JOB OPPORTUNITIES THROUGH INFORMATION AND COMMUNICATION TECHNOLOGY IN RURAL AREA: CASE STUDY DESA KALIABU, CENTRAL JAVA

Mira Azzasyofia[*] and Isbandi Rukminto Adi[*]

ICT has been show a positive impact on development. ICT can be used to reduced poverty and improving wellbeing. Desa Kaliabu, Central Java become one of rural area that experienced a positive impact of ICT utilization. Purpose of this paper is to discuss that impact on people in Desa Kaliabu. Used descriptive study, this paper showed that people at Desa Kaliabu has benefited from ICT utilization. Almost every person living at Desa Kaliabu now have new job as a logo designer. Now, employment rate in Desa Kaliabu has reduced rapidly and crime rate also reducing.

Keywords: component; Community Empowerment; Poverty Alleviation; Community Development

I. INTRODUCTION

Information and Communication Technoloy (ICT) development has spread all over the world since 1990s, included in Indonesia. Increasing on ICT developmet in Indonesia not only happened in urban area but also in rural area. Based on Statistics Indonesia (BPS, 2015), 81,33 percent villagers used mobile phone, this amount increase almost 50 percent by six years. A large number of mobile phone user also increase amount of internet user in rural area. In 2014, BPS (2015) recorded that 24.32 percent internet user in Indonesia located in rural area. This growth on ICT should be in line with rural economic development. World Bank (2003), says that ICT has an important role in development strategy. They claimed ICT has reduced poverty by increasing market access, efficiency and competitiveness of the poor, improving social inclusion of isolated populations, and facilitating political empowerment.

Agu (2014) examine that the used of ICT can creating employment opportunities. Study from Oxford in 2011 (ICC, 2012) reveal that ICT can be one of solution to decreased unemployment rate. This study result that ICT industry in Europe hired 13 million peoples. World Development Report (World Bank, 2016) reveal the same thing, about 3–5 percent of the employment in OECD countries are in ICT sector. Not only open the oppourtunities to working in ICT industry, opportunities for entrepreneurship and self-employment are also growing rapidly. Hence, this paper will discuss job opportunities in rural area through used and utilization of ICT.

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[*]   Departement of Social Welfare, Faculty of Social and Political Sciences, Universitas Indonesia, *E-mail: miraazzasyofia@gmail.com; isru@ui.ac.id*

II. LITERATURE REVIEW

Globalization provides considerable impact on poverty, where individuals feel that economic activities are no longer able to assist them in meeting their needs (Ife, 2013). From the perspective of community development, to respond to this is to create an alternative approach to relocate economic activity in the community, which aims to generate profit community, to revitalize local communities and to improve the quality of life in community. An alternative approach is called community economic development which divided into two categories, conservative and radical.

Conservative community economic development has three approaches: (1) Attracting industry, by trying to attract new industry to the local area by providing a good environtment for investment. The problem in this approach is that the industry is increasingly mobile, following the market. Moreover, there is no guarantee that the new industry would remain in the local community or profits will be reinvested locally; (2) Initiating local industry, this approach is more emphasis on improving the economy and the creation of local resources; (3) Tourism, this approach emphasizes community development potential in the tourism sector. (Ife, 2013: 222-225)

Meanwhile, radical community economic development has four approaches: (1) Cooperatives, cooperative judged to be an approach that can be achieved and can be applied effectively in a variety of locations as it also is able to strengthen the ties of solidarity between communities; (2) Community banks and credit unions, is the emergence of a inisaitif to form local banks and local credit institutions, so that local communities can take control of their economic activities; (3) Micro-finance and micro-credit, which uses the idea that a small loan will be able to help people out of poverty; (4) Local currency schemes or LETS (Local Employment and Trading Scheme), this approach seeks to formalize local transaction economy by creating community currency. LETS's can help the individual to maintain a role in economic transactions, even though they do not have a steady income. Individuals can get their basic needs and services that exist even though they have no money. The system is very potent in enhancing cooperation and generating economic communities that focus on community interaction and the benefits of the existing economic activity remained at the level of local communities. (Ife, 2013: 225-231)

In an effort to do community economic development can be done by utilizing the community asset. The community asset such as, social capital, human capital and capital and information technology has an important role in community. Green & Haines (2012) defines social capital as relationships and social networks that exist in community. Meanwhile, human capital is the ability and skills possessed workers that affect their productivity. While, Adi (2013) linking human capital with matters relating to the quality of human resources that can master the

technologies that benefit the community, be it simple technology or sophisticated technology. Without the human element, which has sufficient capacity, engine or existing technology will becomes useless. To control existing technology, education plays an important role in preparing the human capital that exists in a community. Other than the human capital, information and communication technology (ICT) capital itself becomes an asset that exists in community. ICT capital is the availability of appropriate technologies that are useful to community, and not just an advanced digital technology, but not necessarily usefull for the community. (Adi, 2013).

