Kartini in the Pandemic: Women’s Economic Empowerment Through Synergy of Digital Banking, Fintech, and E-Commerce

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Abstract
The role of the Financial Services Authority (OJK) is getting bigger in Indonesia. Various strategies are implemented to increase financial inclusion and literacy in Indonesia. However, the mindset that is built that women are identical to housewives who do not have financial independence creates a gap in inclusion and financial literacy between men and women. As a result, women cannot contribute to managing finances well and cannot help build a strong family economy because they do not have the knowledge and financial skills as well as men. The KARTINI program is a program that provides facilities for the women’s community to have financial independence. The integration between digital banking (smart behavior), financial technology (affiliate marketing), and e-commerce (dropship) can be the right program in optimizing financial inclusion and literacy for women. The implementation of the KARTINI program has a positive impact on the women’s community such as women’s cooperatives, PKK women, Aisyiyah women, recitation groups, dharma Wanita and other women’s groups. In addition, this program can be applied by OJK to all regions in Indonesia to increase financial literacy and inclusion. Through the integration of smart behavior, affiliate marketing, and dropship, the goals of OJK will be achieved more quickly.

Keywords: Laku pandai, affiliate marketing, e-commerce

Abstrak
itu, program ini dapat diaplikasikan oleh OJK ke semua wilayah yang ada di Indonesia untuk meningkatkan literasi dan inklusi keuangan. Melalui intergrasi laku pandai, affiliate marketing, dan dropship, maka tujuan dari OJK semakin cepat tercapai.

**Kata Kunci:** Laku pandai, affiliate marketing, e-commerce

**Introduction**

In Indonesia, there is still a view that women are identical with housewives who do not have financial independence. Housewives cannot participate in strengthening the family economy so they cannot maximize family welfare. As a result, women have poorer financial knowledge and skills compared to men (Hung et al., 2012). In addition, women feel insecure in making decisions to do business or investment (Singh and Kumar, 2017). Many empirical studies document the existence of gender gaps in financial knowledge and skills in many developing countries (Filipiak and Walle, 2015). This is what causes women in most developing countries to suffer from poverty (Badullahewage, 2019).

The results of a survey in Indonesia in 2019 showed that the level of financial inclusion and the level of financial literacy of women was lower than that of men (OJK, 2020). In line with Hung et al. (2012) which suggests that women have low levels of inclusion and financial literacy. In fact, financial inclusion is an important indicator for the development and well-being of people around the world (Bhatia and Singh, 2019). Bank Indonesia (BI) launched a financial inclusion program as an effort to expand public access to the use of financial services. Financial inclusion is a dimension of financial services to access all financial service products in the form of deposits, capital/credit, and other services (Ahyar, 2019). Financial inclusion also aims to empower the women's community so that women gain the ability to control their own lives (Badullahewage, 2019).

In addition to financial inclusion, financial literacy is needed especially for women to develop an understanding of investment behavior and make effective investment decisions (Singh and Kumar, 2017). Having literacy skills means being willing to learn to choose between many options to set financial goals. Women should be educated about investment and how this investment will help them in real economic development (Singh and Kumar, 2017). The results of research by Haque and Zulfiqar (2015) show that financial literacy, financial attitudes, and financial well-being are significantly and positively related to economic empowerment. Financial knowledge leads to a better standard of living, independence in financial decision making, and better empowerment (Anupama and Joshi, 2015). By having good financial knowledge, women, especially housewives, can independently contribute in managing household finances and make money through investments or running businesses.

The gap between men and women regarding financial inclusion and literacy must be resolved (Filipiak and Walle, 2015). Financial inclusion and literacy programs are needed to make women feel confident in making good financial decisions (Anupama and Joshi, 2015) so they don't just depend on the help of family and friends (Singh and Kumar, 2017). The integration between digital banking (smart behavior), financial technology
(affiliate marketing), and e-commerce (dropship) can be the right program in optimizing
financial inclusion and literacy for women in Indonesia.

The Financial Services Authority (OJK) launched a regulation regarding Officeless
Financial Services in the Context of Financial Inclusion (Laku Pandai) which is expected
to increase the level of Islamic financial inclusion (Putri and Firmansyah, 2017). Sari and
Frensidy (2019) stated that smart behavior is a financial inclusion and financial literacy
program carried out by the government so that more people can be touched by financial
services. Laku clever is integrated with digital banking so that all transactions can be done
only with a smartphone. Laku clever provides products that are simple, easy to understand
and in accordance with the needs of the community which are expected to encourage
economic growth and equitable development between regions in Indonesia (Putri and
Yusuf, 2017). Through the smart behavior program, women can take advantage of
banking services or other financial services with the help of agents and information
technology facilities (Sari and Frensidy, 2019) to manage their finances through various
products such as savings, payments, loans, and so on.

