Adopting E-commerce Technology for SME's (Case study in Tangerang, Indonesia)

Nadia[1], Evawaty Tanuar[2], and Agnes Kurniati[3]

[1,2,3]Computer Science Department, School of Computer Science, Bina Nusantara University,
Jakarta, Indonesia 11480
[1]nadia@binus.edu, [2]etanuar@binus.edu, [3]akurniati@binus.edu

Abstract – *E-commerce is one of the trend technology to help a business. It can help business for the marketing, simplyfy and facilitate business steps, reach out the different and much more potential customers. Though there are so many benefit of e-commerce, are the Small Medium Enterprise, especially Micro Enterprise able to take that opportunities? To distribute and introduce E-commerce adn it's advantage, workshop and mentoring conducted for 31 Micro enterprise was held in Tangerang. The participant learning about e-commerce and try to implement their business using that. Participant able to adapt to e-commerce and also compare get knowladge for different type of e-commerce on their understanding. In the usability testing, shows that the participant able to use the application and doing transaction. While the impact on the business itself still need to be explore more in future.*

Keywords: *e-commerce, technology, micro enterprise, adoption, mobile application*

I. INTRODUCTION

In past years, small business facing a problem. The problem is, technologies grows and become common thing in daily life. Ways of trading changing as technologies growth. E-commerce become new way of trading in the world including Indonesia. Slow but sure at past years, the ways of trading changing from on site transaction become online transaction.

Growth of e-commerce users in Indonesia is increasing significantly every year. Growth from 2017 to 2018 is increasing around six million e-commerce users, and predicted will increase 6.4 million in 2019 based on (Statista, 2018).

Based on statistic above, e-commerce is widely used nowadays in Indonesia. Almost everywhere in Jabodetabek (Jakarta, Bogor, Depok, Tangerang, Bekasi) area, we will find an advertisement of an e-commerce. We also notice that as one of the largest populations in Facebook, mobile phone and internet somehow is not a big issue.

The most potential buyer or customer in this era is generation Y and Z, based on (Statista, 2018) that show 76% users of global consumer of e-commerce is age 18-34 years old (users age by 2017). Generation Z or young generation in Indonesia which is turning into adults and become potential customers have different behavior with other/ older generation, which is a consumptive buyer.Generation Z will immediately spend money if have desire for products and they like to shop online (Simangunsong, 2018).

This generation is really familiar with technologies and really common in use of internet. People is follow the big the growth of e-commerce by using it and more get used to use online shop. In general, seller or entrepreneur is someone that come from older generation.

SME or usually known as Small Medium Enterprise isa name for small scale of business but have been independent especially in financial and focused on customers. SME is have an important portion in economic growth and development of the country basically in regional economic. SME take big part on regional economic development because they can provide new job vacancy, investment opportunities and increasing economic capital which is really important for economic growth (Gulnara Ruchkina, 2017).

The question is, are SME really optimize the used of internet? Are the seller in micro enterprise or SME ready with this new behavior from physic to online shopping or e-commerce? Can they innovate with technologies?
Working with Informatics and Communication Department of Tangerang Kota, under the ministry of Informatics and communication, this research will conduct a series of workshop and coaching to see how the Micro Enterprise able to adapt to e-commerce. 31 Micro enterprise participated in this research.

II. METHODS

The method used in this research are experimented into three sectors: SME (Small Medium Enterprise), e-commerce and user experience in shopping. In SME, according to [3], there are three types of SME in Indonesia: Micro, Small and Medium. In 2017, March, according to Industry Ministry, Indonesia have 166.000 SMEs [4]. The classification of SME and its characteristic features are presented in the Table 1 below.

Table 1 Criteria of SME

| Type | Criteria | |
	ASSET	Turn over
Micro	Maks. 50 Million	Maks. 300 Million
Small	> 50 - 500 Million	> 300 Million - 2,5 Bil
Medium	> 500 Million- 10 Billion	> 2,5 Billion - 50 Billion

The number of Micro Enterprise rise in enormous number in 2013, raised as much as 2.4%, compare to 1.13% small, 0.09% micro. 98% of enterprise in Indonesia is Micro. Ministry will promote SME through increase the use of digital platform, online marketing, e-payment to provide wider market access for all.

