Student Awareness of Digital Payment Services (Case Study in Indonesia)

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Abstract

The industrial revolution 4.0 increases the level of awareness of various groups of people in using digital payment services. This study investigates the student awareness of digital payment services in the higher education level in Indonesia. The main contribution of this research is to provide evidence about the relationship between demographic variables and the level of awareness of digital payment services among students in Indonesia. This study is based on a sample of 104 students from various higher education institutions in Indonesia. The results of this study concluded that there was no significant difference between Indonesia student demographics and the level of awareness of digital payment services. The findings of this study will be useful for digital payment service providers in providing an initial understanding of student awareness of digital payment services in Indonesia.

1. Introduction

Digital payment services has grown rapidly today. By the statistic from the central bank of Republic Indonesia, In 2019 the volume of card transaction are 4.3 billion and digital payment transaction are 5.2 billion. In contrary the card transaction value is worth 3.204 trillion rupiah and higher than the value of digital payment transaction that only worth 145 trillion rupiahs. People tend to choose card transaction because of it’s convenience, security, and access to online purchases at home and abroad, while the reason for choosing digital payments are due to speed, attributes of style and high cashback [1] safety, expected performance, facilitating conditions, absorbency, availability, consistency, product involvement, compatibility, value, services, accessibility, system quality, agreement, usability, structural certainty, acceptance of acceptance, awareness [2] transactions are received very quickly and have low transaction cost, very beneficial for user who live in rural areas, less populous areas of incurring a loss of income so that user do not lose income and time to go to the bank, other advantages, user can record digital payment transaction. [3,4]

Card is a new technology and known as the Technology Acceptance Model (TAM). It is provide by technology-based companies. [5] related to the internet, big data, cellular technology, and computers, which are the collaboration of financial and information technology. [6] Digital payment provider develop and provide payment service technology at lower costs and user friendly, their provide various services such as goods and services transaction, as well as financial assets[7] and all financial services using the internet [4] that allows paying digitally, mostly made via apps, and the apps are rapidly overshadowing their website when it comes to usage on smartphones. [8] Digital payment transactions with smartphones blur the line between everyday life and financial management [1] Digital payment can affect consumption habit and often has a causal impact on consumption payments. There is also evidence it can drag people to do excessive consumption and loan [9] "Showing off" and many believe that this method is excessive and currently hype, but users also agree that this is a progressive solution in the industrial era 4.0. [1]
The results of a study of young Indian as digital payments user show that the number of female and male was quite close [10] but in South Asia the female user is very low [4] These studies are contradictory, therefore in this study, the author will examine demographic factors, and student was chosen because payment technology has been adopted in several developing countries and is in great demand by millennials [6] This digital payment user is a student age and from the reading above it has been explained that the volume of transactions is very large but the value is small amount of money transacted is small, therefore the author wants to see how much the monthly expenses is spent by the student, the results aim to provide input to the digital payment provider map the demographics of students in Indonesia which are useful for the development of digital payments going forward.

2. Methodology
The purpose of this study is to individually and collectively analyze the influence of demographics on the level of awareness of digital payment services among students in Indonesia, including gender, age, and monthly expenses. To achieve this goal, we used a quantitative approach using a questionnaire survey. The primary data for this study were 104 students from various universities in Indonesia, both public and private universities. The participants were asked to provide their assessment of the level of awareness of digital payment services. For data analysis, this study uses a bivariate analysis to test whether there were differences between groups of demographic variables [11].

3. Result
3.1. Gender differences in student awareness
The details of participants based on gender can be seen in Table 1.

| Gender        | Number | Percentage |
|---------------|--------|------------|
| Male student  | 50     | 48.08%     |
| Female Student| 54     | 51.92%     |
| Total         | 104    | 100%       |

Table 1 shows that the proportion of male and female students was not much different (Male = 48.08% and Female = 51.92%).