In addition to smart behavior, financial technology (fintech) can also be utilized
through affiliate marketing (AM). AM is considered as one of the most promising and
rapidly growing customer acquisition tools in Industry 4.0 (Gregori and Daniele, 2011).
AM can be used to introduce and market a home business more optimally. AM programs
are emerging as one of the fastest growing methods of acquiring customers and increasing
sales on the web (Fox and Wareham, 2007; Haq, 2012). AM is a type of online marketing,
where a company (advertiser or merchant) signs an agreement with another company
(publisher or affiliate) to display links from its website on affiliate sites (Dwidevi et al.,
2017). This agreement will benefit both parties (Gregori and Daniele, 2011). Therefore,
AM is increasingly important in the general strategic marketing considerations of
businesses.

Another way to optimize inclusion and financial literacy for women is to take
advantage of dropshipping facilities through e-commerce. E-commerce is an online
buying and selling platform (Bolos et al., 2016). Dewi and Hartono (2019) mention that
e-commerce is included in the communication strategy between sellers and buyers.
Sellers can also take advantage of the dropship feature. Dropshipping is a retail fulfillment
method in which the store does not store the products it sells (Youderian and Hayes,
2015). The seller purchases inventory according to the buyer's request/needs to a third
party (usually a wholesaler or manufacturer) to fulfill an order from the buyer. This
system does not require large capital. E-commerce helps sellers reduce the
manufacturing, processing, distribution, storage, and administrative costs associated with
customers (Yazdanifard and Samuel, 2012). Salespeople only need to have a smartphone
that can access e-commerce.

The main problem in this study is the gap in inclusion and financial literacy between
men and women. Therefore, to increase inclusion and financial literacy for women, we
created an integration model for smart behavior, affiliate marketing, and e-commerce to
empower women's communities such as women's cooperatives, PKK women, Muslimat
women, 'Aisyiyah women, recitation groups, arisan groups, Dharma Wanita and other women's groups. Through this system, women can upgrade their ability to independently manage their finances and help improve the family's economy. This research contributes to the household by increasing household income which not only comes from men but also women who also participate in building the family economy.

Methodology

The method of writing this paper is a Research and Development (R&D) model. This method is used to produce certain products and test the effectiveness of a product (Sugiyono, 2009). According to Borg (1983) the R&D model has 10 stages that researchers need to carry out in developing a product, namely as follows.

![Research and Development Stage According to Borg](image)

Research subject in this research are the parties involved in the KARTINI Business Model are 1) the Women's Community as actors; 2) universities, Corporate Social Responsibilities (CSR), and Start Ups as program initiators, consultants and supporters; 3) Banks, Fintech, and E-commerce as providers of products, services and technology; and 4) OJK, BI, and KOMINFO as regulators.
The research flow in this service is the researcher has conducted a preliminary analysis to see the model opportunities. After finding the results of the initial analysis, the steps taken by the researcher to complete this research are seven stages. This stage is adopted from the R&D Borg stage.

1. Preliminary Field Testing
   At this stage, the researcher conducted an initial test to evaluate the business model and the acceptance of the women's community as the research sample. This test is needed to find out whether the developed model is in accordance with the functional and non-functional needs that exist in the community and other related parties (Nisrina et al., 2019). Data analysis was carried out qualitatively by conducting community surveys and interviews with experts and practitioners.

2. Main Product Revision
   The researcher followed up the results of the Preliminary Field Testing by revising and improving the results of the initial product trial according to the needs of the community and related stakeholders. So that the main model of KARTINI is obtained which is ready to be tested more widely in the community.

3. Main Field Testing
   At this stage, testing is carried out to determine market/consumer acceptance of the KARTINI business model that has been developed, as well as to analyze the characteristics of potential customers. So that the right strategy is found in model replication.

4. Operating Product Revision
   This stage is a product improvement process based on trials that have been carried out in the field. Thus, the developed business model has become an operational model design that is ready to be validated.

5. Operating Field Testing
   At this stage, the researcher conducted a validation test on the previously produced KARTINI operational model.

