The Influence of User Trust and Experience On User Satisfaction Of E-Commerce Applications During Transactions in Mini Markets Using Delon and McLean Method

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Abstract

In order to increase net advantages for users of e-commerce applications in minimarkets, this research attempts to quantify the degree and influence of experience and trust on user pleasure. This research employs a quantitative methodology. Direct observations of e-commerce applications, literature reviews, and the online distribution of Google Forms-assisted questionnaires to application users via social media were the methods used to collect data. Both statistical and demographic analysis were used to analyze the data for this study. Users of e-commerce applications make up the study's population. Purposive sampling was the method employed for sampling. With a total of 180 samples, the non-probability sampling approach makes use of the PLS-SEM theory. The majority of respondents expressed high levels of satisfaction with the e-commerce application in minimarkets, according to the data processing results. Because perceived utilitarian's path coefficient and t-test values are below the threshold, the analysis of the aspects of user experience represented by perceived hedonic and perceived utilitarian shows that perceived hedonic has a significant effect on user satisfaction while perceived utilitarian does not. The user happiness variable is significantly impacted by the trust variable. Perceived hedonic value, trust, and ease of use factors that significantly impact customer satisfaction with e-commerce applications in minimarkets.

Keywords: E-commerce, User Satisfaction, Minimarkets, User Experience, Trust.

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1. Introduction

E-commerce in Indonesia is experiencing quite rapid growth. Indonesia is the country with the largest e-commerce usage rate in the world. The growth of e-commerce is influenced by several factors, namely: the growth of the middle class, the increasing level of internet penetration and users, as well as the large number of financial technology companies, so that payment methods are becoming increasingly diverse. In the business world, the use of e-commerce is a necessity to be able to compete with competitors, to keep up with the times that are filled with innovation and creativity, and to reach more complex problems [1]. The use of e-commerce can reach customers widely and make it easier for customers to shop because they can shop without having to go to the store. E-commerce is also equipped with various payment systems and delivery systems so that customers can choose the desired means of payment and delivery service [2]. However, the use of e-commerce also has disadvantages, such as system security risks, which can result in user identities being leaked. Apart from that, the use of e-commerce requires an internet connection and adequate information technology [3]. If the internet connection is bad or the system is experiencing an error, the transaction process will be disrupted. The increasing use of e-commerce has made minimarket chain companies take part in creating e-commerce innovation [4]. A and I are the two largest minimarket chain companies in Indonesia. In the third quarter of 2020, A outlets reached 15k outlets. Meanwhile, the number of I outlets as of 2020 was 18k. To keep up with technological developments, two retails are created an e-commerce platform in the form of an application. A has the Alfagift application, and I has the KlikIndomaret application [5] [6].

Complaints and problems that occur can affect user satisfaction when using the minimarket application. The degree of a person's happiness or dissatisfaction with a product or service from a corporation is known as satisfaction. The user's attitude will be more optimistic the more satisfied they are [7]. To sustain the volume of online sales and purchases in the context of e-commerce, customer satisfaction must rise. Customers who are satisfied with the system will reuse it, and this will impact their inclination to reuse. One of the key elements that affects a system's effective implementation is user happiness [8]. A system is considered good if it can yield benefits to its users. As
a measure of the system's effectiveness, net benefit is crucial since it illustrates the advantages that both individuals and organizations have reaped. The impact that an information system's existence and utilization have on the caliper of user performance both individually and throughout the organization including productivity gains, knowledge expansion, and decreased time spent looking for information is known as the net benefit [9]. Use and user satisfaction (net benefit) have an impact on e-commerce users' net benefit. The issues raised by users are directly linked to the quality of the system, the information, and the services. Factors influencing user satisfaction include system quality, information quality, and service quality [10]. The degree of user usage and happiness can be influenced by the quality of the system, the information, and the services. System and information quality have been shown to have a major impact on e-commerce user satisfaction in numerous studies [11]. The likelihood that a system will be used and that users will be satisfied increases with system quality [12]. Improved system quality will lead to more users, which will boost user happiness. User satisfaction will rise in proportion to the quality of the information in a system. Aside from that, service quality is also crucial and positively affects user happiness in e-commerce [13].

