Empowering Modern Kartinis to Welcome Industry 4.0 through an E-Commerce Workshop

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Abstract Most Indonesians have a strong view that a woman should stay at home and refrain themselves from having a job. These days as technology makes life easier, this view has been shifting. Women are able to work, even from home. Furthermore, during the COVID-19 pandemic, the role of women in helping the family's economy was greatly influential. During this pandemic, quite a lot of people have been laid off due to the government enforcing social distancing policy, which affects companies because customers prefer to stay at home and follow the government's requests. Due to this situation, the authors provide a solution for Indonesian Kartinis, especially the PKK women in Purwodadi Village, City of Malang who mostly have small businesses, such as making traditional kue basah, tailors, and other crafting businesses. They were forced to stop their businesses in this pandemic, and one of the factors was because they could not utilize advanced technology and market their product online. The solution for this issue is giving guidance and e-commerce training for the PKK women using the Asset Based Community Development (ABCD) method, so E-Commerce in every business will be sustainable and the results of increasing knowledge of this E-Commerce workshop are 83%.

1. INTRODUCTION

According to Hartutik (2015), RA Kartini was an inspiring hero, depicting the struggle and dreams of Indonesian women. R.A Kartini was allowed to attend ELS (Europese Lagere School) in the Netherland. In this country, R.A Kartini saw a new civilization, met different friends with different views, and also learned the Dutch language. Her love for reading had influenced her way of thinking in how to develop her country, especially in relation to women from her era. Indonesia in the early 20th century was still under colonialization and in a terrible state both in political and social aspects. For Kartini, women were not different from men, especially in terms of their human rights.

Indonesia has started considering the role of women in various sectors in relation to improvements in the economy.

This was what the PKK women in Malang, especially in Purwodadi Village, had been doing. These women have their own small to midlevel businesses. Purwodadi Village is a village located in Blimbing District, City of Malang. This village has 13 Rukun Warga (RW/community association) and 94 Rukun Tetangga (RT/neighborhood). This area has a potential in agribusiness and entrepreneurship (startup/small business). From one generation to another, the main livelihood in this village has been in agriculture.

However, based on the data, although not all citizens have been recorded, around 874 people are entrepreneurs, the 3rd largest livelihood after civil servants and private employees (Kelurahan Purwodadi, n.d.).

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These small businesses are mostly run by women, members of PKK (Family Welfare Movement). Most of these women actively produce kue basah (Indonesian traditional snacks). Every evening, there would be customers who would buy them in bulk and sell them again. This selling spot is called Kampung Kue (Snack Kampong), and during Ramadhan this kampong becomes Kampung Takjil because people from this kampong and others would come and buy snacks and drinks before they break their fast.

The concern which needed the attention of every involved party was the conventional and traditional marketing conducted by these small businesses, such as face to face or door to door marketing. In addition, the PKK women had limited knowledge of the advancement of information technology, which actually could help them grow their business. This was due to the limited knowledge sharing among the citizens of Purwodadi Village.

Empowering PKK Women in Purwodadi Village through guidance and e-commerce training was one of the proposed programs by Universitas Bina Nusantara of Malang, as a part of community services for local citizens in the hope that it would become an empowering model for PKK women in every hamlet in Purwodadi Village. The proposed activities are guidance and training on how to use e-commerce for small businesses owned by the PKK women. This program had a potential for nurturing entrepreneurship spirit in the hearts of the citizens of Purwodadi Village, Blimbing District.

2. LITERATURE REVIEW

This community service used asset-based community development (ABCD) method because this method is oriented to what the community wants, their skills and knowledge, and also their other resources which, are sometimes not only hidden, but also ignored because they think they are insignificant (Mathie & Cunningham, 2005).

Asset-based community development is an alternative approach to develop the community, starting with what they have, such as the capacities and assets of each individual, associations, and local organizations. Because the focus and goal of community services are changing for the last 40 years, not only bottom-up but also motivation from the inside to the outside, the need for alternative approach is critical. John McKnight and Jody Kretzmann from the Institute for Policy Research in Northwestern University Illinois, USA were the first people to introduce ABCD. This was the result of their five-year initiative in successfully empowering the community with dedicated leaders who were able to make transformation in the economy of local communities (McKnight, 2014). In western societies, the use of ABCD has been inspired by the liberalization of the economy where the government's role as solution provider for every problem in the community is reduced. Basically, ABCD is an approach that uses the power of the community to carry out the empowerment. This is different from the traditional approach that has been used, which focuses more on the problem and need of the community.

