Implementation of Productivity Apps to Increase Financial Inclusion in Peer-To-Peer Lending Platform

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Implementation of Productivity Apps to Increase Financial Inclusion in Peer-to-Peer Lending Platform

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ABSTRACT

A new alternative form of loan services, known as Peer-to-Peer Lending (P2P lending), is growing rapidly in Indonesia in line with the advanced of digital technology. This new platform is expected to support the Indonesian government strategy in increasing financial inclusion. Although the new platform is easily accessible using the mobile phone, some Indonesian still reluctant to use the apps by themselves. There is an urgency needs of human touch to educate and give appropriate information about the system. The role of direct sales agents of the P2P lending platform is the important key to gain the trust of the prospect borrower. Therefore, the P2P lending platform must be able to develop and implement apps to monitor activities and increase productivity of its direct sales agent. The purpose of this research is to analyze the implementation of sales management activity apps to increase the productivity of the direct sales agent, simplify the application procedure, shorten the approval time and finally increase the financial inclusion in Indonesia. The object of the research is MODALKU, one of the largest P2P lending platform in South East Asia. The target user of the apps is all the direct sales agents who are approaching borrower from the ultra-micro segment market.

Keywords: *Productivity Apps, Direct Sales Agent, Ultra-Micro Segments, Peer-to-Peer Lending Platform*

1. Introduction

The advance of information technology has encouraged the increase of innovation in many business and financial sectors. Financial technology is an innovative digital financial technology that offers financial services using information technology. As a new platform, financial technology offers more than simplifying financial transaction, minimizing cost and increasing financial services (Lee & Shin, 2018). Peer-to-Peer Lending (P2P lending) is a form of crowdfunding without involving any financial institution as the intermediaries (Cinca *et al*., 2015) using an online platform (Ritter *et al*., 2009). The P2P lending platform offers flexibility to both parties: lenders and borrowers (Meng, 2016). The lenders, as investors, expect a higher return from their investment in a P2P lending platform. Meanwhile, the borrowers can take advantage of the low transaction cost.

The financial technology is expected to fill the gap of financing needs and increase financial inclusion for Indonesians who were un-bankable but had potential business. The financial technology could be seen as an alternative source of financing, especially for the ultra-micro segments to grow their business. The ultra-micro segments are characterized by their low daily income sales, doing business in densely populated housing areas and having simple self-owned trading business. In the year 2018, the total financial technology market in Indonesia reached US$ 22 million with increasing rate at 16.3% yearly, in which lending occupied 31% of the total industry (Fintechnews.sg, 2018). Therefore, there is a huge potential market for P2P lending platforms in Indonesia.

While the latest financial technologies are continually being introduced, the target number rate of the financial inclusion did not keep as the same pace as possible on such changes. Indonesian still had

reluctance in using mobile phone in doing the financial transaction, included the lending and borrowing activities. Indonesians have always been communal, in which they keep close-knit communities and the cultural values push forward principles of collectivism (Minkov, 2013). Even in modern settings and modern communities, they will keep their inclusivity and friendliness (Dellner, 2014). The P2P lending platform rely on the direct sales agent to educate; to give appropriate information about the financial technology platform and to sell the product itself. The role of direct sales agents of the P2P lending platform is the important key to gain the trust of the prospect borrower. The P2P lending platform (Modalku) needs a system that can monitor activity and expedite the product ordering process. The existing work-flow process in the figure 1, shows that no activity management tools or application to measure the direct sales productivity. The management team have difficulties in monitoring and controlling the direct sales agent in approaching new customers. There is some lack of data that can showed the condition of prospect customers. In addition, the procedure to process the application takes a long time. There is inefficient and ineffective process that can affect the sales productivity performance.

