indicator/23/185/1/ju</u> <u>mlah-penduduk-miskin-ribu-jiwa-menurutprovinsi-dan-daerah.html</u>
- [26] Sarnita Sadya (2022). The richest people consume the most fuel in Indonesia. URL : <u>https://dataindonesia.id/sektor-</u> <u>riil/detail/orang-kaya-paling-banyak-</u> <u>konsumsi-bbm-di-indonesia</u>

[27] BBC News Indonesia (2019). Electronic KTP data is submitted to more than 1,200 government and private institutions, how are efforts to ensure privacy? URL : <u>https://www.bbc.com/indonesia/indonesia-49103924</u>