6. Final Product Revision
   Researchers make final improvements or refinements to the business model that has been developed, so that it becomes the final model of the KARTINI system that is ready to be launched to the public.

7. Dissemination and implementation
   This stage is a step in disseminating the KARTINI business model that has been developed and perfected.

8. Business Incubation
   At this stage, the researcher supervises and monitors the KARTINI business program on each research subject.
Results and Discussion

Kartini's Business Model

The social and economic status of women with economic growth and development has a directly proportional relationship. Where women's empowerment that focuses on education, health, labor participation, and political rights will increase their role in economic growth and development (Sawicka et al., 2020). However, according to Mason and Smith (2003) women's empowerment can vary in different communities, but this is considered stronger if women are more educated and have more job opportunities. Community participation in development will be realized if efforts are made to develop and empower the community according to their potential and abilities (Muljono et al., 2019). Analysis of five Asian countries shows that community is a much stronger predictor of women's empowerment than individually (Mason and Smith, 2003). This is in line with research by Rozalinda and Nurhasanah (2020) which shows the effectiveness of community economic empowerment through communities can potentially form a community & business ecosystem.

KARTINI (KARya waniTa today) is a women's community-based business model using digital technology. By utilizing E-commerce applications to obtain products by dropshipping or resellers, the products will later be resold to members of the community and the surrounding environment. Then use fintech for financing and/or transactions in E-commerce and doing affiliate marketing. As well as being an agent of smart behavior by utilizing digital banking and EDC for the efficiency of financial transactions. The women's communities that have the potential to use this system are women's cooperatives, PKK women, Muslim women, Aisyiyah women, recitation groups, arisan groups, dharma Wanita, and other women's groups.

The results of the literature confirm that women are said to be economically empowered if they have the ability to succeed and advance, namely the economic ability and power to make economic decisions (Gulla, 2011). To achieve women's economic empowerment, competent institutions or organizations must be able to overcome the contributing factors, namely individual factors, community resources, institutional norms and rules (Muljono et al., 2019). Peterman (2015) from UNICEF suggested general indicators used to measure women's economic empowerment in micro surveys, including labor force participation, agricultural productivity, asset ownership, financial inclusion, consumption, decision making & autonomy, combination/aggregate measures, and other things. subjective aspects related to satisfaction and happiness. Based on needs analysis, KARTINI's business model needs to pay attention to the usefulness of technology, ease of use, having good facilities, being trustworthy, providing satisfaction, and being attractive to users.

KARTINI Products

KARTINI integrates the use of several technologies into a low-capital and flexible business model. So that this model is very suitable for women (especially housewives), if it can be properly implied, it will be able to make women economically empowered.
and improve family welfare. And has the potential to increase public access, literacy, and financial inclusion.

Figure 2. KARTINI's Business Model

In KARTINI's business model, there are several products and services that can be offered, namely:

1. Dropship/Reseller

Kartini agents can sell various products by becoming a dropshipper (eg: Win Market, Distributor Shop, Dus Dusan, etc.), this is the right step if you don't have
capital or have minimal capital. To increase profits and speed up response, agents can also become resellers. Where these products can be sold to community members and non-members, both face-to-face and online using social media or creating accounts on the marketplace.

2. Laku Pandai
Kartini agents can also become Laku Pandai agents (such as Laku Pandai BSM, BRILink, BPD DIY Laku Pandai, etc.) if they meet the requirements. Agents also do not need to spend capital, because EDC equipment/Applications/other systems are provided by the bank. The products provided include cash in and out, cash deposits and withdrawals, transfers, top up credit and E-Money, payment for marketplace transactions, merchant shopping, even loan applications, and others. Kartini agents can also use M-Banking for all transactions so that it is more effective and efficient.

![Figure 4. Laku Pandai Scheme](image)

3. Affiliate marketing
Fintech agents play a very important role in increasing financial inclusion, as well as facilitating access to financial services. However, the number of these agents is still limited and their distribution is not evenly distributed (AFTECH, 2019). That way Kartini's agents can become agents of fintech and do affiliate marketing, and can bring fintech service products closer to the community (including MSMEs). Examples are Modalku agents, Gradana, Finfleetc, Paytren, Syar-Q, and others.

4. Other Services
It is possible that Kartini's agents can also expand their business apart from those stated above. For example, marketing the products of members and MSMEs, and if KARTINI has spread across Indonesia, then cooperation can be across
KARTINI agents. The following is a general design of the resulting business model.

