

MODEL OF HANDPHONE UTILISATION AS INFORMATON MEDIA AT UMKM IN BOGOR DISTRICT

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ABSTRACT. *Phenomena happened in the Medium and Micro Business Units (UMKM), they have picked or chosen better 'BPKB (vehicles ownership book) pawn system' than loan system offered by the banks, because BPKB Pawn System is easy to apply using handphone facility that has attracted UMKM obviously. Problems design offered in this research is the extent to which handphone utilization has become intermediate access to financing UMKM facilitated by Bank of Indonesia policy. What kind of handphone technology innovation will be developed to access UMKM capital?. To what extent is technology innovation utilized by UMKM? To what extent is the district economics competitiveness in Bogor District to be improved? This research has applied quantitative descriptive method. Result of the research has identified that variable of technology innovation has been affecting district competitiveness. And model of tripartite cooperation between Bank of Indonesia, Ministry of Internal Affairs and Ministry of Communication and Information is offered to produce capital information policy for UMKM which is cheap, easy and efficient. Suggestions offered are expected to have an applicable policy of Bank of Indonesia to bridge capital loan facility from bank to UMKM using handphone.*

Keywords : *UMKM, capital, information, technology, competitiveness*

1. INTRODUCTION

UMKM (Micro and Medium Business Unit) has been contributing a big role toward National Economics Development. UMKM had saved critical economy in 1997. According to Scarborough & Zimmerer (2005) described that recovery of economical crises has been going thru 7 years and some studies have identified that Indonesia economy is not only depending on big business units but also relying on UMKMs which is having relatively better endurance.

Stel, Carree, Thurik & Zoetermeer (2004) described that UMKM role is very important part in national economy. UMKMs' role are related to the aspects of job opportunity development, equal income distribution, villages economics development, and export of non oil and gaz According to the report of Financial Authority Services (OJK). UMKMs have been contributing significantly national economy which is 60% GDP and 97% of national manpower placement.

The government should have developed an effort to make sure and to change UMKMs paradigm about the procedure of banking which is from difficult to get a loan to be easy way to get the loan, therefore, UMKMs will pick the facility provided by the government instead of 'BPKB pawn system' Recently, changes and modification have occurred in order to make the people can adapt using sophisticated conditions, therefore Bank can utilize a technology to ease people work. A research done by Dell Technologies and Institute for the Future (IFT) has predicted that economical ecosystem is entering new era working with machines, and in the range of the recent time up to the year of 2030, people and machineries will be getting along with each other. Index Digital Transformation Dell

Technology has predicted that 52% of the companies in the Area of Networking Service (APJ) will be suffering of bankrupt within 3-5 years and 83% will be threatened by Starup digital.

Based on the previous research, handphone has been an important thing for UMKMs in communication. However, UMKMs are requiring a new innovation of the handphone they have to run their business properly. Referring to this condition, technology can be used as media of information distribution by banking or government about loan facilities to UMKMs using handphone. As a matter of fact, handphone is a telecommunication tool to communicate either by using short text message or voice message. Nowadays, handphone has been a lifestyle requirement by the people to access any information, and everybody has owned it obviously.

UMKMs in Bogor District have potentially contributed District Economy. District economy is measured by Origin District Revenue (ODR). Origin revenue of Bogor District had been increasing in 2016 amounting to Rp. 2,292,175,674,801 and in 2017 was Rp 3,041,872,447,905.35. It has explained that Bogor District is able to maximize the district capability and has indicated stable and good economical capability.

The development of Gross Regional Domestic Product (GRDP) was constant referred to the price in 2017 had reached 6.19 % and in 2014 reached 6.10%. The highest increasing of economical development was in communication and information categories of 9.87%. This increasing was supported by the increasing of handphone user, data and internet requirement. The second level of increasing was in the transportation and warehousing categories of 8.81%.

Referring to the phenomena above, the researchers have interested in doing further exploration about an alternative of technological innovation utilizing handphone and as intermediate media to access the capital and the extent to which the Technology Utilization Model has increased the Economics District Competitiveness in Bogor District.