The comparison of the level of awareness of male and female students to digital payment services can be seen in Table 2.

| Awareness       | Male student | Female Student |
|-----------------|--------------|----------------|
| Strongly Aware  | 50%          | 54%            |
| Aware           | 40.74%       | 42%            |
| Moderately Aware| 7.41%        | 4%             |
| Slightly Aware  | 1.85%        | 0%             |
| Not Aware       | 0%           | 0%             |

Table 2 shows that, based on 104 participants, the male and female students awareness towards digital payment services is relatively very high (Male = 90.74% and Female = 96%). There were only 9.26% of male students and 4% of female students have a low level of awareness about digital payment services.

To determine whether male and female students have different levels of awareness of digital payment services, a two-sample for means z-test with $\alpha = 5\%$ is used. The summary of the data processing for the gender differences in student awareness can be seen in Table 3.
Table 3. Summary of gender statistics in student awareness

|     | z-value | p-value |
|-----|---------|---------|
|     | -0.8754 | 0.3813  |

Table 3 shows that the p-value is 0.3813, which means that there is no significant difference between the awareness level of male and female students towards digital payment services (p-value > 0.05).

3.2. Age differences for student awareness

The details of participants based on age can be seen in Table 4.

Table 4. Percentage of participants by age

| Age  | Number | Percentage |
|------|--------|------------|
| below 20 | 38    | 36.54%     |
| between 20-30 | 63    | 60.58%     |
| above 30   | 3     | 2.88%      |
| Total      | 104   | 100%       |

Table 4 shows that the proportion of students with age 20-30 was the greatest (60.58%), then students with age below 20 (36.54%) and the least proportion was students with age above 30 (2.88%).

The comparison of the level of awareness of students with age below 20, age 20-30, and age above 30 to digital payment services can be seen in Table 5.

Table 5. Summary of age differences for student awareness

| Awareness      | Age Below 20 | Age 20-30 | Age Above 30 |
|----------------|--------------|-----------|--------------|
| Strongly Aware | 52.63%       | 53.97%    | 0%           |
| Aware          | 39.47%       | 39.68%    | 100%         |
| Moderately Aware | 7.89%   | 4.76%     | 0%           |
| Slightly Aware | 0%           | 1.59%     | 0%           |
| Not Aware      | 0%           | 0%        | 0%           |

Table 5 shows that, based on age differences, the student awareness towards digital payment services is relatively very high (students with age below 20 = 92.10%, students with age 20-30 = 93.65% and students with age above 30 = 100%). There were only 7.89% of students with age below 20 and 6.35% of students with age between 20-30 have a low level of awareness about digital payment services.

To determine whether students with age below 20, students with age 20-30, and students with age above 30 have different levels of awareness of digital payment services, a two way ANOVA test is used. The summary of the data processing for the age difference in student awareness can be seen in Table 6.

Table 6. Summary of age statistics in student awareness

| Source of Variation | SS     | df | MS     | F         | P-value | F crit |
|---------------------|--------|----|--------|-----------|---------|--------|
| Between Groups      | 0,577615 | 2  | 0,288807 | 0,669403 | 0,515007 | 3,116982 |
| Within Groups       | 32,78947 | 76 | 0,43144 |           |         |        |
| Total               | 33,36709 | 78 |        |           |         |        |
Table 6 shows that there is no significant difference between the awareness level of students with age below 20, students with age 20-30, and students with age above 30 towards digital payment services (p-value > 0.05).

3.3. Monthly expenses differences for student awareness

The details of participants based on monthly expenses can be seen in Table 7.

| Monthly expenses (in Millions) | Number | Percentage |
|-------------------------------|--------|------------|
| Below Rp 1.75                 | 47     | 45.19%     |
| Between Rp 1.75 – Rp 2.5      | 30     | 28.85%     |
| Above Rp 2.5                  | 27     | 25.96%     |
| Total                         | 104    | 100%       |

Table 7 shows that the proportion of students with monthly expenses below Rp. 1.75 million was the greatest (45.19%), then students with monthly expenses between Rp. 1.75 – Rp. 2.5 million (28.85%) and the least proportion was students with monthly expenses above Rp. 2.5 million (25.96%).

