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The Use of 'Katalis' for Facilitating Education Payments to Increase Digital Transaction during Covid 19 Pandemic

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ABSTRACT

The Covid-19 pandemic has shaken the economies of all countries, including Indonesia. Bank Indonesia strives to improve the resilience of the national banking system in the face of the global crisis. "Katalis' is a digital bussiness application that can be used to facilitate cashless transactions in Indonesia with the hope of making it easier for non-cash payments and helping reduce the spread of the Covid-19 virus. This study used a qualitative approach with a case study conducted at a Madrasah Tsanawiyah in Jember Regency. Collecting data used observation, interviews and documents. The focus of this research was how to implement education payments using "Katalis" and what obstacles are faced in its application. The results showed that although there were several easy payments using "Katalis", but there were still many obstacles, especially related to human resources in schools and the socioeconomic conditions of the various parents of students.

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Keywords : "Katalis, Education Payment, Digital transaction"

1. INTRODUCTION

The Rockefeller Foundation reviews the state of the world economy due to the Covid-19 pandemic, "Even developed countries are overwhelmed by the worldwide pandemic, which has infected nearly 20 percent of the global population and killed 8 million people in just seven months, most of them are young and healthy adults. The pandemic also has a deadly effect on the economic sector; international mobility of both people and goods has stalled, weakening industries such as tourism and cutting global supply chains (Rockefeller, 2010)". The Covid-19 pandemic shook the economies of all countries, including Indonesia (I Wayan Arta Setiawan, 2020)

The condition of the Indonesian economy which was shaken as a result of the spread of Covid-19, Bank Indonesia took steps as part of its efforts from the human and economic aspects to overcome the impact on society, UMKM, education and the business world. One of the steps taken is to encourage the use of non-cash payments to reduce the spread of Covid-19 (https://www.bi.go.id/id/publikasi/ruang-media/news-release/Pages/Perkembangan-Langkah-Langkah- BI-in-the-Face-COVID-19.aspx).

The non-cash payment system has grown to the point of the use of smartphone applications as a means of transactions. Payment transactions experienced by humans have been metamorphosed over a long period of time. Beginning with bartering, ancient people were sufficient for their life necessities by exchanging goods with others. Then, it come a new medium of exchange called money, both in the form of coins and banknotes, which was guaranteed by the state. According to the Bank Indonesia website, the payment system was born at the same time as the concept of 'money' as a medium of change or intermediary in transactions for goods, services and finance. The payment system is defined as a system that includes a set of rules, institutions and mechanisms used to carry out the transfer of funds to fulfill an obligation arising from an economic activity.

The evolution in payment systems continues to evolve using three driving elements, namely technological innovation and business models, community traditions, and authority policies. Currently, the payment system is divided into a cash payment system and a non-cash payment system. The cash payment system utilizes currency (banknotes and coins) as a means of payment. Along with the development of culture and technology, non-cash payment systems emerged. The instrument used was no longer in the form of currency. However, the method of payment is made through a specific, more specific instrument. In general, non-cash payment instruments or instruments can be differentiated according to the following categories:

1. Paper-Based. Paper-based non-cash money, for example, is a check or bilyet and demand deposit. These securities are issued by a bank, and allow the name of the person listed on the paper could withdraw the customer's money. The customer who previously issued has a checking account or checking account facility.
2. Card Based. This non-cash money is in the form of credit cards and debit cards. Customer funds remain in the management of the bank. When a customer transacts with the card and gives authorization, the bank will make

a payment to the designated third party. The money is in the nature of access and there is no record of the card held by the customer.

3. Electronic Based. Non-cash money of this type is also known as electronic money (e-money). The nature of electronic money is prepaid. This means that the amount of money is recorded in electronic money according to the filling made by the customer.

Electronic money is completely under consumer control. One of the advantages of electronic money is that it can be used to pay for small value transactions. Its existence can replace coins. For example: it can be used to pay for groceries at minimarkets, it can even be used to pay at shops that accept electronic non-cash payments. Currently, electronic money is in the form of cards and applications in smart phones. In fact, the latest technology makes payments possible by scanning a QR code (Quick Response) via a smartphone camera. QR payment systems must at least have a smart phone, internet connection, and applications that operate in electronic money, such as OVO, DANA, LinkAja, and so on. The source of the funds is from the customer's electronic money stored in the storage media, or debit card and credit card instruments in e-money issued by the bank. (https://tirto.id/gaG6)

Katalis is a non-cash card designed by PT. Indonesian Card Technology (ICT) in collaboration with Bank Syariah Indonesia (BSI). Katalis is a digital card that is used for buying and selling transactions using the EDC Katalis application, it can also be used for attendance to open or close doors etc. In addition, this card can be used as a student card (what distinguishes this card from a Blank Card is that this card can be implemented with various designs). PT.Teknologi Kartu Indonesia is a company engaged in technology. One of them is the Digial Card, a digital card that can be used for various purposes, for example for school purposes, such as this card can also be used for snacks and pocket money.