According to Kretzmann and McKnight, if we only focus on the poverty aspect in mapping the problem, then there will be a deviation from the original goal of empowering which is dependency. Furthermore, the community will be less confident and would think that they are different and unable to sustain their own lives. Therefore, ABCD is an approach that starts from what already exists inside the community as a positive asset (McKnight, 2014).

ABCD has been developed in western universities as a means to transform organizations. At present, it has been used in many countries, such as the development of communities by MYRADA in India, PACT in Nepal, World Vision in Tanzania, International Institute for Sustainable Development in Canada, and Coady International Institute in Canada. In Canada, this approach was used by the government as their mainstream policy for developing communities (Blickem et al., 2018).

3. RESEARCH DESIGN

In ABCD approach, there are methods and tools for mobilizing and discovering assets. In ABCD principle, the ability of the community to discover its assets, strength, and potential is viewed as something that could move and motivate the community to make a change and become the main actors. The methods and tools in ABCD are as follows (Salahudin, 2015):

1. Appreciative inquiry which comes from appreciation:

   a. Having respect, looking for the best part in someone or something, acknowledging the strength as well as past and present successes, understanding the aspects of life (health, vitality, superiority) in the system of existence.

   b. From a valuing perspectives, it improves. For example, the economy level increases. Its synonyms are value, reward, respect and honor, and inquiry (finding), exploration and discovery.

   c. Asking to be open to various new potentials and probabilities. Its synonyms are finding, searching, systematic investigation, and learning.

2. Community Map
   Community map is an approach to expand access to the local knowledge. This map is a visualization of knowledge and perception based on the community. It encourages the community to exchange information and gives an equal chance for all members to participate in the process that influences their environment and life. The real goal for this mapping is that people could understand and identify their own strength as a part of their community. This is to identify what is the best thing they could do and who are the ones with skills and resources.

3. Transect or Territory Tracing
   A transect is an imaginary line along a certain area to

capture as many diversity as possible. While walking along the line and documenting the observation, an assessment of various assets and opportunities can be conducted. For example, walking from the top of the hill and down the river in a valley enables people to see different variations of natural vegetation – how the land was used, the type of soils and plants, the owner of the land, etc. Territory tracing is done in parallel with the community mapping.

4. Mapping of Association and Institution
Association is an interaction process underlying the creation of social organizations. These organizations can be formed because they have fulfilled the following factors: 1) the awareness of similar conditions, 2) social relations, and 3) goal orientation. Physician associations and referees associations are examples of such organizations. Meanwhile, institutions are norms or rules regarding a specific community activity which has binding and lengthy attributes as well as certain characteristics such as logo, values, rules, and goals. Institutions can be divided into formal and non-formal institutions.

5. Mapping of Individual Assets
Questionnaires, interviews, and focus group discussions could be used as tools to map individual assets. The benefits of mapping individual assets are: a) help building a foundation to empower the communities and interdependency between people in the community, b) help forming a relationship with the community, and c) help the members of the community to identify their own skills and talents.

6. Leaky Bucket
The leaky bucket is an easy approach for the community to discover, identify, and analyze various activities of a local community's economy. In short, the leaky bucket can be used to easily identify the assets of their own local economy. Therefore, it can be used to collectively improve its strength and growth. This method requires the participation of all of the community members because they need to understand the concept of the leaky bucket, which

is the economy as their asset and potential. They could also understand the concept of innovation and creativity to maintain and the economic growth through the power of the community.

7. Priority Scale
Priority scale is an easy method to choose from the list of potentials to be realized using their own strength without others' interference. Priority scale is a measurement to decide which potential needs to be selected and who decides it.

A small business, owned by the members of the community, is an industry that would give significant influence in empowering the local economy. The limitation in marketing expansion, experienced by the people of Purwodadi Village, Blimbing District, City of Malang, could be solved by upgrading their ability at using information technology in their respective businesses. It will add more value to business owners, especially for the PKK women.

