

## Perception of beneficiaries towards adoption of e-money in the distribution of social assistance in Indonesia

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### Abstract

Wide access to formal finance for poor households through distribution of social assistance via electronic money (E-money) is believed to accelerate eradication of poverty. We would like to find out the beneficiaries response to this payment method. This aims of this study is to investigate the perception of beneficiaries towards distribution of social assistance through e-money. We surveyed 230 beneficiaries in Jakarta, Cirebon and Pasuruan. The result of research indicates that the perception of PKH beneficiaries related to the cost, benefits and security of e-money is relatively good. However, from the aspect of ease of use and the respondents' desire to use e-money, the perception is quite low.

### Abstrak

Akses yang luas ke pembiayaan formal bagi rumah tangga miskin melalui distribusi bantuan sosial dengan uang elektronik (E-money) diyakini dapat mempercepat pengentasan kemiskinan. Penelitian ini bertujuan untuk mengetahui respon penerima manfaat terhadap metode pembayaran uang elektronik bagi penyaluran bantuan sosial dari pemerintah. Jumlah responden keluarga miskin penerima bantuan sosial sebanyak 230 penerima manfaat yang tersebar di Jakarta, Cirebon dan Pasuruan. Hasil penelitian menunjukkan bahwa persepsi penerima PKH terkait dengan biaya, manfaat dan keamanan e-money relatif baik. Namun, dari aspek kemudahan penggunaan dan keinginan responden untuk menggunakan e-money memiliki persepsi yang cukup rendah.

### Introduction

In optimizing efforts to eradicate poverty and accelerate full access for the underprivileged, the Government through the National Team for the Acceleration of Poverty Reduction (TNP2K) has changed the system for distributing aids to poor people from previously in-kind or cash to non-cash in the form of electronic money or e-money. E-money is a digital financial service (LKD) that is a part of the National Strategy of Financial Inclusion (SNKI). The community members are given SIM cards which contain electronic money to be used to access the government assistance in the form of health and education assistance, or savings from the government. Through

LKD, the people are no longer restricted by the existence of banks or ATM. They can send funds through their cellular phone (cell phone) and collect cash money through the agent appointed by the bank that saves their funds. Poor families can perform the activities of consumption and savings using the concept of e-money.

Distribution of social assistance through e-money is intended to change the people's behavior from cash transaction to non-cash transaction. Non-cash transaction is believed to give more benefits. Distribution of assistance though e-money is not only more transparent but believed by the Government as more effective, more efficient and can promote the national program of financial inclusion. On the other hand,

the characteristics of the beneficiaries who are in general of low education and are not accustomed to carrying out electronic transactions create a fear of the program's low effectiveness. Singh (1999) maintains that the effectiveness of electronic money policy is highly influenced by the way the consumers see and use *e-money*. The better the peoples' perception, the higher the participation level of poor people in the use of *e-money*.

This research is aimed at investigating the perception of the beneficiaries towards the benefits, cost, security, convenience, trust and desire to adopt e-money in the distribution of social assistance. Specifically, the research questions to be answered are a) What is the perception of the beneficiaries towards the adoption of e-money in the distribution of assistance in the three regions?; b) Is the perception of the beneficiaries in the regions significantly different one to another?

Indonesia is the country with very high potency of e-money use that can be seen from its use which increases every year as in Table 1. The transaction volume in using e-money has even exceeded the volume of transactions using credit cards as a payment method in year 2015. This indicates that E-money at present has become a very popular payment method in Indonesia, although the volume is lower than the transactions using debit card/ATMs. This is

different from other countries such as Singapore, where cash transactions are increasingly smaller in volume and replaced by the instruments such as e-money.