E-commerce refers to buying or ordering good via the internet (Shia B.C, 2015). There are three types of e-commerce:

- Business to Business (B2B), this model sells product to intermediate buyer.

- Business to Consumer (B2C), this model sells product direct to customer, where customer able to purchase directly from several type of seller.

- Consumer to Consumer (C2C), this model sell their assets, such as property, room renting by publishing the information at website.

- Consumer to Business (C2B), this model explain by an individual able to sell certain product or services to organization or business.

business because of the Internet technology, it able to reach people much more beyond the distance while doing conventional business. It is open another advantages for all the parties, yet the challenges also rise as the benefit rise.

In user experience by shopping, there is relationship between and engagement while doing shopping (Kvasnicova T., 2016). The better the sites/application, the usability can be improved, means that make online shopping more easily for the customers, and it will equal to the possibility of sales. Stress while accessing the application need to be reduce

E-commerce or developer need to be evaluating the e-commerce by testing and recommendation the sites (L., 2016).The result will be able to help the ecommerce to improve the usability. Several point to be focus on are:
1.Navigation and link
2.Architecture of the website and menu
3.Website content
4.Support
5.Font type
6.Images used
7.Design of pages
8.Consistency

The technologies that adopted to solve the problem in this coaching is e-commerce technologies. Participant which is from SME will learn about how to do trading transaction in e-commerce such as Tokopedia, Shopee, Bukalapak etc.

Participant will learn about to do transaction in e-commerce as seller and buyer. So the participant will learning about using application and web service so they can improve their business transaction in industry 4.0.

There is flow to conduct a series of workshop and coaching for 31 Micro enterprise about adapt to e-commerce :
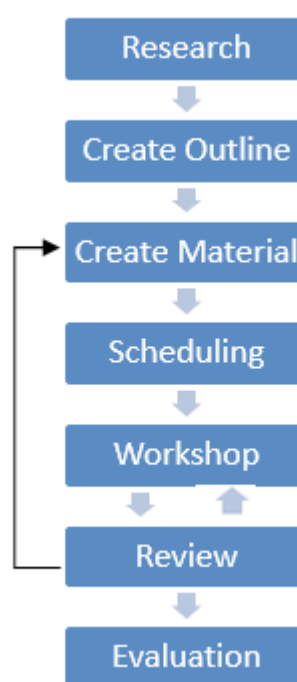

Figure 1 Flow char about how to conduct a series of workshop and coaching

Method to conduct this workshop series shown by Figure 1. First of all, before do the workshop and coaching, research must be done. This step is to get much information about coaching and workshop material, so the workshop will give knowledge that participant needed most. Research is an important start step to make sure material is fresh and improve participant.

After do the research and get the information needed, create the outline to make frame of the material so workshop will deliver in good structure. Then, creating material that will be guided participant to learn the material.

For this workshop material given with the booklet. Booklet is tools to deliver the material which participant can bring home and learn it by themselves if the workshop is over. Scheduling by the material done.

Workshop held in few months. Every month of workshop will be reviewed and result of the review material need to improve, it will be improved as soon as possible so the improvement can be deliver in this workshop series. The end of workshop there is evaluation and feedback that done by questionnaire.

III. RESULTS AND DISCUSSION

This research done with the support of Communication and Informatics Department (Kominfo), of Tangerang Kota Government.

First is the initial research which is done by Training to introduce Google Business conduct to 31 SMEs invited by the Kominfo. A survey distributed to the participants, it shows that all (100%) have Android devices and can be used for browsing and chatting. Also, 58% of them (18 out of 31 participants) have computer/tablet that have internet access.
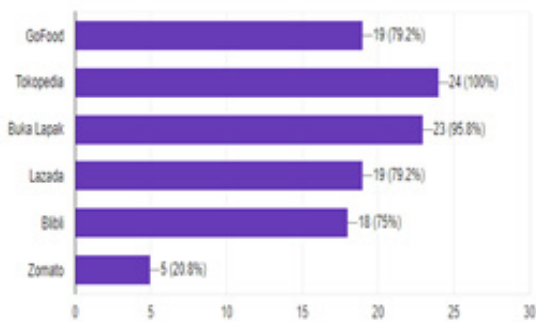