Lazada was chosen as the best e-commerce platform (Setiani et al., 2019). After giving e-commerce (Lazada) training and guidance (Porntrakoon & Moemeng, 2017), the community team from Universitas Bina Nusantara of Malang would continuously provide some guidance for the PKK women when they encounter problems in management and marketing in using the e-commerce platform. The management guidance was a training session on how to use e-commerce until they could use it on their own and also on the knowledge about the features of e-commerce. The team also provided guidance in taking pictures of their products and other relevant objects in addition to providing consultation and training.

The evaluation of the community service for the PKK women in Purwodadi Village was conducted after the training by reviewing and checking the results of e-commerce setup by each participant. The team also reviewed suggestions from the participants. Meanwhile, the progress will be monitored monthly through communication with the community service coordinator.

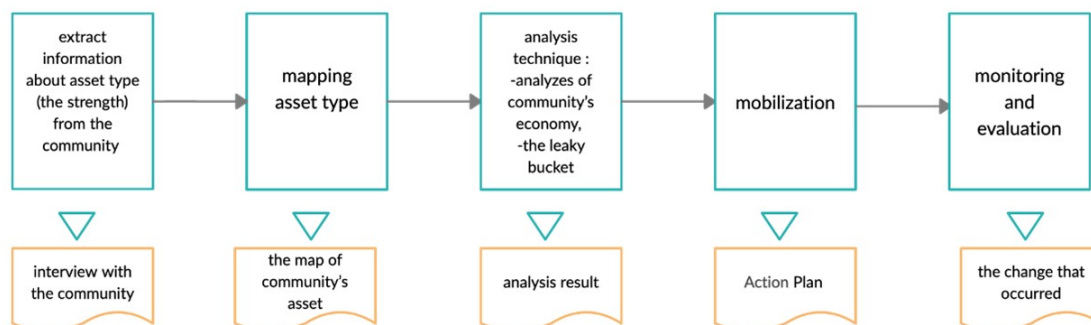Figure 1 shows the methodology of ABCD method used in this research:

Figure **1** . Research methodology using ABCD approach (Mathie & Cunningham, 2003; Dureau, 2013)

4. RESULTS

From the interviews with the representatives of small-medium business owners and village office staff, we discovered several assets, including their potentials and opportunities. For example, there were small-medium businesses run by the PKK women and there were parcels of land that could be utilized for agriculture. These assets were then mapped according to their territories and the types before being analyzed using the leaky bucket. The mapping is shown in Figure 2.
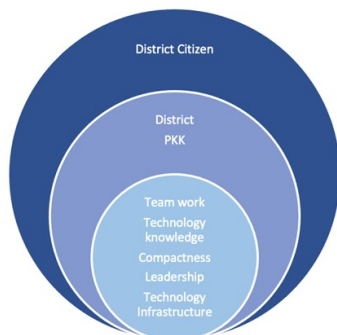

Figure 2 . Community asset mapping

The result of the leaky bucket analysis was that the PKK women could begin to identify their potentials from their own businesses, strength, and weaknesses. For example, in traditional snack production, the strength is that it is cheap and affordable. However, the weakness is the products easily spoil as they last only several days or even a day. There is a need to find a solution to this problem especially during the pandemic as they need to continuously promote their products. One solution for this is utilizing social media for online promotions and drivers for deliveries. The last step is using a priority scale to choose which assets need to be prioritized. The PKK women were asked to make a priority list. From this list, they then made a promotion based on them. This way, even during the pandemic, they would be able to sell their products, and their business would stay in operation. We could conclude that ABCD approach was able to facilitate in finding a suitable solution using the potentials within the community, in this context for the PKK women in Purwodadi Village, Malang.

We provided e-commerce training for them using Lazada as an e-commerce platform. Lazada was chosen because it automatically connects to social media, thus could be used to improve the marketing of the PKK women's businesses. One social media platform that connects to it is Instagram, a place where people (its users) share pictures and videos. This platform enables us to indulge our followers or audience through our posts, including the pictures, videos, and captions. Attractive and creative contents are required, and the use of hashtags is important. The hashtag has a similar mechanism as on Google+, which enables us to get more followers. The plan for this training was to provide the skills to use an e-commerce platform which connected to social media or other Apps, so that customers would feel comfortable.

E-commerce platforms such as Shopee and Lazada are examples of such platforms. We could form a partnership with online driver platforms for the delivery. This partnership enables same-day delivery, which makes goods such as vegetables, fruits, or cakes can be sent directly, and the goods stay fresh even after delivery.