Figure 5. Affiliate Marketing Scheme

**Financial Literacy and Inclusion Opportunities**

Based on research by Google, Temasek, and Bain & Company (2019), Indonesia has a very fast internet economic growth and is the leader in Southeast Asia with growth of more than 40% per year. But the growth is still uneven (15% of the population area). Urban areas have six times higher online transactions. This shows that the digital economy is growing twice as fast outside the big cities. Therefore, we need a system that facilitates the community in accepting technology that supports digital literacy and inclusion in society. KARTINI is a solution for women to increase digital literacy and inclusion in Indonesia.

Moreover, if KARTINI's business model is implemented properly, women will be more empowered and economically independent, and can still carry out their obligations as wives and mothers. Because the flexible KARTINI system can be done anywhere and anytime, as long as there is a smartphone and internet connection. This system is also claimed to have minimal financial capital because KARTINI's business model utilizes existing technology and can be accessed for free (because it has been provided by related parties, namely E-commerce, Fintech, and Banks). These technologies are then synergized into a business model that has the potential to improve women's economic welfare.
KOMINFO data (2020) shows that Indonesia is ranked 1st in the world in E-commerce growth, reaching 78%. Where internet users in Indonesia have reached 82 million people which puts Indonesia in the 8th rank in the world. In addition, OJK data shows that as of September 2019 there were 27 BUK and 4 BUS providing Laku Pandai with transactions reaching Rp. 2.2 trillion, with agents spread across 34 provinces. Bank Indonesia also recorded an increase in the volume of digital banking transactions by 38.81% (yoy) and electronic money by 24.42% (yoy) as of July 2020. Regarding Fintech, OJK data shows that the distribution of Fintech Lending loans as of July 2020 reached 100.32 trillion with female borrowers 49.31% and lenders 36.90%.

This shows that this system has the potential to increase financial inclusion effectively and efficiently, because the increase in inclusion is carried out in groups (community-based), especially in targeting the Indonesian people who are underbanked by 47 million and unbanked by 92 million (Google, Temasek, and Bain & Company), 2019. The system is also potentially financially profitable. As an illustration, Risa became a 101 Red dropshipper with a turnover of up to 918 million rupiah; Tiya being a hijab dropshipper can benefit from Rp.15,000 - Rp.44,000/item; and Rossy with dropshipping perlak can get a margin of 20%-25% (nova.grid.id). Likewise Rika, a 45-year-old mother who earns an average of 8 million rupiah by becoming a smart sales agent (kontan.co.id). This will be more profitable if the business is synergized together in one business, surely the prospects will be better.

KARTINI's business model also has the potential to increase digital literacy. According to research by the UGM Literacy Activists Network which involved 2,280 respondents in 2019, it was found that there was no difference in the level of digital literacy between men and women, but in terms of work, housewives had a lower level of digital literacy. This shows that, if implemented properly, KARTINI can be useful in increasing digital literacy for women in its empowerment program.

**KARTINI Business Model Replicative Opportunity**

In accordance with the Indonesian Financial Literacy National Strategy Framework, OJK is also intensively increasing public financial literacy. The KARTINI program can facilitate the initiative programs listed in these pillars. Financial planning and financial management can be obtained through education to the women's community. Furthermore, the expansion and ease of access to finance as well as the availability of financial products and services can be obtained through the smart behavior program. Through the KARTINI program the objectives of the pillars of financial inclusion and literacy can be achieved.

OJK can monitor and provide support for the progress of this program. As a start, this program can be implemented in several women's communities such as women's cooperatives, PKK women, Muslim women, 'Aisyiyah women, recitation groups, arisan groups, dharma Wanita and other women's groups. Furthermore, the success of the KARTINI program can be a motivation for other women's groups to implement the same program.
a. As a start, OJK can start practicing to achieve the goals in the first pillar, namely providing education to the women's community regarding financial inclusion and literacy.

b. Making a Memorandum of Understanding (MoU) between OJK and the women's community to work together to strengthen financial literacy.

c. Incubating smart behavior agents

d. Provide consultation regarding affiliate marketing and the use of e-commerce

Figure 6. National Strategy Framework for Indonesian Financial Literacy

Preliminary Analysis

The researcher conducted a preliminary analysis to ascertain the program's need for women's economic empowerment. In addition, preliminary analysis is useful for finding the right business model to achieve the research objectives. The stages carried out in the preliminary analysis adopted from the research and development stages of Borg (1983). There are three stages in the preliminary analysis. Phase 1 includes a description of the results of the preliminary study and the conceptual model that has been developed. Furthermore, Phases 2 and 3 were carried out to test the system to improve KARTINI's business model which will later be disseminated to the public, especially the women's community.