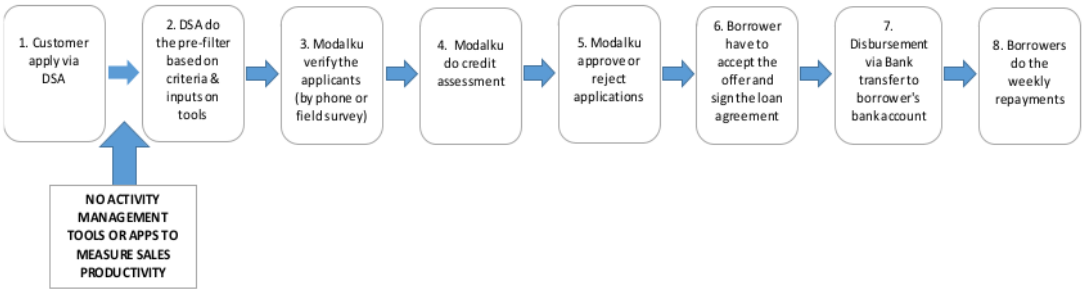

Figure 1. Flow Process (Current)

Source: Modalku (2019)

Therefore, the P2P lending platform must be able to develop and implement apps to monitor activities and increase productivity of its direct sales agent. The purpose of this research is to analyze the implementation of sales management activity apps to increase the productivity of the direct sales agent, simplify the application procedure, shorten the approval time and increase the number of borrower which will finally increase the financial inclusion in Indonesia.

2. Literature Review

a. Peer-to-Peer Lending

Financial technology is defined as mobile based technology to increase financial system efficiency (Kim *et al*., 2015) and a new type of information technology-based financial services (Lee & Shin, 2018). P2P lending is defined as all lending and borrowing activities among individuals using a technology platform without any intervention from a traditional financial institution (Lee & Shin, 2018; Ritter *et al*., 2009) and related to the internet-based financing platform (Stern *et al*., 2017).

b. Ultra Micro Segment

Indonesia is renowned for its large scale microfinance sector, with over than 50 million small medium enterprises (SMEs), representing some 97% of all enterprises and contributing no less than 30% of GDP growth in 2012 (OECD, 2019). Currently, however, many of these do not have adequate access to the bank financing they need to grow their businesses, particularly in rural areas. Inadequate outreach to

rural communities has also contributed to unmet demand. Most micro lending has been located in the urban areas of Java and Sumatra, where the Indonesian population is concentrated. For microfinance operations to remain sustainable, it needs to cover its operational costs. This is achieved by ensuring that there is ample customer base to spread its expenditures and that it is located closer to the customers' homes and workplaces. Taking advantage of the emergence of smartphone and mobile subscribers, the peer-to peer lending platform such as Modalku seen the opportunity to capture this prospective market. The new Targeting the ultra-micro segment, Modalku focus in serving and providing loan for the ultra-micro segment located in the big municipalities in Java provinces. The Modalku Dana Usaha was launched in the late of 2018 using the new approach. To minimize the risk and reduce the default rate, the first applicant only able to borrow maximum of three million Rupiahs with the loan tenor of 13-26 weeks. The repayment system is setting-up weekly every Wednesday to their virtual account that can be paid through some appointed POS, such as: minimarket. There is 3% interest rate per week and additional 5% administration fee for any approved loan application. The borrower must be able to provide the bank account since the loan disbursement will be transfer directly to their account.

c. Direct Sales Agent

The innovative strategy was developed by using the direct agent sales (DSA) system in approaching the new lead prospective customers. Even P2P lending system is highly emphasized with the technology application and platform, Modalku chose to combine the existing system with the direct selling strategy. Direct selling defined as a distribution method that can be used both for product or service industries through personnel contact (Wen, Chen & Chen, 2008). In his book "Marketing 4.0", Phillip Kotler stated that the marketing strategy should adapt to the changing nature of customer paths in the digital era and the role of marketers is to guide the customers throughout their journey from awareness and ultimately to advocacy (Kotler, Kartajaya and Setiawan, 2017). The DSA of Modalku are expected to be able to play the role to give adequate information about the product and the platform and in the same time influencing the prospective borrower to apply the loan. The DSA act as an educator who will explain the benefit of the product to increase the borrower business performances.