2. LITERATURE REVIEW

2.1 Technology Innovation

Technology innovation is introducing new technology, new service, and new ways which are more usefull. Innovation is different with discovery, innovation relates to use new idea or method, but discovery relates to create an idea or method.

According to Stephan P. Robbins & Mary Coulter (2010), there are three connected chains triggering innovation such as structure, culture and practice of Human Resource in the Organization, itself.

Research about the impact of structure variable upon the innovation is as follows: a. Availability of sufficient resources providing basic of an innovation; b. Frequent communication between units is jeopardizing the innovation; c. Innovative organization has tried to minimize time pressure or extreme pressure against creative activities; d. A creative employee's job performance is enriched when the structure of an organization is explicitly supporting the creativity of the people.

And the research about the impact of resources upon the innovation is as follow:

- a. Innovative organization has provided actively employees training and development to improve their knowledge.
- b. Providing security at work to the employees reducing their worry to be dismissed due to a mistake they have not done on purpose, and it is supporting an individu becoming an ideal promotor.

1.2 District Economics Competitiveness.

Definition of Ccompetitiveness according to the experts:

- a. Competitiveness is the extent to which productivity is an output resulted by an employee. (Michael Porter: 1990)
- b. Competitiveness is a distinct excellence comparing to others consisting of comparative advantage and competitive advantage (Tambunan: 2001)

- c. Competitiveness is the ability, capability and strength to compete (Brata Atmaja: 1994)
- d. District competitiveness is the way how the economical district capability to reach the achievement of high level continuous welfare without closing the door to domestic or international competitiveness (Abdullah, et.al: 2002)

2.3 Research Hypothesis

Romijn and Albaladejo (1999) had done an empirics research over 50 small and medium business units (companies having < 250 employees) describing that internal factors such as education and experience of the owner, research and development institution, expertise of manpower and investment on training and development of human resources are defining factors of organization innovation. This research has figured out that external factors such as financial support from the government to do a Research and Development, communication or interaction with external parties (customers, suppliers, competitors, financial institutions, R & D institutions, Industry associations) are the factors significantly defining the capability of organization innovation.

Referring to the research of Zulaikha and Fredianto (2003) regarding the relationship between external environment, strategic orientation and UKM(Middle Business Unit) performance in Semarang has determined that the willingness of a company to do an innovation and proactivity has connected positively to the dimension of developing company.

And the hypothesis offered is as follow:

H: Technology Innovation has affected District Competitiveness.

3. METHODS

3.1 Methods of the Research

Methods of the research have applied descriptive and quantitative. Descriptive research is a research describing a phenomena or circumstance happened on the objects of the research. And quantitative research is a research describing the data in figures or qualitative data collated into figures and hypothesis test is to be done.

3.2 Objects of the research

Objects of this research are UMKMs. One of the important factors supporting the development of people economy is UMKM which has supported the execution of specific program of Cooperative Authority and UKM in Bogor District. UMKMs are private business unit which are not any branches of companies and are having a certain limited business capital.

3.3 Time and Location of the Research

The research had been done in September 2019 up to October 2019. Location of the research is in Bogor District area, and Bogor District has had 23,470 units of formal UMKMs (BPS/Statistical Administration Bureau) of Bogor District: 2018). Total of UMKM units can show their quality and introduce their products to the international, they are expected to be united, motivated to pursue their success and to meet one of the misison of Bogor District which is Competitive Economics District. Due to Bogor district has large scale area distribution, therefore, the farther the area from economical district is, the bigger the limitedness is happened. Significant limitedness is reffering to simple and low communication technology that will affect District Economy sector.

3.4 Population and Samples

Population of this research are street vendors (PKL) registered as UMKM in Bogor District. Sampling has applied purposive sampling with the following criteria:

- a) UMKM that has been running the business for one year or more.
- b) UMKM that is having handphone.

Samples are 50 owners of the business units or UMKM management as the respondents. In this research, 50 samples are quite representative as it is a big total of the samples (Gay and Diehl: 1992).