Schools are engaged in the world of Education is also affected by the impact , learning face to face implemented 100 percent in school, suddenly experienced a very drastic change. And, it is undeniable that more than 50 percent of students and university students come from low and middle income communities. As a result of the Covid-19 pandemic, various policies were implemented to break the chain of spread of the Covid-19 virus in Indonesia. One of the efforts made by the government in Indonesia is by applying an appeal to the public to carry out physical distancing, namely an appeal to maintain distance between people, stay away from activities in all forms of crowds, associations, and avoid meetings that involve many people. This effort is aimed at the community to break the chain of spreading the Covid-19 pandemic that is currently happening. The government implements a policy, namely Work From Home (WFH). This policy is an effort applied to the community in order to complete all the works at home. Education in Indonesia has also become one of the areas affected by the covid-19 pandemic as well. With the existence of restrictions on interaction, the Ministry of Education in Indonesia also issued a policy, namely by dismissing schools and replacing the Teaching and Learning Activities process by using an online system. By using this online learning system, both teachers and students faced various problems, such as the subject matter that has not been completed by the teacher, and the teacher suddenly replaces it with other assignments. This is a complaint that comes from students due to the teacher gives them more assignments.

Another problem with this online learning system is that access to information is constrained by a signal which causes slow access to information. Students are sometimes left with information due to inadequate signals. As a result, they are late in collecting an assignment given by the teacher. Not to mention for teachers who check the many assignments that have been given to students, making gadget storage space even more limited. The application of online learning also makes educators rethink about the learning models and methods to be used. Initially, a teacher has prepared a learning model that will be used, then must change the learning model (Siahaan, 2020) .

Based on preliminary observations made at a Tsanawiyah Madrasah, it was found that since online learning at schools, no infaq payments have been received by the school. This pandemic situation disturbs the school activities. Based on these facts, schools will begin to receive infaq payments after "limited learning" that takes effect from April 2021 in Jember Regency. To reduce the risk of spreading covid-19, the school is collaborating with Bank Syariah Indonesia to organize non-cash payments.

Based on the explanation above, the researcher took the research entitled: "The Use of 'Katalis' for Facilitating Education Payments to Increase Digital Transaction during Covid 19 Pandemic ". The main focus in this study is how to use Katalis in education payments which are divided into three sub-focus, namely: (1) how to take steps for making Katalis in schools, (2) how are the implementations of the use of Katalis by students and parents / guardians of students?, and (3) What obstacles are faced in the use of Katalis for education payments?

2. RESEARCH METHOD

2.1. Approach and Type of Research

The research was conducted using a qualitative approach and a case study design with descriptive analysis method. This study aims to describe how the use of "Katalis" for education payments. This research was conducted at a Madrasah Tsanawiyah (MTs) in Jember Regency.

2.2. Researcher's presence

In this ethnographic study, the presence of the researcher is the main key in the research. According to Bogdan and Biklen (2003), researchers in qualitative research act as planners, data collectors, analyzers, interpreters, and reporters on the results of their research. The presence of researchers in the field is as full observers and as a measure to obtain the validity data and it is expected to support success in understanding the focus of the research.

2.3. Data Source

The data collected in this study are primary data and secondary data. Primary data is the data that is obtained directly by the researcher. The identification of data sources is carried out using the snow ball principle; the information from the first informant will be used as key information to determine the next informant who can provide research data. The process of determining the main data source is determined by the following criteria: (1) The main informant is the principal and administrative staff at the research location, (2) The main informant is the parent or guardian of the student at the research location, (3) The main informant is the head of the school committee at the location of the research, (4) The main informant has knowledge, understanding and is willing to give the information to the researcher.

2.4. Data Collection Techniques

In Case study research also uses of the data collection techniques used in qualitative research in general, however, there are some unique techniques. The data collection techniques in ethnographic research are as follows: (1) in-depth interviews, (2) observation, (3) documentation study.