d. Mobile-Based Applications

A mobile-based application defined as a type of application software designed to run on a mobile device. The mobile application itself has the ability to utilize data from the GPS to ensure the location of the direct sales agent (Horton, 2018). The mobile application also has the facility to read the item barcode using the camera to accelerate the input all necessary information and data. By using this mobile application, Modalku management are able to easily monitor the activities of their sales agent when meeting with the prospect customers in the exact location and in the same time having adequate knowledge about the business of prospect borrower. The mobile-based application provides the real-time information accurately and shorten the application processing time. The apps make it easier to handle the whole application process, increase efficiency, improve customer service, and increase the approval rate. Some benefits of the mobile-based application system are: easy coordination among the team member by sharing information and data accurately; keeping tracking the application process; simplify the reporting system and allocation of the resources.

d. **Global Positioning System (GPS)**

Global Positioning System (GPS) is the method of determining position of the object in the earth

in any circumstances by measuring distances to points at known coordinates using satellites (Blewitt, 1997). As a global navigation satellite system (GNSS), GPS is able to provide the geolocation and time information to any GPS receiver in the earth (Abel & Chaffee, 1991). The mobile-based application with the GPS feature, enable the management to track in real-time (live) all the movements of the sales agent directly from the computer or laptop. The GPS shows which streets or areas were covered by the sales agent and the suitability with the target performance for each sales agent.

3. System Design

Developing sales productivity application for Modalku needs some phases which should be performed. The application system should be able to cover the need to monitor the performance of the direct sales agent, including the attendance system, the work-plan, the live tracking and reporting. The following figure shows the system design used in the sales productivity apps, called The Worm.

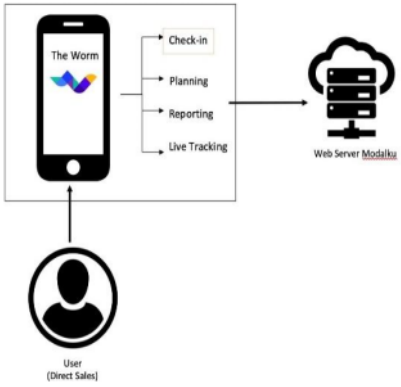

Figure 2. System Design

Figure 2 shows the design of The Worm system. The string message sent by the user (direct sales agent) is transmitted to the back-end of the system through the Internet and some text pre-processing steps are performed. All form of database query will be delivered to the web server Modalku. The knowledge structure which is shown in the Worm application, obtained from interviewing with Modalku management team. The features of the Worm consist of four main subjects, including: check-in, planning, reporting and live tracking.

4. Implementation

The implementation of the new application "The Worm" is changing the flow and business process of Modalku in acquiring new customers (refer to Figure 3 below). The new application shortens the business process in measuring the performance of the direct sales agents (DSA). The DSA are able to download the Worm apps easily and login through their smartphone. The Worm enable them to record their attendance directly. By recording their attendance via apps, the DSA do not need to go to Modalku office every day. DSA also able to inform and give the reason to the office about their absence in the Worm apps. The new apps reduce the time needed for them to go to the office. They can start visit the prospect customers as soon as possible during the office hour that starting on 8 a.m. The apps system allows them to acquire more

prospect borrowers and allocate their time to visit the existing borrowers. All the DSA activity will be recorded real-time and the Modalku management had the opportunity to monitor directly. Managing the time efficiently, the DSA have the opportunity to fulfill the target of new borrowers. If the DSA find any difficulties in achieving the target, the Modalku management is able to respond and solve the problem in the speedy time.