Despite increasingly wider use of e-money in Indonesia, several studies show fears in the adoption of e-money. One thing that hampers use of e-money in Indonesia is the fact that the people have yet to feel the benefit of the e-money (Hidayanto, et. al, 2015). In many other countries, the factor of perception of security risk is the main hindrance (Martins et al, 2014; -Cabanillas et al, 2014). The result of study conducted by Mowat and Harrabin (2013) on use of e-money in Brazil, UK, Indonesia and US also indicates that the e-money system is felt unsafe compared to other methods of payment. In addition, other factors that still hamper use of the system are low knowledge of Indonesians on the function and method how to use the instrument of electronic money. Meanwhile electronic money has several pluses compared to other methods, one of which is this electronic money can increase speed in transaction; hence the process of payment transaction is more efficient. Another plus is electronic money is more comfortable to use (Chiu and Wong, 2014). In addition, electronic money which is mobile-based can be used anywhere any time without having to carry a lot of money.

**Table 1:** Comparison of transactions using debit cards/ATMs, credit cards and e-money

Type	Period	2010	2011	2012	2013	2014	2015 *
<b>Debit Card</b>	Volume	1,812,075,881	2,262,299,433	2,824,108,310	3,461,149,865	4,077,696,164	2,987,712,691
	Nominal	2,001,853,202	2,477,041,450	3,065,080,042	3,797,370,438	4,445,073,437	3,197,244,311
<b>Credit Card</b>	Volume	199,036,427	209,352,197	221,579,851	239,098,519	254,320,061	183,939,023
	Nominal	163,208,491	182,602,331	201,840,736	223,369,577	255,057,458	184,831,460
<b>E-Money</b>	Volume	26,541,982	41,060,149	100,623,916	137,900,779	203,369,990	341,959,178
	Nominal	693,467	981,297	1,971,550	2,907,432	3,319,556	3,468,938

Nominal in Rp million, Volume in unit of transactions, \*Data up to August 2015

Source : (<http://www.tmoney.co.id/news/asia-dilanda-trend-e-money-part-2>).

Related there to, Bank Indonesia has launched various programs to educate the people to become less cash society. Dissemination has been carried out in various regions among others Aceh, Ambon, Surabaya, Makassar, and Banjarmasin. One of the technologies discussed is mobile-based electronic money technology by considering the demography of the users of the mobile devices in Indonesia which is large in number with penetration reaching all parts of Indonesia. In future, the government expects that the users of e-money are not only people living in large cities but also people living in all corners of Indonesia, including those with low economic level who all this time have not been touched by conventional banking system.

The Indonesian Government has a program for mitigating poverty, one of the strategies of which is by providing social assistance as an effort to reduce the expenditure burden of poor community. The Program of social assistance includes among others the Family of Hope Program (PKH). PKH is a social protection program through granting of cash money to Very Poor Families (KSM). This social assistance has the purpose to help very poor groups in fulfilling their needs for education and health, and increase consumption expenditures. In this Family of Hope program, in addition to receiving cash fund, the participants will also get access to health and education services. In addition, the PKH Participants will be included in other social assistance programs (Jamkesmas, BSM, Raskin, Kube, BLSM).

The criteria of poor families that are eligible to receive PKH assistance is families with children of 0-6 years old, or have children under 18 years old that have yet to complete his/her primary education, or families that have expecting women or women under postpartum period. Every family that is the PKH beneficiaries must fulfill its obligation in the financial sector, such as never missing school sessions and

routinely checking health condition in community health centers for children under 5 years old, and pregnant women. This is the condition to be eligible for receiving the aids in full. If the condition is not met, there is a penalty that may cut the amount of assistance received. PKH is expected to change the behavior of very poor families to check their pregnant mothers/postpartum women/children under five years old to the health facilities and send their children to school.

The beneficiaries in the PKH program are married women or adult women who take care of children in their families. In the absence of married women the beneficiaries are the adult older sister. The mechanism for PKH payment is by providing PKH participant cards to the beneficiaries. As an evidence of participation in the PKH, the families are to be given PKH participant cards, and the names included on the cards are the beneficiaries'. The parties entitled to collect the payment are those whose names are included in the PKH cards not his/her representatives. The assistance fund can be collected at the nearest Post Office or banks (BRI).