In addition to features of the system, the user's experience which highlights emotions of pleasure and enjoyment while utilizing the system also contributes to higher levels of user satisfaction [14]. According to ISO (2010), user experience refers to how a person feels and reacts when utilizing a system, product, or service. The importance of perceived benefit (considered utilitarian) and perceived pleasure (perceived hedonic) are two key components in the context of user experience [15]. Aside from that, utilitarian and hedonistic aspects comprise the value of online buying, which is a crucial component [16]. Hedonic is associated with sentiments of pleasure and delight, whereas utilitarian is associated with the advantages that people receive. A user's level of utilitarian and hedonistic acceptance will rise as they get proficient with a technology, which will boost their level of enjoyment and desire to utilize it going forward [17]. Trust is another factor that needs to be taken into account in order to increase consumer pleasure. In e-commerce, trust has been shown to affect user happiness and interest in making repeat purchases [18]. User happiness is largely influenced by trust in e-commerce. Trust has a favorable and considerable impact on e-commerce user pleasure, according to several research [19]. There has never been any research on how experience, trust, and user pleasure relate to boosting user net benefits [20] [21]. Only the relationship between user experience and contentment, or the relationship between trust and satisfaction, are covered in certain research [22] [23]. To quantify the impact of user experience on satisfaction, prior study added two primary user experience variables to the six Delone & McLean model variables [24]. The study's findings show that user satisfaction is influenced by perceived enjoyment, system use, information quality, and system quality [25]. Additional studies looking at how client trust affects the use of e-commerce in the context of Using the DeLone & McLean model as a lens, it was determined that trust influences MSMEs' e-commerce media users both directly and indirectly. User happiness is positively and significantly impacted by trust as well [26].

2. Research Methods

This research employs a quantitative methodology. The author employs a quantitative strategy that includes techniques for both data collecting and analysis. Direct observations of e-commerce apps, literature reviews, and online questionnaire distribution via social media platforms like Instagram, Twitter, WhatsApp, Line, and Telegram as well as the use of Google Forms to facilitate application users' questionnaire completion were the methods used to collect data. The results of the questionnaire that was collected will be examined utilizing Ms. software. SmartPLS and Excel. Both statistical and demographic analysis were used to analyze the data for this study. Ms. Number Processing Software was used to do the demographic analysis. Utilizing Ms. Excel and SmartPLS 3 tools for statistical analysis, measurement models (outer models) and structural models (inner models) are analyzed. The objective of the outer model is to evaluate the model's dependability and validity. In the meantime, the internal model looks for patterns in the data. Next, depending on the outcomes of the completed statistical analysis, draw conclusions and offer recommendations. Users of e-commerce applications make up the study's population. Purposive sampling was the method employed for sampling. Using the PLS-SEM theory, a non-probability sampling technique is employed. In this research, the population size of the two objects is unknown, so to determine the minimum sample size, we use the formula for the number of hypotheses times 10. The author uses 18 hypotheses, so the minimum sample size required is 180 samples.

3. Results and Discussion

Based on the findings of the demographic analysis that was done, the author makes interpretations. The results of the demographic analysis are explained as follows: 400 participants participated in the survey as respondents, with 300 of them women, who made up the majority. There were 100 male respondents at the same time. This may occur because the author identified more female respondents than male respondents when disseminating questionnaires via social media. Therefore, it can be said that women are more likely than males to utilize e-commerce applications at minimarkets. 150 responders, or the majority, were between the ages of 25 and 29. A further 150 respondents were between the ages of 20 and 24. 70 were older than 29, and 30 were between the ages
of 11 and 19. The bulk of e-commerce application users in minimarkets are therefore estimated to be between the ages of 25 and 29. There were 150 respondents who were civil servants, 30 respondents were teachers or lecturers, 90 respondents were students, and 130 respondents were employed as employees. The majority of respondents in this study have jobs other than the four, namely other jobs in Indonesia, with a total of 170 respondents. Other jobs can be defined as those of entrepreneurs, housewives, medical personnel, and others. This is in accordance with the demographic results of the respondents’ ages, with the majority aged 25–29 years, followed by an age range of 20–24 years.