2.5. Analysis Techniques and Checking the Validity of Data

According to Miles and Hubermans (1992) data analysis is a process of reviewing, sorting, and grouping data with the aim of compiling a working hypothesis and elevating it to a theory as a result of research. While according to (Bogdan, 1998) data analysis is the process of systematically searching and compiling data obtained from interviews, field notes, and other materials, so that they can be easily understood, and the findings can be shared with others. The data referred to according to (Patton, 2002) are detailed descriptions of situations, events, people, interactions, and behaviors, a person's statements about his experiences, attitudes, beliefs and thoughts, excerpts of document content as collected and written in transcripts of interviews or field notes (Miles, 1992).

The data analysis activity in this study is an activity of systematically reviewing and compiling all interview transcripts, field notes, and other research material that has been recorded by researchers during research data collection (Bogdan, 1998). The data analysis technique used is inductive analysis which includes two types of analysis, namely on-site analysis and cross-site analysis. Analysis on the site was carried out by following the model of Miles (1992), namely reducing data, presenting data, and making conclusions. Data reduction is done to reduce and discard data that is less relevant to the research.

Furthermore, it is continued with the data presentation step, namely creating a research data pattern, which is presented in the form of descriptions, charts, and relationships between categories. The three activities are carried out simultaneously, in the sense that data reduction activities are not separate from data collection activities or vice versa, nor are they separate from the conclusion-making process. The three were carried out together during the data collection process as shown in image 1.
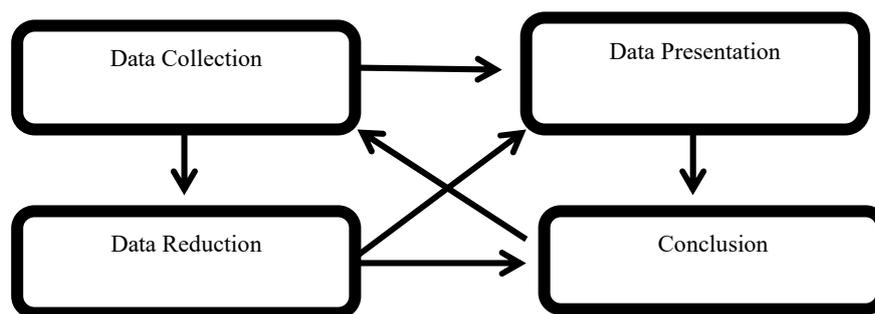
Image 1.Process of Analysis Data of Individual Situs (Sources: Miles & Huberman, 1992)

In qualitative research, the validity of the data tested in qualitative research includes credibility (interbal validity), transferability (external validity), dependability (reliability), and confirmability (objectivity) tests. The first data validity test was carried out through a credibility check which was carried out by the triangulation technique of data collection methods, triangulation of data sources, peer discussion, and member check. Triangulation of data collection methods is carried out by means of data obtained from in-depth interviews, observation, or documentation studies are matched with each other so that data accuracy is obtained, according to Reynolds & Nasution's suggestion cited by (Mantja, 2008).

3. RESULT AND DISSCUSION

Based on the results of research where the main focus is "how to use Katalis to increase digital payments during a pandemic" which are divided into three sub-focuses, namely: (1) how are the steps for making Katalis in schools, (2) how to implement the use of Katalis by students and parents / guardians of students ?, and (3) What obstacles are faced in the use of Katalis for education payments ?. Katalis is a multi-functional digital card. The use of cards is considered to be the best solution, because: smartphones are prohibited in schools and require transaction speed. With a transaction card it can take 3-5 seconds. Apart from card transactions, it can be used for attendance, door access, and parking portals.

Katalis digitizes bills or invoices at school. We made a Payment Management System simple, informative and easy to use. Katalis digitize money saved for various purposes. Another form of its service is children's teaching and learning progress reports; it can be submitted via the application. There is a news and information feature from the school for student guardians.

The legal aspect of using Katalis is an implementation that is carried out on the basis of a Cooperation Agreement, Confidentiality and Security of User Data, Implementation without data on the cellphone number or email of student guardians and Katalis helps change payment transactions and services from manual to digital and informative.

3.1. Langkah-langkah pembuatan katalis di sekolah

There are several steps that must be taken by the school when implementing digital payments using a Katalis card, namely:

1. **The drafting of a cooperation agreement between the school and bank**

2. **Schools facilitate the creation of virtual accounts**

The school facilitates the creation of a virtual account for parents/guardians by inviting them

3. **Schools pay the registration fee so that the Katalis card form can be designed immediately**

The cost of using a Katalis card is Rp. 1,000,000.00 for a custom application, Rp. 10,000 for student registration, Rp.