Figure 2 Shows how familiar the participant to several ecommerce/websites

Most of the participant are more than 40 years old, with different kind of business, where mostly are accessories, food, and clothing. Figure 2 shows the number of participants that are familiar with several famous e-commerce.Furthermore, the landing page of Tokopedia and BukaLapak are clearly shown in the Figure 3.
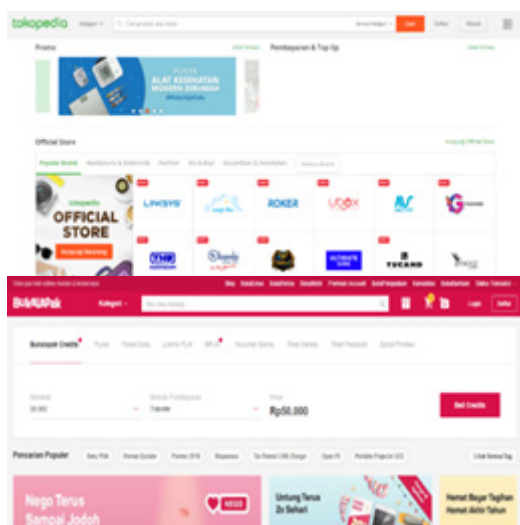

Figure 3 E- commerce Tokopedia and BukaLapak

Table 2 The satistic of users and active users of different ecommerce

	User		Seller	Total	
GoFood	8	25.8%		8	25.8%
Tokopedia	13	41.9%	5	18	58.1%
Buka Lapak	9	29.0%	1	10	32.3%
Blibli	4	12.9%		4	12.9%

Table 2 above shows that the most of participants still passive internet users.Whiledata in the Figure 2 shows that all of them know Tokopedia, only 58% of the participants are active users.

A series of workshop and coaching are held to train and monitor the progress of SMEs in using two common e-commerce:Tokopedia and BukaLapak. Based on our findings depicted in the Figure 2 and Table 2, they are the most well-known marketplaces in the society. Participant download the mobile application in the Google Play Storeontotheir mobile phone and try to use it by their own.

To guide the participant in using the e-commerce applications, we create a booklet for them. In the booklet there arestep by step tutorial to perform several tasks in Tokopedia and BukaLapak. The booklet created is shown in the Figure 4 and Figure 5.

Figure 4 E-commerce Booklet of BukaLapak

Figure 5 E-commerce Booklet of Tokopedia

The series of workshopis conducted in four months. The participants learn and implement e-commerce technologies through coaching and mentoring. In the fifth month, Shopee marketplace was introduced to further increase knowledge about e-commerce. Landing page of Shopee shown at Figure 6.

There are the feedback regarding to the information and user interface of Tokopedia, BukaLapak, Shopee using 5 Likert-type scale, where one is the score for worse or not good, and five score for the best. The Figure 6 and Figure 7 shows that regarding to the interface, Tokopedia and BukaLapak are better than Shopee, but regarding to the process itself, most of the participant prefer Shopee than others.
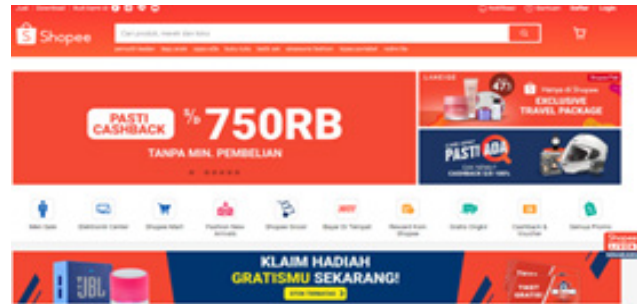