The end results of the measurement model analysis demonstrate that the model employed in this study has good qualities and satisfies the criteria for moving on to the next step, which is the structural model analysis. The outer loading value for all indicators being above 0.6, the composite reliability value being above 0.7, the AVE value being above 0.5, the cross-loading value being above the threshold, and the Fornell-Larker value being above the threshold all serve as evidence for this. The IQ → U hypothesis is supported, according on the findings of the inner model analysis of H1. These findings are evident from the t-test value over 1.96, or 4.4, which indicates that IQ influences U. Additionally, the path coefficient analysis yielded a value of 0.324, indicating that IQ significantly affects U. The relative impact (q2) and effect size test findings (f2), however, yielded relatively low values. The findings of this hypothesis demonstrate that information quality significantly affects system use. These findings are consistent with earlier research that discovered the impact of information quality on system utilization. It can have an impact on how a system is used to present information that is comprehensive, accurate, pertinent, current, and clear. Thus, it can be inferred that the adoption of e-commerce applications in minimarkets can expand with the availability of high-quality information.

The IQ → US theory is disproved, according to the findings of the inner model analysis of H2. These findings are evident from the t-test value, which is less than 1.96, or 1.3, indicating that IQ has no bearing on US. Additionally, the path coefficient analysis results, which are below 0.1 and equal to 0.08, show that IQ has no discernible impact on US. In addition, the findings of the tests of the effect size (f2) and relative impact (q2) were not particularly significant. According to the findings of this hypothesis, and in accordance with earlier research, information quality does not significantly affect user happiness. Users may experience difficulty understanding the information produced by a system because the system has complex information. This is in accordance with the value of the information presentation indicator (format) in the information quality variable, which has the smallest value. Therefore, it can be inferred that customer happiness is unaffected by the accuracy of the information provided by e-commerce applications in minimarkets. The IQ → PU hypothesis is supported by the findings of the inner model analysis of H3, according to the findings. These findings are evident from the fact that the t-test result was above the threshold, or 7.14, indicating that IQ has an impact on PU. Additionally, a value of 0.5 was found in the route coefficient analysis results, indicating that IQ significantly influences PU. The relative impact test results (q2) received a value of 0.11 (little), while the effect size test results (f2) received a value of 0.2 (medium). According to the findings of this hypothesis, perceived benefits are significantly influenced by system quality. These findings are consistent with earlier research that discovered the impact of system quality on the advantages enjoyed by users. Users will gain from a system that reacts to commands fast, is simple to use, error-free, offers transaction security, and is routinely updated. Therefore, it can be stated that employing e-commerce applications in minimarkets can boost user benefits due to superior system quality.

The SQ → PH hypothesis is confirmed by the inner model analysis of H4 data. These findings are evident from the t-test result of 10.04, which indicates that SQ affects PH. Additionally, the route coefficient analysis yielded a value of 0.56, indicating that SQ significantly affects PH. Additionally supporting this claim are the medium effect size (f2) and relative impact (q2) numbers. The findings of this hypothesis demonstrate that system quality significantly influences perceived pleasure. These results are in accordance with previous research, which found an influence of system quality on the pleasure felt by users. A system that responds to commands given quickly, is easy to use, free from errors, provides security in transactions, and is updated regularly will provide a pleasant experience for users. So it can be concluded that good system quality can increase a pleasant experience for users when using e-commerce applications in minimarkets. The SQ → T hypothesis is accepted, according on the findings of the inner model analysis of H5. These findings are evident from the t-test value, which is 11.3, or above the threshold of 1.96, indicating that SQ has an impact on T. Additionally, the route coefficient analysis yielded a value above 0.1, or 0.62, indicating that SQ significantly affects T. Additionally supporting evidence comes from the relative impact (q2) value of 0.3 and the effect size (f2) value of 0.45 (big). According to the findings of this hypothesis, system quality significantly affects user trust. These findings are consistent with earlier research that discovered a relationship between system quality and user trust. A system that responds to commands given quickly, is easy to use, free from errors, provides security in transactions, and is regularly updated will increase user confidence in using the system. So it can be concluded that good system quality can increase user confidence in using e-commerce applications in minimarkets.