Related to ICT capital, Gigler (2015) said in effecting the asset utilization of ICT in community then it should be able to improve the community, especially in terms of informational capabilities. There are four components in 'informational capabilities', (a) to use ICTs in an effective manner (ICT capability); (b) to find, process, evaluate, and use information (information literacy); (c) to communicate effectively with family members, friends, and professional contacts (communication capability); and (d) to produce and share local content with others through the network (content capability). The effective utilization of the existence of ICT enable the poor to understand their problems and also to voice and explained their needs. One of them is in accessing the work. The existence of ICTs has become an avenue of providing job oppourtunities by building human capacity. Thus, ICTs can minimize the problem of unemployment. (Mohammed & Sadiq, 2015).

ICTs has created jobs as a sector and ICTs has become as tools by helping people find work and do work (World Bank, 2013). There are three categories of ICT competencies in term of work skills which proposed by OECD (2005), (a) ICT specialists, who have the ability to develop, operate and maintain ICT systems; (b) Advanced users: competent users of advanced, and often sector-specific, software tools; and (c) Basic users: competent users of generic tools (e.g. Word, Excel, Outlook, PowerPoint) needed for the information society, e-government and working life. In ICT specialist ICTs is the main part of the job meanwhile in advance users and basic users ICTs are not main job but a tool. Therefore, ICT sector creates ICT jobs for specialists who produce ICT, and ICT-intensive users who consume ICT (World Bank, 2013).

In this digital age era, ICT has led to online talent platforms which connecting individuals with work opportunities. In McKinsey Global Institute report (2015), stated potential of online talent platforms could allow as much as 540 million peoples or 10 percent of the working-age population benefited from online talent platforms in 2025. Furthermore, in that report McKinsey Global Institute stated that by 2025 as many as 230 million could find new jobs more quickly, reducing the duration of unemployment, while 200 million who are inactive or employed part time could gain additional hours through freelance platforms. As many as 60 million people could find work that more closely suits their skills or preferences, while an additional 50 million could shift from informal to formal employment.

Not only that, Online talent platforms increase the transparency of the demand for skills, enabling young people to make better educational choices. As for companies, they can use online talent platforms not only to identify and recruit candidates but also to motivate them and improve their productivity once they start work.

Online talent platforms can take the form of websites, mobile apps, or proprietary corporate systems. Online talent platforms can match people and jobs, create marketplace for freelance work, helps firm hire and manage talent, and also reveal trends in demand for skills. McKinsey (2015), define the online talent platforms based on data usage and functionality by three categories:

- Matching individuals with traditional jobs: digital tools that enable users to post full-time or part-time jobs, create online resumes of individuals, search for talent or work opportunities based on extended matching attributes, and provide transparency into company or worker reputations, skills, and other traits. Example platforms from this categori are Careerbuilder, Glassdoor, LinkedIn, etc.

- Online marketplaces for contingent work: digital tools that enable users to connect individuals with contingent or freelance projects or tasks and facilitate transactions by providing transparency on reputation and ratings. Example platforms from this categori such as TaskRabbit, Uber, and 99Designs.

- Talent management: digital tools that enable users to assess candidates' attributes, skills, or fit, personalize onboarding, training, and talent management, optimize team formation and internal matching, and determine the best options for training and skill development. Example platforms from this categori such as PayScale, Pymetrics beta, and ReviewSnap.

III. METHODOLOGY

This study aims to provide a description of the use of ICT by community with collecting data and information to get an overall picture of the use of ICT in providing job opportunities in Desa Kaliabu. Based on these goals, this research uses a qualitative approach. In addition, this study describes in depth the conditions that occured in the field based on data, facts and information that focuses on the observation of the use of ICT in Desa Kaliabu. Therefore, this kind of research method used in this research is descriptive study. Descriptive study is a study whose main purpose is to "paint a picture" using words or numbers and to present profiles, classifications, or outline steps to answer questions such as who, when, where, and how (Neuman, 2014). Data collection techniques used in this research are literature review, observation, and interview. In-depth interviews, purposive sampling used as informant selection technique. Based on this technique selected

twentytwo informants, consisting of government officials, community and religious leaders, as well as the community who involved in used of ICT and become logo designer.

IV. JOB OPPORTUNITIES THROUGH ICT: LOGO DESIGNER DESA KALIABU, CENTRAL JAVA

Desa Kaliabu, Central Java has a population of 3,978 peoples divided into 1038 households. (BPS, 2016) Most of the population included in the labor force age group, 2,633 peoples. The amount of the labor force age group become a challenge for the government to meet the availability of jobs in Desa Kaliabu. The majority of the population more work as labour, farmer, construction workers, and craftsman of brown sugar. However, in recent years emerged a new profession in this village as logo designer.