Bank Indonesia launches a breakthrough in cooperation with the Ministry of Social Affairs in the distribution of assistance in the Family of Hope Program (PKH). For the initial stage, the assistance distribution using electronic money is given to 3,000 family heads. Each family head will receive Rp600,000 for three months. This program will be put on trial on September 17, 2014 in five provinces, among others, Jakarta, West Java, East Java, and East Nusa Tenggara. The participants in the PKH are chosen from the beneficiaries that have participated in the program since 2007. This is performed with assumption that the participants have used the conventional method in receiving assistance through post offices. Hence, based on this trial, we can analyze the advantages and disadvantages of this distribution program

via e-money. In addition, the trial is carried out for the last payment, or the 3rd, and 4<sup>th</sup> months out of 4 payments in one year, namely year 2014.

The transfer mechanism used is by using cellular phone. The number of cellular phone will be the account identity of the beneficiary of PKH social assistance fund. After receiving notification of the fund, the beneficiary may visit the Digital Financial Institution (LKD) by showing the SMS notification or cell phone number to disburse or collect the assistance fund. From the side of banking business, LKD may save the bank cost because they do not have to open branch offices. LKD is the extension of the bank to do the transaction of withdrawal and saving of money by the PKH participants. When a beneficiary withdraws fund in the LKD, the LKD account in the relevant bank will be debited and the account of the customer will be credited.

All this time, distribution of the social assistance (bansos) fund has been performed through bank (Bank Rakyat Indonesia) and PT Pos Indonesia. Under this cash transfer mechanism, the beneficiary of bansos fund must visit the nearest BRI branch office or the nearest branch office of PT Pos Indonesia. For some beneficiaries who live in remote areas must oftentimes spend great deal of time and cost to reach that office. Even in some cases, as Indonesia's condition consists of islands, some beneficiaries must use boat to cross the sea or the PKH worker must come to their area carrying cash money. This of course makes the issue of security as one of factors that must be considered because they have to travel far carrying large amount of money.

The existing PKH Program will then be used to carry out trial in the distribution of e-money. The transfer mechanism used is by using cellular phones. Increasing use of cellular telephones and its access that reaches more and more remote areas make cellular phones as an alternative for payment. Under this mechanism, the num-

ber of cellular phones will become the identity of the beneficiary of Bansos fund. In other words, cellphone number is the account number of the Bansos beneficiary.

However, the program of PKH distribution carried out by the government is still under trial. There are several factors that need to be improved both from the aspect of the service providers such as BI as the regulator, banks and telecommunication companies that provide such service, or from the PKH participants. For example, in the trial, the telecommunication company was not directly involved. This is because under Bank Indonesia Regulation, distribution of social assistance may only be performed by banks and post offices. Meanwhile telecommunication companies have product of e-money service, and can actually be involved directly. As a result, during the trial the participants received cards that must always be recharged in order to extend their active period. In addition, in the trial, 3G signal is required to send data for transaction process.

Another thing that poses problem is the preparedness of the participants in the program. They particularly face problem in adapting to new technology. In addition, as telecommunication companies are not fully involved, the participants must extend the card to stay active. The participants object to this condition that some them discard the SIM cards and do not collect the second transfer assistance. Despite several problems, the positive aspect that is felt by the participants is that they feel comfortable with near LKB location and the assistance that they can collect anytime. It is different from the conventional methods in which the participants must walk to the Post Office, and only on one certain day.

## Methods

We conducted research on the PKH beneficiaries participating in the trial of distribution of social assistance through e-money in 2014. As many as 230 respondents were

surveyed to find out their perception of the implementation of e-money. 34.78 percent of the respondents or 80 respondents are from Dukupuntang District in Cirebon Regency, 39.13 percent are from the Districts of Koja and Cilincing in DKI Jakarta (91 respondents) and the remaining 26.09 percent are from Beji District, Pasuruan Regency(60 respondents).