The SQ → U hypothesis is accepted, according on the findings of the inner model analysis of H6. These findings are evident from the t-test result, which is 3.1, indicating that SQ has an impact on U. Additionally, the route
coefficient analysis yielded a value of 0.2, indicating that SQ significantly affects U. The results of the tests for effect magnitude (f2) and relative impact (q2), however, are modest. According to the findings of this hypothesis, system quality significantly affects how a system is used. These findings are consistent with earlier studies. Users will be more inclined to utilize a system if it reacts to commands promptly, is simple to use, error-free, offers transaction security, and is routinely updated. In light of this, it can be said that minimarkets may use e-commerce applications more frequently if the system is of high quality. The SQ → US theory is disproved, according to the findings of the inner model analysis of H7. These results are known from the t-test value, which is below the limit value of 1.96, namely 0.6, which states that SQ has no effect on US. Apart from that, in the path coefficient analysis, a value was obtained below 0.1, namely 0.04, which means that SQ does not have a significant influence on the US. Then, in testing the effect size (f2) and relative impact (q2), relatively small results were obtained. The findings of this hypothesis support earlier studies that found no significant relationship between system quality and user happiness. This may occur as a result of the system's performance not yet being at its peak, as shown by the reliability indicator's value on the system quality variable, which gets the smallest value and indicates that the system still regularly makes errors or encounters interference. Therefore, it can be inferred that user pleasure is unaffected by the effectiveness of e-commerce applications in minimarkets.

The SVQ → PU hypothesis is confirmed by the findings of the inner model analysis of H8. These findings are evident from the t-test value, which is more than 1.96 and equal to 3.1, indicating that SVQ affects PU. Additionally, the route coefficient analysis yielded a value of 0.21, indicating that SVQ significantly affects PU. Meanwhile, rather modest results were found when examining the effect size (f2) and relative impact (q2). Based on the findings of this hypothesis, it is known that, in line with earlier research, service quality significantly influences how advantages are perceived. Users may benefit from responsive customer service, caring customer service, and assured problem resolution from customer service. Therefore, it can be stated that providing high-quality customer service can affect how much consumers will gain from using e-commerce applications in minimarkets. The SVQ → PH hypothesis is supported by the findings of the inner model analysis of H9, according to these findings. The t-test value, which is 3.8, reveals these findings and indicates that SVQ affects PH. Additionally, the path coefficient analysis results show that the SVQ variable significantly influences the PH variable, with a value of 0.2. Meanwhile, rather modest results were found when examining the effect size (f2) and relative impact (q2). These results show that users' satisfaction is significantly impacted by service quality. These findings are consistent with earlier study, which discovered that customer satisfaction is influenced by service quality. Users may have a positive experience if customer service is responsive, considerate, and guarantees the resolution of their issues. Therefore, it can be inferred that providing high-quality service can enhance customers' enjoyment of utilizing e-commerce applications in minimarkets.

The SVQ → US hypothesis is accepted, according to the findings of the inner model analysis of H10. These findings came from a t-test value of 3.96, which is above the threshold of significance of 1.96, indicating that SVQ affects T. In addition, results above 0.1, specifically 0.2, in the route coefficient analysis showed that SVQ significantly affects T. Meanwhile, rather modest results were found when examining the effect size (f2) and relative impact (q2). Based on the results of this hypothesis, it can be said that service quality has a considerable effect on user trust. These findings are consistent with other studies that discovered a relationship between user trust and service excellence. User trust in utilizing the system can be increased by customer service quickness, customer service concern, and guaranteed problem resolution from customer service. Therefore, it can be claimed that providing high-quality services can help users of e-commerce applications have more faith in minimarkets. The SVQ → U hypothesis is accepted, according to the findings of the inner model analysis of H11 model. These findings are evident from the t-test value over 1.96, or 2.9, which indicates that SVQ affects U. In addition, the path coefficient analysis yielded a value of 0.208, indicating that SVQ significantly affects U. The relative impact test (q2) and the effect size test (f2), however, produced results that were not very significant. It is clear from the findings of this hypothesis that service quality significantly influences system use. These findings are consistent with earlier research that discovered the impact of service quality on system utilization. The utilization of a system may be affected by customer service quickness, customer service concern, and customer service guarantees of problem resolution. Therefore, it can be claimed that offering high-quality services can encourage minimarkets to use e-commerce applications.