In 2010, the villagers were introduced on new profession through open access to the internet. The existence of a internet cafe become the initial deployment of this profession. By utilizing the online talent platform which enable villagers to connect with freelance projects and graphic design software raises job as logo designer. Limitations in education did not dampen the ability of people to change try the job as logo designer. Their educational background, whether elementary school or university, all flocked to try a chance to be a logo designer. Difficulties in learning to take the job, successfully conquered after feeling the results. As experienced by AB who is a former bus driver and a high school graduate, it takes three to four months for AB studying graphic design. "After three to four months, finally it had results. But the process is really remarkable, and really incredible struggle. Only two peoples have a computer, the cyber cafe worker and my brother. " (AB, March 2017)

According to AB, the perceived difficulties in addition to not having the tool neither a degree on graphic design, is a language. In the online talent platform, the language used to communicate is English. Which is not their mother tounge language. Nevertheless, AB can overcome these difficulties by utilizing the translator application, google translate. At the beginning tried to design a logo, AB is still working as a bus driver. Until, after approximately two years doing part-time as logo designer he decided to focus on it. "Yes, I was still bus driver at that time until 2013. At that time, I was thinking of everything that is done out of focus, the result will not be maximized, I should give my best." (AB, March 2017).

AB decision to focus his profession as a logo designer because this job makes him able to paid for his daughters education fee. While working as a bus driver, AB never thought could afford to send his daughters to university. Before his salary only enough for daily expenses. Different from AB, MJ choose works as logo designer after being laid off. Logo designer become a solution for MJ who have lost his job. He admitted being involved as logo designer after was introduced

by his friends. MJ educational background is high school graduate, it took eight to nine months for him to learn before he felt the results from logo design. Indeed, this logo design work does not provide a fixed monthly income by reason of job system offered in the form of the contest. Thus, both AB and MJ have to compete to win the contest and get the results of their work. Nevertheles, this doesn't make them quit as a logo designer.

In the process of learning to this day after taking the profession as a logo designer, MJ also admitted language is the greatest difficulty in carrying out this work. Communication with the client that is almost all in English, making it sometimes difficult to capture the intent of the work presented. He never thought to take college on English majors in order to improve his capabilities and maximize the work, but did not do due lack of time. Therefore, nowdays MJ only rely on a translator application, google translate to support his communication with the client.

The chance of getting a job through the logo design, it is also not wasted by IBN. With his background as a junior school graduate, IBN is only able to work odd jobs as farm labor and construction worker. Therefore, when looking at his friend who was working as logo designer, IBN was keen to try it. After two weeks of self-taught learning, IBN finally managed to win a contest. From these result, IBN used it to buy a computer because before he used his friend computer for working. Although he has declared as a logo designer, IBN did not leave his job as a labor and construction worker. At noon, IBN will work as a labor, but when the night he will begin to design. "... my work during the day is a construction worker, and at the night I will start design. Because I am easily get bored if only focused on design, so I still take the job at the constraction." (IBN, March 2017)

The spread of logo designer profession in Kaliabu has an effect on the decreasing of youth who wander looking for job outside the village. In fact, many of the youth who previously fared in big cities like Magelang, Yogyakarta, and Jakarta returned to their villages to pursue work as a logo designer. As experienced by AJ. AJ previously working at waiters in Yogyakarta, but after knowing that his little brother can make a money just after he graduate high school, AJ decided to comeback to Kaliabu and learning to designing a logo with his brother. Now, he and his brother become logo designer, even his brother, RN can afford paid his college tuition fee from working as logo designer. There is another youth like AJ that decided to comeback and working as logo designer, as stated by KYM that the decline of youths who wandered out of the village due to job opportunities that could improve their economies. "Yes, the economy increases, if I observe the youth do not go anywhere, i.e to Jakarta, before many of youth decided to out of the village, out to Jakarta. Nowdays is not because there is this profession." (KYM, March 2017).

In doing their work as logo designer, people usually make their own work space that they provide specifically in their home. Privacy in the design and

quietness is the reason they made the space. However, not all of them provide special room, they also using their bedroom as their work place. The opportunity to work from home is also the reason many villagers take this job opportunity. Some of them also claimed if the logo designer's profession has increased their quality time with family so the attention given to the family becomes more. As experienced by AB who previously worked as a driver felt after He changed profession as a logo designer He became more able to pay attention to both daughters especially pay attention to their education. In fact, AB confessed in seeing his differences before switching professions as a logo designer can be compared from them. When confessing this, he claimed to have feelings of guilt for his first child because he felt not maximally pay attention to his first daughter because the economic situation was not as good as he felt now, so for his second daughter He can and want to give and provide her the maximum education.