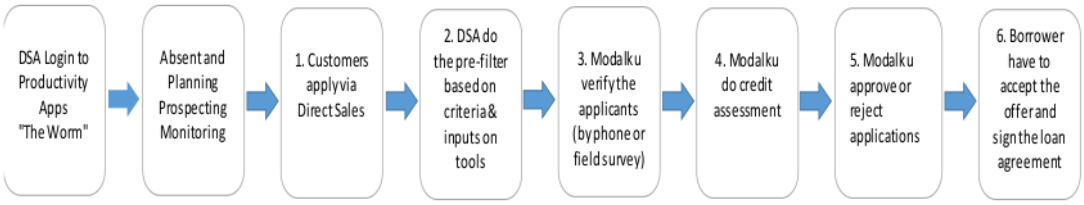

Figure 3. Flow Process (New)

Source: Modalku (2019)

The Worm application is developed as an integrated system to monitor the productivity of the DSA as users. Shortly after users launch the application, The Worm logo in the splash screen will be displayed as in Figure 4 (a). Before able to log in with the Worm system, all DSA have to complete and fill in their profile which consist of the personal data, password and the sales coverage area (refer to the Figure 4 (b)).

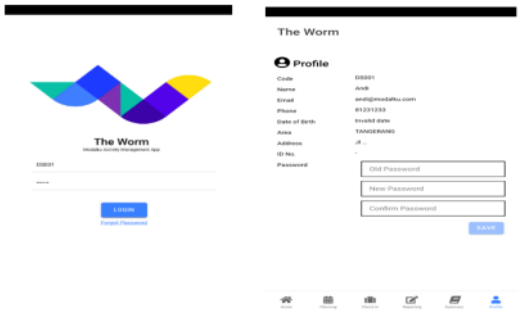

Figure 4. Splash screen (a) DSA Profile page (b)

The menu display of the created mobile application can be explained in the following picture. The menu provided in this application is the check-in menu for the DSA (Figure 5). As the first feature in the Worm, this feature describes the activity of DSA to check-in. After take a photo by the camera in their smartphone, the DSA must tag their location. Using GPS, the system will be able to live tracking the exact position of each DSA. This feature records the position of the DSA and compare it to the prospect borrower location. If the location of the prospect borrower is not in the sales coverage area, the system will automatically reject the check-in process. This system is expected to assist the Modalku management in supervising the DSA assigned to visit the both the prospect and existing borrower. The system will describe each DSA performance to fulfill the assigned daily target visit (Figure 6).

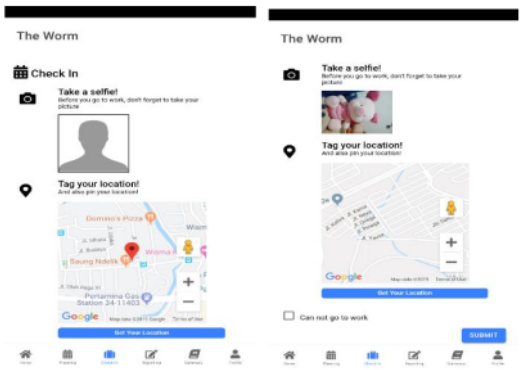

Figure 5. Check-in Feature

Figure 6. Daily Target Feature

In the planning features as seen in the Figure 7, the Modalku management create the target assigned for each DSA daily. The Worm application will be used by Modalku to ensure that all DSA have fulfilled the target to visit the borrower according to the schedule specified by Modalku team. The feature describes the prospective leads/borrower target, the prospective apply target and not apply leads target. Each DSA have to give the reason if they fail to meet the target.

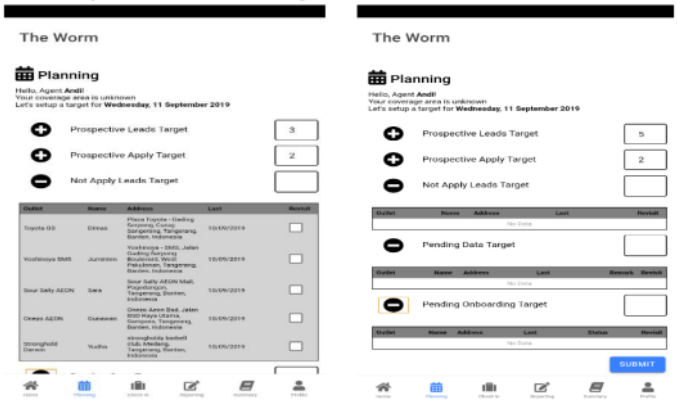

Figure 7. Planning Feature

Figure 8 shows the next feature of the application system which is recording data from new lead (prospective borrowers). Each DSA must fill-in the personal data of the new lead including the personal and business name and also the address of the business. Using GPS, the system will show the live tracking of the exact location of the business. New lead who is interested to apply the loan, will proceed to next process and apply online through the DSA sales application.