The use of e-money is influenced by several factors: security (Ming-Yen, et al, 2013; Owusu-Dankwa et al, 2014), trust (Ming-Yen, et al, 2013), ease of transaction (Owusu-Dankwa et al, 2014). Study Amoruso and Watanabe (2011) states the factors that influence the use of e-money is the adaptability of the user, the level of consumer acceptance of new means to pay; level of usability means to pay, the behavior of the use, support facilities, profit-loss means to pay, the level of security, social influence, confidence in the service providers the means to pay, the desire to use, the possibility of losses, the appeal of a new use of the means to pay.

In this study we examine the five indicators Perceptions ( $j = 1, \dots, 5$ ) namely:

a. Perceived Cost

The aspects of costs inquired to the beneficiaries include all the expenses incurred in using e-money to collect assistance fund. There are 4 cost indicators asked namely Transportation cost incurred in collecting the assistance fund at LKD; Cost for activating SIM card; Cost for arranging for lost card; and Other additional costs.

The lower the cost incurred in collecting the assistance fund using the e-money system relatively compared to using the previous system (through post office), the higher the perception score. The cheaper or the lower the cost for activating cards, the cost for arranging for lost cards, the higher the perception score. The same holds true if there are no additional costs in the use of e-

money, the perception score will be high.

b. Perceived benefit

The beneficiaries were inquired of their perception of the benefit of distribution of assistance fund using the e-money system compared to through the post office. The perception of benefit is measured using 4 indicators namely ease of use; convenience; effectiveness; and efficiency

If distribution of assistance fund through the e-money system is felt easier, more convenient, more effective and more efficient compared to through the post office, then the score of beneficiaries' perception is high.

c. Perceived security

There are 4 indicators inquired that can represent the perception of security namely Security in storing or saving money using e-money; Security of fund although the SIM card is lost; Security in doing transactions through cell phone; and Security from abuse of fund.

If a beneficiary feels safe saving money in the e-money, feels secure in doing financial transactions using Cell phone, feels certain there will be no abuse of assistance fund under the e-money system, then the perception score will be high.

d. Perceived Ease of Use

Ease of use is measured from 3 indicators namely Easiness to find places for collecting assistance; Convenience in using Cell phone for SMS banking; and Easiness in obtaining help for doing e-money transaction.

If a beneficiary feels it easy to find places for collecting the assistance fund, using cell phone for SMS banking and obtaining help for doing e-money transaction, then the perception score will be high.

e. Perceived desire (behavioral intention)

This part will observe the desire of the beneficiaries to use e-money. There are 3 indicators namely The desire to use e-money if the program of distribution of assistance fund through e-money is continued; The desire to ask the people around to use e-money; and The desire to support the government in adopting the e-money system.

If a beneficiary intends to use e-money, ask the people around him/her to use e-money and support the e-money program, then the perception score will be high. The perception score ranges between 1 to 6. Score 1 denotes strongly disagree (STS), 2 Disagree (TS), 3 Somewhat disagree (ATS), 4 Somewhat agree (AS), 5 agree (S), 6 strongly agree (ST).

The methods used to answer the research questions are as follows:

a. Analysis of mean

The analysis of mean is to compare the perception of the beneficiaries inter regions. We compare the mean of perception indicators based on the type of perception and region.

$$\bar{X}_{ijmp} = \frac{\sum_{i=1}^n X_{jp}}{n}$$

Where  $i$  is respondent  $1, \dots, n$ ,  $j$  is the type of perception,  $m$  is the indicator of  $j$  type of perception in region  $p$ ,  $\bar{X}$  is the mean of the perception scores.

b. Test of hypothesis on differences of mean

This is to test whether the average perception of respondents across regions is different significantly. The hypothesis tested is as follows:

i. Hypothesis on Perceived Cost

Ho<sub>11</sub>: the respondents in the three regions have the same perception namely the transportation

cost to collect the assistance fund at LKD is lower than to go to the post office

Ho<sub>12</sub>: the respondents in the three regions have the same perception namely the cost for activating is low in all regions

Ho<sub>13</sub>: the respondents in the three regions have the same perception namely the cost for arranging for lost cards is low.