The existence of logo designer profession spread in Desa Kaliabu because of the social network of people who are still tight in this village. The large number of unemployed youth in the village makes the opportunity to become a logo designer utilized by all communities. Still the preservation of cultural gathering as well as the norms of society that do not distinguish one another by social status and the desire to help each other and want to share knowledge also became the cause of the logo designer profession among the village youth. However, not only the men who took the opportunity to be logo designer, women also interested to learn. MO is one of them.

In 2016, MO are interested in learning design after watch her friends who have felt the results of the work of the logo designer. MO is junior high school graduate who only lived with her father since her mother left for work in Jakarta several years ago. Her daily activities are only to help her father to do household work, made her interested in getting income from work as a logo designer. Her father is a craftman of brown sugar. According to MO, income from selling brown is little and it takes almost two days until the brown sugar can be sold. Indeed, there is not much job opportunities in the village especially for a woman. Thus, the opportunities to work as logo designer help MO in order to support her parents financially. Besides MO, there is MN who is a housewife that ever experienced to work as logo designer. Since 2014, she has been involved in this work and has been often feel the results. However, after giving birth to her second child, she put an end to design activities.

The presence of the two women who were involved as logo designer proves that online work is able to provide access for anyone regardless of their background and gender. They have the same opportunity when competing to win a contest. Not only women who felt the job opportunities from this, people with disabilities like AG also able to get a chance to work as logo designer. AG has physical disability, he cannot use his right hand, so that in operating computer primarily

using the mouse he used his left hand. Still, it's also not discourage his desire to work as logo designer. Nowadays, AG is still learning to improve his skills on graphic design and look for other things he can do through an online job.

Opportunities that provided through online jobs, designer logo, enable to decrase unemployment in Desa Kaliabu. According to KDS unemployment in the Desa Kaliabu can be said is zero. When there are people who do not have a job, they would start to learning graphic design. The decrease of the number of unemployement has also influenced the decrease in crime in Desa Kaliabu. "Previously here, many of youth hang out in the street, getting drunk. Since, there is activity on logo design, youth spend most of their time in home working. Theft also decrease because at night a lot of people still awake doing their work so it made thief afraid to come." (KDS, March 2017)

The existence of job as logo designer also made opportunities to open a business. Businesses that previously did not exist in Desa Kaliabu now become available. One of them is 'MTC Computer' owned by ASB. A large number of designer logo in Desa Kaliabu who using a computer, made ASB open his computer store. Along with his two friends, ASBB make 'MTC Computer' as one of reliable computer store in the village. ASB who does have a degree in computer engineering, worked at computer store in the city. After logo designer become a massive profession in Desa Kaliabu, he decided to come home and open his own store. Nowdays, people does not need to go to the city to service or buying computer tools, they can rely their needs with ASB. Not only 'MTC Computer' that provide designer needs, small coffee shop which call 'angkringan' also exist after logo designer become one of the most popular job in Desa Kaliabu. There is three 'angkringan' in Desa Kaliabu, which will usually begin to open in the evening till midnight.

Job as a logo designer at Desa Kaliabu be an evidence that there is effective ICT utilization by the community. Not only do the use of the Internet but also has the expertise to operate computer software. The effectiveness of the use of ICT is also a form of had done the proper use of the information by community. ICT is not only used for communication but it has made them sell their own creation, in this case is logo. Despite the emergence of professional logo designers have a positive impact in Desa Kaliabu, there is concerned that the existence of this profession makes people would neglect the natural potential of the village. Community especially youth no longer wants to be a craftsman of sugar brown. As disclosed by IM (craftswomen of brown sugar). "If everyone works as a designer, later the farm here will be ignored. No one wants to working as a farmer nor craftman of brown sugar. But before design, the youth already have not interested work at the farm." (IM, March 2017)

Regarding the youth who was not willing to work on the farm was admitted by MJ, but he denied that there is will be no one working at the farm. According to

him, it will generate job for others because youth who have a farm from their parents could afford to paid for other people to work at their farm. Other than that, there is concerned regard sustainable of logo designer jobs. Number of rival in this job getting larger every day, so its hard to maintain to get a constant result every month. In dealing with this case, some of them have already started to spread to find other opportunities to do from online jobs, such as web design.

V. CONCLUSION

ICT utilization in Desa Kaliabu has created employment opportunities by enabling rural communities gain access to an online job. The existence of job as a logo designer is providing proves to the creation of the economy using local resources especially the local human resources. The villagers who were considered to be far behind the people of the city, was able to find opportunities to participate in development through opportunities to get a job online by being a logo designer. Despite their backgrounds were not in accordance with the graphic design world, they managed to improve the economy for themselves even participate in development for the village. Thus, this is showed that ICT utilization escpecially form online talent platforms can have impact on decresing unemployment.

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