The comparison of the level of awareness of students with monthly expenses below Rp. 1.75 million, monthly expenses between Rp. 1.75 – Rp. 2.5 million, and monthly expenses above Rp. 2.5 million to digital payment services can be seen in Table 8.

| Awareness            | Below Rp.1.75 Million | Rp.1.75–Rp.2.5 Million | Above Rp.2.5 Million |
|----------------------|-----------------------|------------------------|----------------------|
| Strongly Aware       | 53.19%                | 56.67%                 | 44.44%               |
| Aware                | 42.55%                | 40%                    | 40.74%               |
| Moderately Aware     | 2.13%                 | 3.33%                  | 14.81%               |
| Slightly Aware       | 2.13%                 | 0%                     | 0%                   |
| Not Aware            | 0%                    | 0%                     | 0%                   |

Table 8 shows that, based on monthly expenses differences, the student awareness towards digital payment services is relatively very high (students with monthly expenses below Rp. 1.75 million = 95.74%, students with monthly expenses Rp. 1.75 – Rp. 2.5 million = 96.67% and students with monthly expenses below Rp. 1.75 million = 85.18%). There were only 4.26% of students with monthly expenses below Rp. 1.75 million have a low level of awareness, 3.33% of students with monthly expenses between Rp. 1.75 – Rp. 2.5 million have a low level of awareness and there were 6.35% of students with monthly expenses above Rp. 2.5 million have a low level of awareness about digital payment services.

To determine whether students with monthly expenses below Rp. 1.75 million, students with monthly expenses between Rp. 1.75 – Rp. 2.5 million, and students with monthly expenses above Rp. 2.5 million have different levels of awareness of digital payment services, a two way ANOVA test is used. The summary of the data processing for the monthly expenses difference in student awareness can be seen in Table 9.

| Source of Variation | SS       | df | MS       | F        | P-value | F crit |
|---------------------|----------|----|----------|----------|---------|--------|
| Between Groups      | 0.855422 | 2  | 0.427711 | 1.009355 | 0.3681  | 3.086371|
| Within Groups       | 42,79842 | 101| 0.423747 |          |         |        |
| Total               | 43,65385 | 103|          |          |         |        |
Table 9 shows that there is no significant difference between the awareness level of students with monthly expenses below Rp. 1.75 million, students with monthly expenses between Rp. 1.75 – Rp. 2.5 million, and students with monthly expenses above Rp. 2.5 million towards digital payment services (p-value > 0.05).

4. Discussion and Conclusion
This study aims to investigate whether demographic factors affect the level of student awareness of digital payment services. Several discussion points emerged as follows:

- Gender differences in student awareness
  The results showed that the student awareness level of digital payment in gender perspectives was very good (each has a value of more than 84.2% [12]). Based on the result of the analysis using the z-test, the p-value is 0.3813. This indicates that there is no significant difference between student awareness levels based on gender (p-value > 0.05). In other words, the gender factor is not significantly different the student awareness level of digital payment.

- Age differences for student awareness
  The results showed that the student awareness level of digital payment in age perspectives was very good (each has a value of more than 84.2% [12]). Based on the results of the analysis using two way ANOVA, the p-value is 0.5150. This indicates that there is no significant difference between student awareness levels of digital payment based on age (p-value > 0.05). In other words, age factors are not significantly different for the student awareness level of digital payment.

- Monthly expenses differences for student awareness
  The results showed that the student awareness level of digital payment in monthly expenses perspectives was very good (each has a value of more than 84.2 percent [12]). Based on the results of the analysis using two way ANOVA, the p-value is 0.3681. This indicates that there is no significant difference between student awareness levels based on monthly expenses (p-value > 0.05). In other words, the monthly expenses factor is not significantly influencing the student awareness level of digital payment.

In conclusion, this study has investigated the factors that affect the level of student awareness of digital payment services in Indonesia based on demographic variables. In particular, this study focuses on gender perceptive, age perceptive, and monthly expenses perspectives. The results of data analysis involving 104 students showed that the demography variables did not significantly influence the level of student awareness of digital payment services, both based on gender, age, and monthly expenses. The results of this study can contribute by providing empirical evidence about the level of awareness of Indonesian students towards digital payment services based on demography variables and their impact on the level of awareness of students in Indonesia. Besides, the results of this study can also provide insight into digital payment services providers to increase student satisfaction and awareness regarding digital payment services.

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