During the training (Figure 3), both the community and government representatives were enthusiastic (more than 70% of the participants asked questions during the workshop). After the workshop, the participants asked if the workshop could be extended because they thought that there was not enough time to answer all of their questions. Only 19 people were allowed to attend the training due to the limitation of the venue capacity. The training was done by observing social distancing. Support from the government was shown during the opening ceremony and mini talk show which featured the mayor of Malang and the head of Purwodadi Village.

The training was delivered in accordance with the needs of the PKK women in Purwodadi Village. During this pandemic, a training that could give motivation for the PKK women and increase their creativity using technology could become a solution to strengthen the families' economy. The government of Malang applied large-scale social distancing which directly affected these PKK women who were mostly business owners. The PKK women in Purwodadi Village (around 80% of the feedback in postest) said that the training had helped them because they became able to sell their products (around 86%) through online platforms such as Lazada and Shopee even in the middle of large-scale social distancing.

Figure 3 . Documentation of e-commerce workshop

After the workshop was done, the leader of PKK and the participants asked if there would be another (the second) workshop. They said that they were happy because the workshop did not only provide theoretical knowledge, but also practical skills. They could practice during the workshop. Unfortunately, not all of the participants brought their mobile phones although we had already informed them that they must bring them to practice at the workshop. In addition, we also had other problems like the internet connection in the venue was bad, and the participants (30%) did not bring their mobile phones because there was only one mobile phone in their families, and their husbands brought it to work. However, these participants said that it was not a problem because they could memorize the

steps, and they could watch these steps on other participants' mobile phones. We were very happy that they felt this workshop was very meaningful and beneficial to expand their businesses.

During the workshop we monitored the participants' progress on their mobile phones one by one, but we were not allowed to touch their mobile phones as this was a part of the health protocol prescribed by the district government.
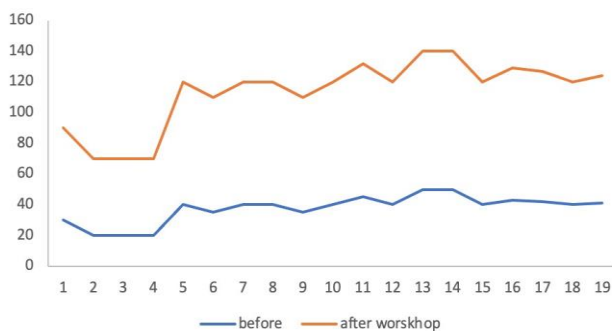

Figure 4 . Participants' e-commerce knowledge before and after the workshop (PKK)

Figure 4 explains the results of the workshop based on the participants' answers to the questionnaires before and after the workshop. The posttest consisting of ten questions (after workshop) and pretest consisting of ten questions (before workshop) were filled by 19 participants. Figure 4 shows that the participants' e-commerce knowledge increased by 83%. Twelve of the 19 participants managed to utilize the e-commerce platforms.

5. CONCLUSIONS

The conclusions of this community service are as follows.

1. The approach used in this activity was appropriate. There was a correlation between the assets (small business owned by PKK women in Purwodadi Village) and the problem – how to utilize technology in promoting small businesses especially using e-commerce. This was because from the feedback that we received after the workshop (from the posttest), 80% of them said that the workshop was relevant to their real problems. That was exactly what they actually needed.

2. The effect of providing the guidance and training in utilizing e-commerce was the increase of knowledge among the PKK women, so they could setup their own shops on e-commerce platforms. The PKK women's knowledge increased by 83% (shown by the posttest consisting of ten questions and pretest consisting of ten questions – filled out by 19 participants), and twelve of the 19 participants managed to utilize the e-commerce platforms.

3. A recommendation for a follow-up community service is the use of 360 degree of marketing (all shops connected to social media) to grow the PKK women's businesses. This follow-up (in-person workshop) is not yet done because after the workshop the PPKM (public activity restrictions) was intensified, and the confirmed cases of the Covid-19 increased. However, we still maintain contact with the participants (the PKK women). They can contact us via WhatsApp or Zoom should they have any problem.

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CONFLICT OF INTERESTS

This statement is to state that all authors have agreed to the manuscript made and submitted. We certify that this article is the author's original work, has not been previously published and is not being considered for publication elsewhere. On behalf of all authors, the author will be fully responsible for the content of the manuscript from beginning, revision until the final stage of being ready for publication.

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