20,000.00 for card printing and bank transfers of Rp. 2000,00 and school administration fees of Rp. 1,000.00

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4. The school creates a web portal with the help of PT.TKI

The bank and PT. TKI integrates virtual user payment accounts based on data provided by the school. The school provides data related to name, photo, NIS, date of birth, class.

5. The pre implementation stage

The card is printed, registered to the system, then distributed to the student guardian, logged in with the company's initials and student identification number. The equipment such as information platforms and EDC machines can be installed within 10 working days


6. Upload digital card payment portal data

The next step is to upload the digital card payment portal data. Uploaded data must be processed before it can appear in reports. This means that it can take up to 24 hours for data to start appearing in reports.

The processing status of each uploaded file is displayed on the Manage Uploads page, whether it is pending, completed or failed. By looking at the upload management, the operator can monitor the data upload process.

7. Card printing process

The Katalis card is printed based on the data sent by the school, where on the card there is a school identity logo, student's name and student identification number as well as a photo, as shown in the following picture.
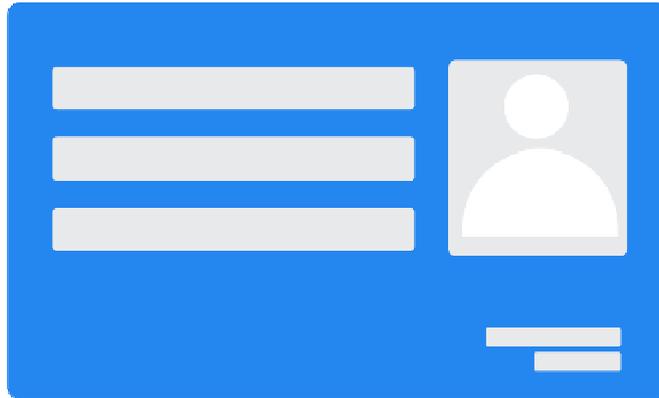
8. Katalis web synchronization process

The web synchronization process is carried out to make this application can be run through a web browser because the process required for synchronization is very long (according to the amount of data data). Thus, it is hoped that when the Katalis is implemented there will be no significant obstacles because the synchronization process has been carried out.

9. Custom application

Custom is short for the word Customize which means Customize, in this case a software or program has a flow that follows the flow of the business process requested by the prospective user so that the system will function perfectly and be in line with the business processes that are usually carried out or implemented by the company or work system of the prospective software user. In this case, an adjustment is made between the application of the Katalis and the needs used by the school.

10. Implementation of using a Katalis card

At this stage, the school, students and parents / guardians can implement the use of Katalis cards.

3.2. The implementation of the use of Katalis by students and parents/guardians

In implementing the use of Katalis for non-cash payments, there are several things that are done by parents / guardians, including:

1. Opening a virtual account provided by the bank
2. It is recommended to open an account at Bank Syariah Indonesia in order to save more on costs incurred during transfers and Katalis top ups
3. Pay the registration fee and card fee
4. Make infaq and Jariyah payments through Katalis applications
5. Top up the Katalis card held by the child
6. Make purchases in the canteen through the adc machine that has been provided.
7. Doing absences at the information platforms available at the school
8. Report to the school and bank if the Katalis card is lost

3.3. The obstacles faced in the use of Katalis

Based on the results of the research, there are several obstacles faced in the use of Katalis including: (1) Katalis cards are new products which some people know about it, so it needs socialization and promotion (2) there is still limited knowledge of human resources in schools, and (3) parents / guardians of students who have various socioeconomic diversity so that they need assistance regarding the use of Katalis cards. Parents/guardians of students are still not used to making non-cash payments, they are more satisfied with cash payments because they immediately receive receipts with school stamps.

4. CONCLUTION

Based on the research discussion, the following conclusions can be drawn: (1) There are ten steps to make a Katalis, namely: making a cooperation agreement, creating a virtual account, filling out forms for payment of school registration fees, creating a web account on the portal, integration of virtual accounts for user registration payments, pre-implementation, uploading data, printing cards, synchronizing to web Katalis, custom applications and implementation, (2) Implementation of using Katalis by students and parents / guardians of students, namely to make infaq and Jariyah payments, purchase at canteen and school attendance, and (3) the obstacles faced in using Katalis are (1) Katalis cards are new products which some people know about it, so it needs socialization and promotion (2) there is still limited knowledge of human resources in schools, and (3) parents / guardians of students who have various socioeconomic diversity so that they need assistance regarding the use of Katalis cards.

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