

ARTICLE

DETERMINING THE EFFECT OF DIGITAL TECHNOLOGY ON POVERTY ALLEVIATION AND REDUCTION IN LENDING RATES

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ABSTRACT

There are various increased efforts to reduce poverty all over the world. This is because there is need to improve the living condition of people as well as better their economic status. One of the reasons for this is that development cannot be achieved within societies which lack primary essentials and necessities. As a result, the individual needs of the people have to be catered for first before developing the world. The need for poverty alleviation can also be viewed from the developed world where economic progress is high because individuals are able to live quality lifestyles. The current level of improvement in the world can be associated with technology in various aspects. Therefore, it is possible that technology can have an effect on the level of poverty at the moment. This is interconnected with the lending rates in that a decline in interest rates will increase income and in turn will reduce poverty. However, the decline in interest rates is not related to communications technology. In-depth interviews provide information that microfinance institution customers still need assistance in running their business, related to low knowledge and innovation levels. Since credit interest rates also include institutional overhead costs, it is difficult for these microfinance institutions to reduce their interest rates regardless of the communications technology applied. Therefore, the results explained in this paper explain the effect of digital technology on poverty alleviation and reduction in lending rates.

INTRODUCTION

The term digital technology refers to features and processes of technology which influence particular design decisions of digital systems and how various digital systems can be used [1]. Primary, digital technology is an aspect of technology that deals with special enhanced technological systems mind devices. It is among the highest levels of technology at the moment. Digital technology emerged in the early part of the 21st century as are reference to improved technologies [2]. The emergence was primarily visible in communication devices which could ease human and machine interactions. The first devices used were communication devices such as mobile phones and computers. Since their first introduction, digital technology has been improving steadily, a factor that has enabled it to be incorporated in various production as well as world processes.

Regarding business, digital technology has a variety of uses which have appreciated over time [3]. On the other hand, lending rates refer to the levels of interests that are charged on borrowed loans. Primarily, interest rates encourage or discourage borrowing by individuals or organizations because they offer a projection of the total amount that person will be required to pay in the end [4]. In this regard, low lending rates encourage borrowing by individuals as they will incur reduced interest at the end while high-interest rates discourage borrowing as potential borrowers shy away from incurring high interest that will translate into a high amount to be paid in the end [5]. Lastly, poverty refers to a state of having insufficient primary wants. In this regard, the existence of poverty is influenced by various external factors one of which is financial ability. In this regard, lack of accessibility to finance and related services might lead to the inability to acquire primary human wants which translates into being poor [6].

There is an enhanced penetration of technology in various parts of the world from the poor areas to the rich societies. The effect of this has been a variation in the mindset of individuals regarding how certain activities can be carried out. One of the areas which technology is widely spread is in communication. It is currently easy to the community thanks to the variety of communication devices that are available at the moment [7]. For instance, mobile phones are easily available and are becoming more of a necessity and not luxury. Moreover, factors such as wireless technology have enabled individuals to reduce the boundaries of communication using various portable communication devices. There is a large penetration of computers in the society in which case many individuals are able to access them, use them as well as manage to explore the internet [8]. In the same way, businesses have utilized digital technology in carrying out various practices. Aside from communication, digital technology simplifies various business practises [9]. Similarly, digital technology thus has the potential to change the financial services in two major aspects. Firstly, digital technology has the possibility to reduce the cost of loan processing. This relates to borrowing or advancing finances to individuals thereby enhancing penetration of financial services to remote areas [8]. This is because of the ability to simplify communication in many areas without regarding the existing sovereign or geographical boundaries.

Technology has the ability to reduce technology by incorporating it in activities which enhance the ability of individuals to access better incomes as well as financial ability. One of the primary ways through which this can be achieved is enhancing the conditions related to financial borrowing [10]. Ideally, this resonates around lending rates. Using credit to alleviate poverty is referred to as Credit-based poverty reduction. However, in using this technique to reduce poverty, chieftain conditions have to be met. These includes limiting the maximum credit tours \$ 5m, issuing a credit period of 12 months as the maximum period, financing only in groups, meeting the eligibility criteria for borrowing [11]. Technology can play a vital role in credit based poverty eradication practices by simplifying the transactions and relationships. However, it

KEY WORDS

Communication technology, lending rate, micro finance institution, poverty alleviation

Received: 1 May 2017
Accepted: 02 June 2017
Published: 12 Aug 2017

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cannot directly, reduce or decrease lending rate because for small entrepreneurs the need is assistance, where the cost is quite high because it must be face to face and cannot be overcome with technology [12].

MATERIALS AND METHODS

This study utilized a descriptive study design. This is because the amount of data required was diverse. This can be well understood if it is obtained over a large area. The reason for this is because poverty has affected many societies all over the world [13]. Also, the research has many hypotheses that has to be tested as listed below.

Research strategy

This study uses a quantitative method approach to collecting data generated from field survey aimed to gauge how the effect or impact of digital technology on poverty and its effect on reduction in lending rates. This study will test the digital technology as the dependent variable and the dimensions of poverty reduction and reduction in lending rates as the independent variable.