1. Research & Information Collecting

In the first stage, the researcher conducted a literature review and conducted a needs analysis with quantitative and qualitative methods to identify market needs
and readiness for this model to be developed. The results of the statistical analysis in Figure 1 show that women's perceptions and attitudes towards E-commerce are not so different from men's. However, women tend to be more likely to use E-commerce than men. Meanwhile, women's perceptions and attitudes towards Fintech are slightly lower than men's. Likewise with the level of satisfaction and intention to use Fintech, women tend to be lower than men. However, in the use of M-Banking women tend to have higher perceptions than men. Here is also the level of trust and satisfaction. However, men are more likely to continue using M-Banking than women.

Table 1. Acceptance of E-commerce, Fintech, and M-Banking

<table>
<thead>
<tr>
<th>Detail</th>
<th>Acceptance of E-commerce</th>
<th>Acceptance of Fintech</th>
<th>Acceptance of M-Banking</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Female</td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>Benefits Perception</td>
<td>4,14</td>
<td>4,16</td>
<td>4,47</td>
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<tr>
<td>Perception of Ease</td>
<td>4,14</td>
<td>4,04</td>
<td>4,72</td>
</tr>
<tr>
<td>Attitude Towards Technology</td>
<td>3,89</td>
<td>3,96</td>
<td>4,70</td>
</tr>
<tr>
<td>Trust</td>
<td>3,67</td>
<td>3,76</td>
<td>4,60</td>
</tr>
<tr>
<td>Intention to Use Technology</td>
<td>3,95</td>
<td>3,88</td>
<td>4,45</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Detail</th>
<th>Acceptance of Fintech</th>
<th>Acceptance of M-Banking</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Female</td>
<td>Male</td>
</tr>
<tr>
<td>Benefits Perception</td>
<td>4,72</td>
<td>4,96</td>
</tr>
<tr>
<td>Perception of Ease</td>
<td>4,21</td>
<td>4,18</td>
</tr>
<tr>
<td>Social Influence</td>
<td>3,94</td>
<td>3,98</td>
</tr>
<tr>
<td>Perception of Facility Condition</td>
<td>3,94</td>
<td>3,98</td>
</tr>
<tr>
<td>Habit</td>
<td>3,76</td>
<td>3,75</td>
</tr>
<tr>
<td>Trust</td>
<td>3,76</td>
<td>3,75</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>3,37</td>
<td>3,80</td>
</tr>
</tbody>
</table>

* 1-5 point scale

Based on data analysis, it can generally be concluded that women are more prepared to accept and adopt the technology, so that the adoption of the KARTINI business model by the women's community has good prospects. Based on the need analysis, KARTINI's business model needs to pay attention to the usefulness of technology, ease of use, having good facilities, being trustworthy, providing satisfaction, and being attractive to users.
2. Planning
This stage discusses the planning related to the things that need to be prepared in the research. The plan contains the formulation of problems and program objectives, making research steps and a time schedule, determining the budget, identifying the relevant parties, as well as analyzing the possibilities of testing the proposed business model, and a limited feasibility study.

3. Develop Preliminary Form of Product
This stage is the design of the KARTINI business model which includes the following stages.
   a. SWOT analysis (Strength, Weakness, Opportunity, Threat) on the effectiveness of business models in economic empowerment which includes innovation, usefulness, and opportunities for replication
   b. Design and develop KARTINI business model
   c. Build cooperation with related parties
   d. Identify market needs
   e. Designing a STP (Segmenting, Targeting, Positioning) strategy

Conclusion
The KARTINI program is a breakthrough that can be used by OJK to increase financial inclusion and literacy for women in Indonesia. By integrating smart behavior programs, affiliate marketing, and e-commerce, women can increase their knowledge and understanding related to finance. In addition, women can also manage finances through investment and business through the KARTINI program. In accordance with the six pillars of the National Strategy for Financial Inclusion, the Kartini program provides financial education to women, provides public financial facilities, policies, and financial information mapping through the smart behavior program, as well as providing intermediation facilities, distribution channels, and consumer protection through affiliate marketing and e-commerce.

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