The SVQ → US theory is disproved, according to the findings of the inner model analysis of H12. These findings are evident from the t-test value, which is less than 1.96, or 1.2, indicating that the SVQ has no impact on the US. Additionally, the findings of the path coefficient analysis show that SVQ does not significantly affect US, with values for the relative influence (q2) and effect size (f2) being relatively small and 0.07 and 0.07, respectively. The findings of this hypothesis are consistent with earlier research, which found that user happiness is not much impacted by service quality. With the phrase "Customer service gives full attention to resolving problems when using the application" as its statement, the empathy indication in the service quality variable has the least value, indicating that the service is not at its best. This leads to the conclusion that consumer pleasure cannot be increased by the services offered by e-commerce applications in minimarkets. The PU → US hypothesis is disproved,
According to the findings of the inner model analysis of H13. The t-test value, which is below 1.96, or 1.5, indicating that PU has no influence on US, reveals these findings. Additionally, the path coefficient analysis results, which are below 0.1, or 0.079, show that the PU variable has a negligible impact on the US variable, and the effect size (f2) and relative impact (q2) values are both modest. Based on the findings of this hypothesis, it is known that, in keeping with earlier research, the benefits acquired do not significantly affect user happiness. It follows that the benefits that users of e-commerce applications in minimarkets enjoy cannot lead to greater consumer happiness.

The PH → US hypothesis is supported, according to the findings of the inner model analysis of H14. These findings are evident from the t-test value above the threshold of 2.1, indicating that PH affects US. Additionally, the findings of the path coefficient analysis, which showed a value of 0.15, show that PH significantly affects US. Small findings were found while examining the effect magnitude (f2) and relative impact (q2). Based on the findings of this hypothesis, it is understood that user satisfaction is significantly influenced by the level of enjoyment experienced by users. This hypothesis’ findings are consistent with earlier studies that discovered a substantial relationship between the variables of perceived pleasure and user happiness. User happiness can be raised by providing a pleasurable experience, perceived comfort, and user attractiveness to the offered promotion. In light of this, it can be said that users’ positive experiences can contribute to and raise their level of satisfaction with e-commerce applications in minimarkets. The T → US hypothesis is accepted, according to the findings of the inner model analysis of H15. These findings are evident from the t-test result, which was 2.4 and indicates that T has an impact on US. Additionally, the path coefficient analysis yielded a value of 0.16, indicating that T significantly affects US. Meanwhile, relatively low values were found when analyzing the effect size (f2) and relative impact (q2). According to the findings of this hypothesis, trust significantly affects user happiness, which is consistent with earlier studies. Therefore, it can be stated that users of e-commerce applications in minimarkets are more satisfied the more they use them. According to the findings of the inner model analysis of H17, the U → NB theory is accepted. These findings are evident from the t-test result, which was 1.9 and indicates that U influences NB. Additionally, the path coefficient analysis yielded a value of 0.14, indicating that U significantly affects NB. Meanwhile, relatively low values were found when analyzing the effect size (f2) and relative impact (q2). According to the findings of this hypothesis, system use significantly affects net benefits. These findings are consistent with earlier research that discovered a strong correlation between system utilization and net benefits. Therefore, it can be inferred that making use of the system will boost the overall advantages of e-commerce applications in minimarkets. The US → NB hypothesis is supported, according to the findings of the inner model analysis of H18. These findings are evident from the t-test result, which was 10.5, indicating that the US has an impact on NB. Additionally, the route coefficient analysis yielded a value of 0.7, indicating that the US significantly affects NB. Additionally, the relative impact (q2) was 0.2 (medium) and the effect size (f2) test had a value of 0.5 (big).