Figure 6 E-commerce Shopee

Feedback for three e-commerce they have learned on this workshop is shown at Figure 7 and Figure 8. Figure 7 show the participant feedback about user interface , and the summary is participant most satisfied with Shopee's user interface. Identical with result shown at Figure 8, participant most satisfied with Shopee usability.
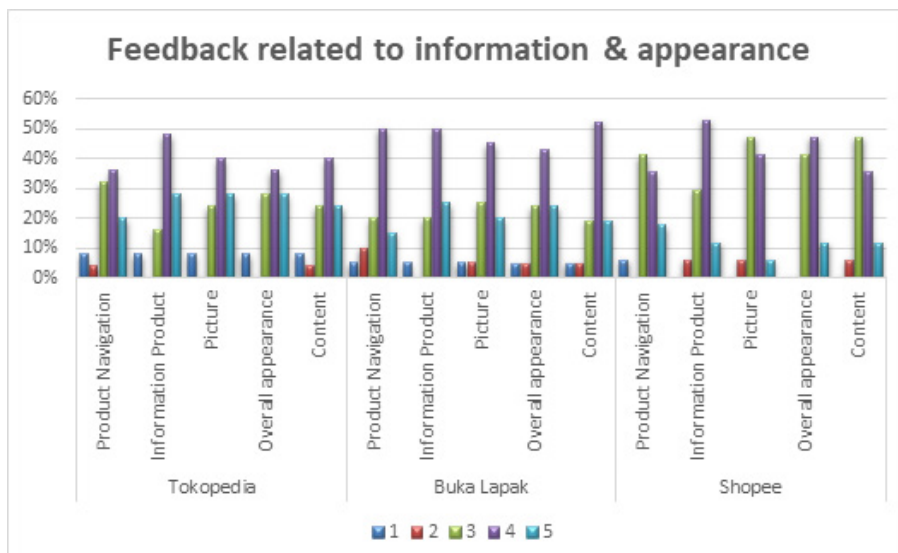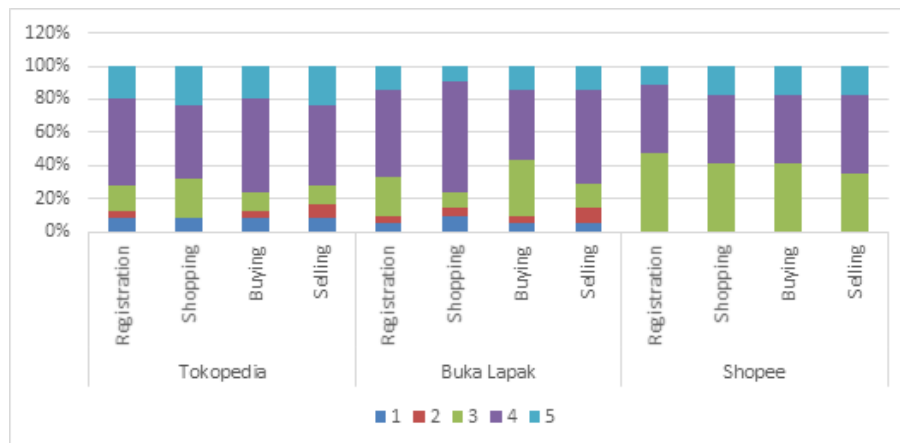

Figure 7 Feedback on user interface

Figure 8 Feedback on usability

IV. CONCLUSION

Even that people nowadays are using mobile phone or technology in mobile phone itself, but we are not that effective yet as a productive users. This coaching upgrading the knowledge about industry 4.0 to several entrepreneur in Small Medium Enterprise. They learn about e-commerce and implement the technologies to their business flow to catch up with technologies growth.

We believed that we still need to introduce more on how to use these technology to benefit the society. Most of the participant believed that they are gain advantages on adopting these different type of e-commerce. The adopting to learn trading flows in e-commerce Bukalapak, Tokopedia and Shopee, with the most user friendly is Shopee.

While we suggest that a lot of area still need to be improved, such as: taking good picture, wording. Developer also need to understand the users, especially older than 40 and non-native internet users. By working together from all parties, government, industries and academic, adopting ecommerce technology will benefit the societies. More research on the impact on adopting technology can be done so that it can be a best practice to be implemented in other area.

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