Research hypothesis

This study tested the six hypothesis as follows: H1: Dimensions digital technology (ease of communication, information search effort, and speed information) effect on poverty alleviation and lending rates

H2: Ease of communication effect on poverty alleviation and lending rates

H3: The information search business through digital technology impact on poverty reduction and lending rates

H4: The speed of information through digital technology impact on poverty reduction and lending rates

H5: The decline in mortgage interest rates affects the poverty reduction

H6: Instalment credit's effect on poverty alleviation and lending rates

Population and sample size

The survey used about 250 qualitative information sources that were peer reviewed. Furthermore, the number of respondents targeted by the study was 250. A careful selection of respondents whose views helped explain the issues that were being studied was made, and it helped offer strong in-depth analysis.

Participants

There were both physical respondents as well as the use of already conducted research. The literature provided data from across all sections of the world regarding the current influence of digital technology on poverty and lending rates.

Materials and equipment

The main material used for this research was existing articles and publications on different education curriculums. Moreover, questionnaires were also utilized in getting data from the research participants from different parts of the globe.

Procedure

The survey was conducted in ten districts with the human development index of less than sixty, and each district was represented by one of the villages. Surveillance techniques were used to spreadsheets questions on the financing of the group (group lending) consisting of 5 persons. 250 sheets were distributed to targeted research questions and the returns amounted to 240 sheets. 230 respondents have answered in full and after removing several questionnaires have charging errors, obtained 95% of otherwise valid question sheet.

Data analysis and presentation methods

After the data collection stage, descriptive statistical analysis of the data was used to obtain an overview of the groups of data acquisition survey in each region.

RESULTS

Details of the information sources

The study used secondary sources of data which were mainly already done studies and had to be validated as being peer reviewed by other scholars. Moreover, primary sources of information were also used which included interviews that was carried out on individuals from different regions which have experience or knowledge regarding poverty issues.

Details of the respondents

The following [Table 1] shows the number of targeted respondents were 250. This was seen as an enough figure to use in determining the outcomes of the research to formulate the responses to the research hypothesis.

Table 1: The respondents

Respondents	250
Respondent	240
Not respondent	10
Corrected Responses	230
Respond Percentage	96%

96% of the targeted respondents responded. This was an enough percentage to provide data for the research.

Responses based on Ease of communication.

Over 87.5% of the total respondents felt that ease of communication has a reducing effect on poverty and lending rates.

Responses based on the speed of information through digital technology

Over 84.17% of the total respondents felt that speed of information through digital technology has a reducing effect on poverty and lending rates.

Responses based on decline in mortgage interest rates affect the poverty reduction

Over 93.75% of the total respondents felt that the decline in mortgage interest rates has a reducing effect on poverty reduction.

Responses based on Instalment credit's effect on poverty alleviation and lending rates

Over 89.5% of the total respondents felt that the installments of credit have a reducing effect on poverty reduction.

DISCUSSION

The primary data showed that technology could reduce poverty by leading to more efficient process regarding the accessibility of credit facilities by individuals. Usually, technology and lending rates integrate into each other in reducing poverty under the concept of credit based poverty reduction [14]. Primarily, there is an overwhelming agreement that simplifying communication helps individuals to understand all factors involved in borrowing which makes them make concise credit terms and reduced lending rates.

In the same, information search makes individuals increase their know-how which offers them information on how they can enhance their situations [15]. Subsequently, this transforms into reduced poverty due to increased returns. Regarding lending rates, extensive information search can make individuals access credit facilities that have low-interest rates as compared to the one currently in use [16]. This resembles the speed of information as fast accessibility to information leads to fast borrowing and accessibility to

low-interest credit facilities.

The type of credit extended to borrowers has various characteristics that determine the urge of customers to use them [17]. However, the most significant characteristic is the interest rates. The data show that low interest rates encourage borrowing. Therefore, a decline in mortgage rates lead to high borrowing which enhances the living conditions if individuals. Similarly, low payment installation encourages borrowing.

CONCLUSION

Both results from the primary and secondary data showed that digital technology has an effect on lending rates and poverty eradication. In this study, the chosen region of Indonesia has over 24.7 million people who are poor. These individuals have the following characteristics, the range of poverty rates between regions is too wide, the example of Jakarta 3.7% while the province holds the poor as much as 32% of the total population, Majority of the poor live in rural areas and working in the agricultural sector, Many of the people who moved between the poor become virtually destitute and vice versa. The government utilized poverty eradication techniques seems to have had a little effect. The use of digital technology helps reduce poverty by increasing the chances and borrowing potential of individuals who are poor. The effect on lending rates is not direct but allows individuals to have access to better credit facilities that attract low-interest rates. In the same manner, the increased efficiency as a result of technology leads to reduced cost of operation which could transform into fewer interest rates.

CONFLICT OF INTEREST

No conflict of interest to declare

ACKNOWLEDGEMENTS

Nil

FINANCIAL DISCLOSURE

Self funded

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