According to the findings of this hypothesis, customer happiness significantly influences net benefits. These findings are consistent with earlier research that discovered a considerable impact of user satisfaction on net benefits. This can happen because users feel that the application performance exceeds expectations, the application can make users make repeat purchases, and users feel satisfied with the overall application. So it can be concluded that user satisfaction can increase the net benefits of e-commerce applications in minimarkets for users. Based on the research results that have been described, the author found a gap between this research and previous research. This research uses 18 hypotheses, referring to several theories from previous research. However, after data processing and analysis, four hypotheses were rejected, namely: H2 (IQ → US), H7 (SQ → US), H12 (SVQ → US), and H13 (PU → US). The results of the second hypothesis show that information quality (IQ) has no significant effect on user satisfaction (US). These findings conflict with earlier research, which discovered a significant link between information quality and customer happiness with e-commerce. However, neither the quality of the information nor consumer happiness in e-commerce were found to be significantly impacted by research done by others. When information quality does not affect user happiness, it may be because the information does not meet the user’s expectations. Due to the system’s complicated information, users may have trouble understanding the information it produces. In this study’s path coefficient test, the information presentation indicator (format) on the information quality variable has the lowest value.

According to the findings of the seventh hypothesis, system quality (SQ) has no appreciable impact on user satisfaction (US). These findings do not agree with those of earlier studies. Others’ research into the subject found...
no connection between user happiness in e-commerce and system quality. According to the value of the dependability indicator on the system quality variable, which has the lowest value from the results of the path coefficient test, this may occur because the system still regularly suffers interruptions. According to the findings of the 12th hypothesis, user satisfaction (US) is not significantly impacted by service quality (SVQ). These findings conflict with earlier research, which discovered a substantial relationship between user happiness and service quality characteristics in e-commerce. However, other studies found no evidence of a substantial relationship between service quality and user happiness since participants in those studies reported receiving subpar services, which had no impact on satisfaction. The application continues to offer users poor service. Customer service cannot ensure the resolution of problems that arise, as shown by the assurance indicator on the service quality variable, which has the smallest value in path coefficient testing. According to the findings of the 13th hypothesis, user satisfaction (US) is unaffected by perceived benefits (PU). The findings of this study are consistent with earlier studies. This contradicts earlier research, which indicated a strong relationship between perceived usefulness and user pleasure. Users in this study have not reaped the full benefits of the program because the majority of users have used it for less than a year and only seldom (1-3 times per month).

4. Conclusion

The majority of users are women between the ages of 25 and 29, according to the research findings. The four hypotheses that were not accepted out of the total of 18 were perceived utilitarianism's impact on user satisfaction (PU → US), system quality's influence on user satisfaction (SQ → US), service quality's influence on user satisfaction (SVQ → US), and information quality's influence on user satisfaction (IQ → US). The user satisfaction (US) variable can increase net benefit (NB). This can be proven from the results of the path coefficient test (0.691) and t-test (10.493). The limitation of this research is that the process of distributing the questionnaire only uses social media, thus allowing for differences in interpretation of the questionnaire questions and statements from each respondent. Apart from that, the demographic data on respondents' jobs is dominated by the other category. The author cannot identify any jobs that fall into the other categories. According to the research's findings, there are a number of suggestions for application developers to boost user happiness by increasing their perceptions of trust, use, and enjoyment, including: More trust will be placed in the application as a result of improving the security system in the transaction process. To make users feel at ease and content when using the application, fix bugs and expand on current functionality, enhancing customer care capabilities to deliver better assistance so that people continue to use the app for their shopping. There are a number of recommendations that might be taken into account for additional study based on the findings of the conducted research, namely: When collecting respondent data, pay attention to the comparison of the number of respondents using the application so that the respondent data obtained more generalizes the object of this research. Add other variables or factors that can influence user satisfaction, such as price and brand image variables. Conduct a comparative analysis of user satisfaction among application users using the Delone & McLean method.

References