Figure 8. The New Lead Feature

The final feature as seen in the figure 9 describes the reporting system of each DSA daily activities. The reporting system give detail information of each DSA in full-filling the target number of borrowers. This feature gives benefit both for Modalku and the DSA themselves. For Modalku, the number of prospective lead who are finally apply the loan will show the ability to increase the company's performance. Each DSA must write down the visit result and explain the reason in details why the prospective leads do not interest in applying the loan. If the DSA missed the target, Modalku is able to assist the DSA in solving the problem and initiating some strategies to improve their performance. The system is able to describe the data of all lead borrowers real-time and the live tracking will enable them to evaluate the business performance of the prospect borrowers. The system summarizes the data of DSA activities every day.

Meanwhile, the reporting system enable the DSA to evaluate their performances and their financial reward they will receive if they meet the target. It will also motivate them to work harder to fulfill the target. Since all data are record automatically, the DSA will able to re-approach the lead borrower who are not interested in applying the loan in the future. A changing new approach can be developed to acquire more lead borrower successfully.

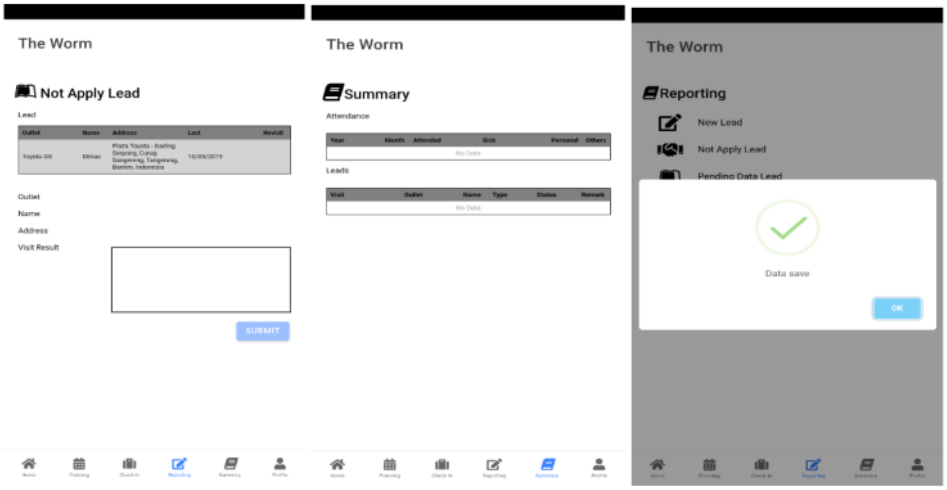

Figure 9. The Reporting Feature

5. Conclusion and Future Works

The Worm application for Peer-to-peer lending industry in Indonesia is successfully developed and implemented in Modalku. Users (DSA) are able to have the data and information which is divided into four categories: Check-In, Planning, Reporting, and Live Tracking. The system is expected both to enhance the DSA and Modalku performances to achieve and support the mission in increasing the financial inclusion in Indonesia. The application system simplifies the administration process by giving live tracking location of the DSA and the prospect lead businesses. The usage of technology would be free of effort and less consuming for the DSA in input the borrower data. GPS sensor that is available in the system, will enable the Modalku management team in monitoring the DSA activities accurately.

Even though the new system brings more benefit for Modalku and DSA, the system still needs some development in the future. The future development should cover the integration both the Worm and the application process. The successful of the new application should be evaluated by measuring the perceived usefulness and perceived ease of use (Sunny, Patrick & Rob, 2019) using Technology Acceptance Model (TAM) approach.

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