Ho<sub>14</sub>: the respondents in the three regions have the same perception namely there are no other unwanted costs

ii. Hypothesis on Perceived Benefit

Ho<sub>21</sub>: the respondents in the three regions have the same perception namely payment of assistance through LKD is more comfortable

Ho<sub>22</sub>: the respondents in the three regions have the same perception namely payment of assistance through LKD is more efficient

Ho<sub>23</sub>: the respondents in the three regions have the same perception namely payment of assistance through LKD is more effective

iii. Hypothesis on Perceived Security

Ho<sub>31</sub>: the respondents in the three regions have the same perception namely feeling secure saving their money or setting aside money at LKD/e-money

Ho<sub>32</sub>: the respondents in the three regions have the same perception namely feeling secure even though their SIM card is lost

Ho<sub>33</sub>: the respondents in the three regions have the same perception namely feeling secure doing transactions through cell phones

- Ho<sub>34</sub>: the respondents in the three regions have the same perception namely feeling secure from abuse of assistance fund
- iv. Hypothesis on Perceived ease of use
  - Ho<sub>41</sub>: the respondents in the three regions have the same perception namely feeling it easy to collect the assistance fund through LKD
  - Ho<sub>42</sub>: the respondents in the three regions have the same perception namely accepting the e-money system because they often use cell phones for financial transactions
  - Ho<sub>43</sub>: the respondents in the three regions have the same perception namely accepting the e-money system because easy to understand the features on cell phone
  - Ho<sub>44</sub>: the respondents in the three regions have the same perception namely accepting the e-money system because it is easy to ask others for help
- v. Hypothesis on Perceived Desire
  - Ho<sub>41</sub>: the respondents in the three regions have the same perception namely they will continue using e-money if the PKH program through e-money is continued.
  - Ho<sub>42</sub>: the respondents in the three regions have the same perception namely they will influence others to use e-money

Ho<sub>43</sub>: the respondents in the three regions have the same perception namely advising the government to use e-money for distribution of assistance

We use the Kruskal-Wallis rank sum ( $S_{statistics}$ ) Test to accept or reject the Ho. If the  $KS_{statistics} > Chi\ square\ table_{(-1, \alpha)}$ , where  $k-1$  is the degree of freedom,  $k$  is total regions, then the Ho is reject. This means there is a significant difference in the mean of perception. If the  $K$  is 2 and  $\alpha$  is 0.05 then the score of Chi square table  $(k-1, \alpha) = 5.991$

**Result**

**Perceived cost**

On average, the perception score of all respondents related to the perception of the transportation cost for collecting assistance fund distributed through e-money is 4. This means on average, the respondents deem the transportation cost to collect the assistance fund through e-money is relatively lower compared to the transportation cost to collect the assistance fund to the post office. Nevertheless, there is a variation among regions. On average, the perception of respondents in Cirebon Regency is 3, while in Pasuruan Regency and DKI Jakarta is respectively 4. By observing the average score we can say that on average, the respondents in Cirebon tend to consider that the transportation cost is rather expensive, while the respondents in Pasuruan Regency and Jakarta tend to deem the cost rather cheap.

**Table 2: Average Perceived Cost**

Region	Perception*			
	Transportation cost for e-money cheap	Activation cost cheap	Cost for lost card cheap	No other unwanted costs
Cirebon	3	3	4	5
Jakarta	4	3	4	4
Pasuruan	4	2	2	2
Total	4	3	3	4

\*rounding up for the score with the decimal of over 0.5, and rounding down for the score with the decimal of below 0.5.