3.5 Data Collection Methods

Field Research

- a) Observation, it is direct observation on the objects of the research.
- b) Interview, it is direct question and answer method with the respondents to find out what they need or they interest in business development related to cheap and easy finance.
- c) Questionnaires, is a technique of questionnaires distribution containing the questions to be answered using available responses.

Library research

They are references research method to get the information related to the subject of this research such as journal, books and archives, to complete the data obtained with the data collected on field.

3.6 Methods of Data Analysis

In order to figure out the effect of Technology Innovation upon District Economic Competitiveness, it is applying linear regression analysis (simple regression).

The equation of :

$$DD = a + bIT + e$$

Description

DD = district competitiveness

a = Constant

IT = Technology Innovation

b = Coefficient value of technology innovation

e = Error

Hypotheses formulation:

$H_0 = 0$, Technology innovation does not affect District Competitiveness.

$H_1 > 0$, Technology Innovation affects District Competitiveness

Hypotheses test refers to $\alpha = 0.05$ and $df = n - k - 1$

If $t_{count} < t_{table}$, H_0 is accepted and H_1 is rejected.

If $t_{count} > t_{table}$, H_0 is rejected and H_1 is accepted.

3.7 Stages of Research

In this research, the researchers have started designing an introduction about the benefit of research planning, researcher competence and previous researches. After all, the result of the observation can be studied referring to informal policy sector, nevertheless, the researcher has studied the literatures and reviewed the problems to be studied. However, the researcher has studied varied information supporting the research.

Having been supported by varied informations, the researchers have prepared field survey planning. Field research has provided further information about the effect of applicable policy upon the instruments of the research. After having executed field survey, some problems have been found out, therefore, the researchers could define the beginning of problems.

After defining the beginning of the problems, the researchers will evaluate them and will study about the utilization of handphone technology, cheap capital, model of competitiveness development, competitive model and technology innovation. Furthermore, the researchers will offer the recommendation to Bank of Indonesia in order to create a policy about easy and cheap capital access

4. RESULT AND DESCRIPTIONS

The increasing total of the people each year will affect the economics of certain area. The bigger the area is, the bigger the revenue of a district (PAD) will be.. When a district has received big

Earnings, it has been increasing each year, and it has explained that the district has maximized the capability of the area and has shown good and stable economy. However, when a district has been suffering to maximize its earnings, unstable economy will appear.

One of the contributions to increase district earnings is to evolve and to create job opportunity in the informal sectors. One of informal sectors is UMKM (Micro and medium business unit). UMKMs can employ # 90% manpower and contributes 58% National Gross Domestic Product. Recently, in Indonesia, total of micro business unit is 98% and small business unit is 1.09%. And the target to increase total of UMKMs is 20%.. Therefore, UMKMs should have to be improved in education, facilities, quality of the products in order to be able to deal with global competitiveness. Tight competitiveness, open local market and global market have made UMKMs developing their business independently. Having had high independence in their business, it will affect the society which is opening new job opportunity and increasing people welfare accordingly.

According to the data of BPS (Statistic Administration Department) of Bogor District, it has indicated formal UMKMs in Bogor district have been reaching 23,470 units and employing 53,104 employees. Capital of UMKMs is coming from their own finance or external finance. UMKMs' capital that is receiving from internal finance amounting to Rp 5,176,928,906, and external finance amounting to Rp 12,293,525,485. The data has explained that UMKMs need capital offered from external parties mostly which is easy administration procedure that can support their business development. However, capital is one of internal factors to deal with tight competitiveness.

Based on the result of the research, it has indicated that UMKMs in Bogor District are fully aware of information technology requirement especially in connection with their continuous business to increase their competitiveness.

Table 1
Simple Linear Regression Test

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	32,866	4,606		7,135	,000
INNOVATION OF TECHNOLOGY	2,466	,080	,976	30,932	,000

Resource : Primary data processed

On the table 2, in order to figure out the extent to which the contribution of technology innovation variable upon the competitiveness it has applied determinant coefficient analysis.

Referring to the table above, it has indicated that coefficient value of technology innovation variable is 2.466 interpreting that change variation of competitiveness variable has been affected by technology variable 2.466. And refers to the analysis result using P-value, it has indicated less than 0.005. Therefore, the hypothesis describing variable of Technology Innovation has affected significantly Competitiveness variable is accepted.