**Table 3:** Result of Test on the Hypothesis of Perceived Cost

Hypothesis	K statistics	Chi Square Table	Decision
Ho <sub>11</sub>	25,515	5,991	Reject Ho
Ho <sub>12</sub>	17,896	5,991	Reject Ho
Ho <sub>13</sub>	61,297	5,991	Reject Ho
Ho <sub>14</sub>	70,849	5,991	Reject Ho

On average, the cost for activating cards is deemed rather expensive by all respondents (average total score, 3). Even though there is variation between regions, in which the respondents in Cirebon and Jakarta deem it rather expensive (average score 3). Meanwhile, the respondents in Pasuruan deem the cost for activating cards is indeed expensive. Related to the cost for arranging for lost cards, on average the respondents said the cost is rather expensive (average score 3). However, based on observation across the regions the respondents in Jakarta and Cirebon deem it rather cheap (average score 4) while the average score in Pasuruan is instead low namely 2. This means on average the respondents in Pasuruan Regency deem the cost for arranging for lost cards expensive. The fourth column of perception shows the average perception score related to the absence of other unwanted costs. On average, the respondents in Jakarta and Cirebon agree that there are no unwanted additional costs. However, on average the respondents in Pasuruan Regency deem there are unwanted additional costs.

The cost perception between regions differs significantly. This is indicated in the procedure of Kruskal Wallis (K) test as in Table 3. Table 3 indicates that there is a significant difference in the perception between regions related to the cost indicator. This applies to all cost indicators. For the Hypothesis of Ho<sub>11</sub>, it is apparent that the score of W statistics is greater than 5,991, then the Ho<sub>11</sub> is rejected. This means there is a significant difference in perception between the three regions related to the cost transportation for e-money. The same is the case for Ho<sub>12</sub>, Ho<sub>13</sub>, and

Ho<sub>14</sub>. For the Ho<sub>12</sub> Hypothesis: the perception of the cost for activating cards is cheap, same for each region. The score of W statistics is 17,896 with the degree of freedom of 2. Since the score of W statistics is greater than 5,991, we can say that there is difference in perception of the cost for activating cards for each region. Some regions claim the cost for activating cards is cheap, some others say expensive. Ho<sub>13</sub> Hypothesis: the perception of the cost for lost cards is the same for each region. The score of W statistics is 61,297 with the degree of freedom of 2. Since the score of W statistic is greater than 5,991 we can say that there is a significant difference between perceptions of cost for lost cards in the three regions. There are regions claiming the cost for arranging for lost cards is low and some other regions deem the cost expensive.

### Perceived benefit

As a whole, the respondents in all regions deem distribution of assistance through LKD is less beneficial (score 3) both from the aspects of convenience, effectiveness and efficiency. Despite the case, there is variation between the regions, where in Cirebon Regency, on average the respondents deem payment via LKD is slightly convenient, while the respondents in Jakarta and Pasuruan Regency deem it less convenient. Related to the aspect of efficiency, on average the respondents in all the regions deem payment through LKD is slightly efficient, while related to the aspect of efficiency, on average all the respondents deem it slightly efficient. Nevertheless, the respondents in Pasuruan Regency deem it inefficient.

**Table 4: Average Perceived Benefits**

Regions	Perceived benefit		
	Payment through LKD more convenient	Payment through LKD more effective	Payment through LKD more efficient
Cirebon	4	3	3
Jakarta	2	3	3
Pasuruan	2	3	2
Total	3	3	3

\* rounding up for the score with the decimal of over 0.5 and rounding down for the score with the decimal of below 0.5.

**Table 5: Result of Test on the Hypothesis of Perceived Benefits**

Hypothesis	K statistics	Chi Square Table	Decision
Ho <sub>21</sub>	44,637	5,991	Reject Ho
Ho <sub>22</sub>	79,614	5,991	Reject Ho
Ho <sub>23</sub>	17,876	5,991	Reject Ho
Ho <sub>24</sub>	28,035	5,991	Reject Ho

The perceived benefits among regions differ significantly. This is indicated in the procedure of Kruskal Wallis (K) test as in table 5.

Table 4 indicates significant difference in perception between the regions related to the indicators of benefit. This applies to all indicators of benefit. This means that the respondents in the three regions have different perception related to convenience in payment of assistance through LKD. There is also significant difference in perception related to efficiency and effectiveness in payment of assistance through LKD which is more efficient.