Table 2
Correlation Test
Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,699 ^a	,488	,478	5,649

Source: primary data processed

Table 2 above has indicated R square value of 0.488 indicating determinant coefficient value describing that variable of Technology Innovation has been indicating change of Competitiveness variable of 48.8 % and the remaining of 51.2% is other variables which are not studied.

Case study in Europe has indicated more than 50 % of productivity is achieved by the Investment of Information Technology. UMKMs will be having global competitiveness effort if they can run their business reliable, balanced, and high standard. Facing global economic crises and multilateral free trading(WTO), AFTA, APEC informal business relationship, and ASEAN Economic Community (AEC), therefore, UMKMs are required to perform any changes to improve their competitiveness efforts to be able to run and to develop their business, though, it is a treath but it is an opportunity for UMKMs dealing with either domestic or international competitiveness. Therefore, competitiveness strength and proper strategy are required to become superior and to win the competitiveness (Syukriah and Hamdani: 2013) Factor of technology innovation is believed by most parties will be defining tools to succeed the District competitiveness. The higher the market competitiveness is, the harder the effort of business people to provide quality of the products better than the competitors.

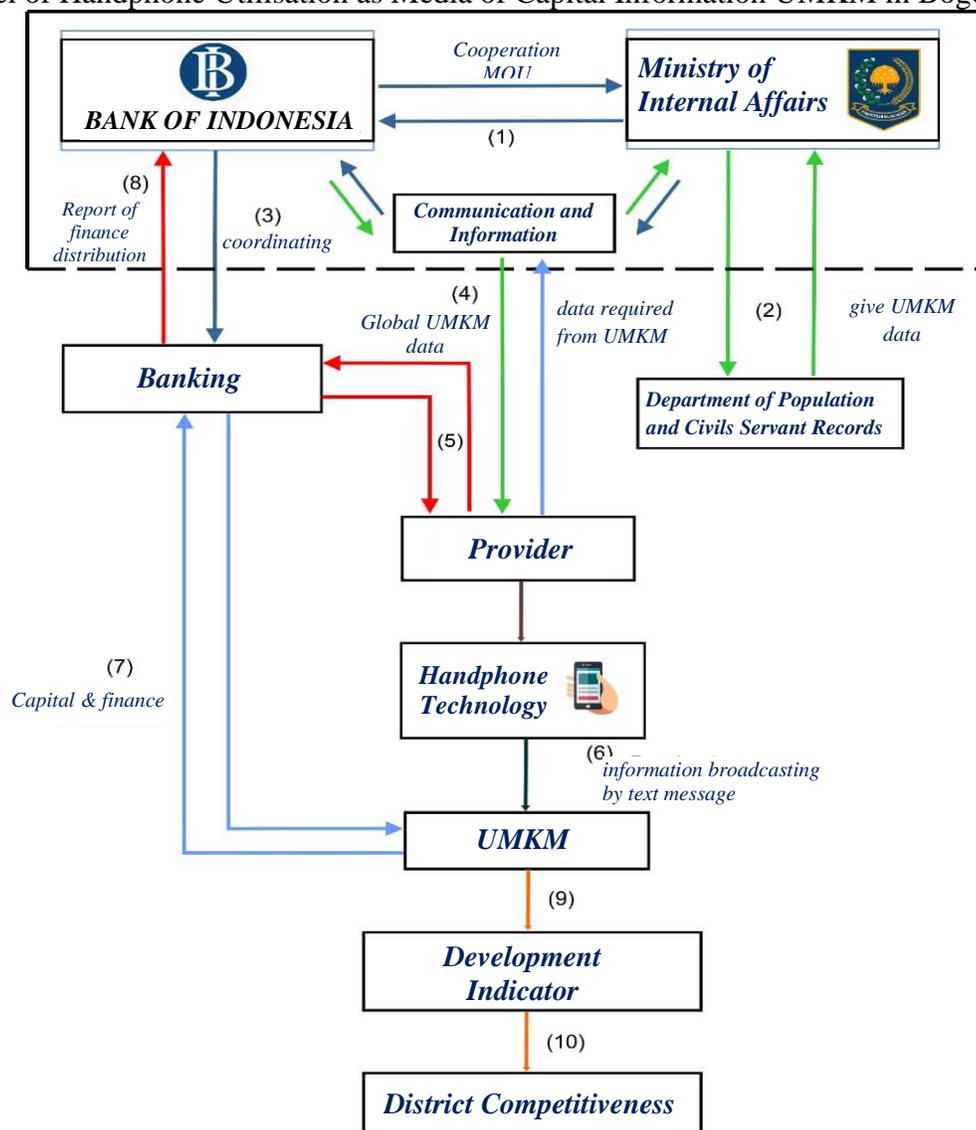
Handphone can be used as technology innovation to solve the problem and to ease the business of UMKMs related to capital accessible particularly.. According to Hadiyati (2010) described that survey from BPS had identified some weaknesses and problems faced by UMKMs in priority, covering:

1. Lack of capital
2. Marketing difficulty
3. Tight business competitiveness
4. Raw material difficulty
5. Lack of production technique and expertise.
6. Lack of managerial skills (HRM) and
7. Lack of knowledge of management problems specifically in finance and accountancy.

However, a model designed to prepare capital accessible for UKMK is described on Drawing 1 herebelow:

Drawing 1.

Model of Handphone Utilisation as Media of Capital Information UMKM in Bogor District



Source : Primary data processed

The drawing above has described that Bank of Indonesia has been associating with the Ministry of Internal Affairs to improve financial service using citizen data utilization. Bank of Indonesia has received UMKMs data from The Ministry of Internal Affairs which is received from Department of Population and Civils Servant Records of each district. After receiving UMKMs data, Ministry of Internal Affairs will report it to Bank of Indonesia, and Bank of Indonesia is able to send the related data to the Banks as data base of UMKMs. In order to communicate the Capital Policy made by Bank of Indonesia, an association between Bank of Indonesia and the Ministry of Communication and Information is required.

By this association. The Ministry of Communication and Information is able to coordinate with providers related to the information distribution to UMKM about Capital Policy made by Bank of Indonesia. The provider will broadcast the information using short message(SMS). This short message contains the information about capital policy to finance UMKMs prepared by Bank of Indonesia having unique number. This capital information is distributed to all UMKMs. Therefore, UMKMs that have received short message from the provider are expected to execute the request according to the

information about loan requisition to the banks facilitating credit distribution. UMKMs can access easily capital/loan requisition to the bank by showing Population Identity Main Number (NIK), Electronic Identity Card (KTP) and unique number received from SMS. Therefore, UMKMs will not assume anymore about difficult prerequisite procedure to request capital loan to the bank, and UMKMs will be interested in this capital loan offered.

Feed back from the banks to Bank of Indonesia is to send the report about finance distribution to UMKMs. This report is used by Bank of Indonesia to measure the success of capital accessibility policy for UMKMs. Because when UMKMs are having sufficient capital, they are developing their business and the problem to access capital facility from the bank is solved.

Developing UMKMs products which is market oriented should have to be done continuously by UMKMs. Besides of government effort to support capital, UMKMs also need technical and management support which is entrepreneurship training. According to Tambunan (2009), even though UMKMs have received sufficient capital support, it is not working if training and development courses are not available. Entrepreneurship training will help UMKMs to improve their entrepreneurship skill.

According to Putta (2014) business people who are following the training are having management skill better than the people who are not following the training. UMKMs that have received more earnings will contribute District Earnings thru business tax, and it is increasing the District Economics continuously, it is evolving District Competitiveness. A district that is having stable competitiveness will provide job opportunity to the people. Nevertheless, the more the employment is, the less unemployment will be.

CONCLUSION

Tripartite association between government departments and banks is required to produce the Capital Information Model for UMKMs which is cheap, easy and efficient, and socialization of government policy should have to be performed to bridge the Capital Prerequisite from the banks to UMKMs using handphone.

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