**Perceived security**

Table 6 indicates the perception of respondents related to security. In general, the respondents deem saving or setting aside money in LKD secure (score 4). However, there is variation in perception of security between the regions. On average, the respondents in Cirebon deem it safe and secure to save and set aside money in LKD. Meanwhile, on average the respondents in Jakarta deem it rather secure and in Pasuruan Regency rather insecure.

On average, the respondents deem the fund saved in LKD less secure if the card is lost.

This perception is the same for each region (score 3). Meanwhile, related to security in doing financial transactions using cell phone, on average the respondents deem it insecure. However, there is variation in perception between the regions related to the indicators. On average, the respondents in Cirebon deem it secure (4), Jakarta rather less secure (3), Pasuruan, not secure (2). Related to the perception of no abuse of assistance fund, on average the respondents in all the regions deem the opportunity for abuse is very small (score 4). The respondents in Cirebon and Jakarta said no abuse of assistance fund (respectively score 5), while the respondents in Pasuruan Regency deem the opportunity for abuse is very small.

Table 7 indicates the existence of different perception related to the sense of safety and security in saving money or setting aside money at LKD/e-money, secure feeling when doing transactions using cell phone and secure feeling from abuse of assistance fund in the regions of Cirebon, Jakarta and Pasuruan. However, there is no significant different in perception related to the security of the assistance fund although the SIM card is lost.

**Table 6: Average Perceived Security**

Regions	Perceived Security			
	Saving or setting aside money	fund if card lost	financial transactions using cell phone	no abuse of assistance fund
Cirebon	5	3	4	5
Jakarta	4	3	3	5
Pasuruan	3	3	2	4
Total	4	3	3	4

\* rounding up for the score with the decimal of over 0.5 and rounding down for the score with the decimal of below 0.5.

**Table 7: Result of Test on the Hypothesis of Perceived Security**

Hypothesis	K statistics	Chi Square Table	Decision
Ho <sub>31</sub>	71,781	5,991	Reject Ho
Ho <sub>32</sub>	5,038	5,991	Reject Ho
Ho <sub>33</sub>	41,064	5,991	Reject Ho
Ho <sub>34</sub>	48,492	5,991	Reject Ho

### Perceived ease of use

Table 8 indicates the average perception of ease of use of e-money. On average, all respondents deem it quite easy to find places to collect the assistance funds distributed using e-money. However, the condition between regions quite varies. The respondents in Cirebon Regency and Jakarta deem it easy to find places to collect assistance funds via e-money while in Pasuruan Regency on average they deem it quite difficult to find them.

Nevertheless, the facts that are quite interesting to know are when the respon-

dents were asked of their opinion related to ease of use of cell phone for SMS banking and their understanding of the features of cell phone. It is evident that all respondents in the three regions deem it difficult (score 2). However, when they were asked if they got help from others to operate cell phones, in general the respondents deem it quite difficult to find help to operate cell phones. The Respondents in the regions of Jakarta and Pasuruan on average said that it is difficult. Only the respondents in Cirebon deem it easy to find help.

**Table 8: Average perceived ease of use of e-money**

regions	Perceived ease of use			
	Finding place to collect assistance fund	Using cell phone for SMS banking	Understanding features of cell phone	Receiving help from others
Cirebon	5	2	2	4
Jakarta	5	2	2	3
Pasuruan	3	2	2	3
Total	4	2	2	3

\* rounding up for the score with the decimal of over 0.5 and rounding down for the score with the decimal of below 0.5.

**Table 9: Result of Test on the Hypothesis of Perceived ease of use**

Hypothesis	K statistics	Chi Square Table	Decision
Ho <sub>41</sub>	105,354	5,991	Reject Ho
Ho <sub>42</sub>	14,582	5,991	Reject Ho
Ho <sub>43</sub>	28,541	5,991	Reject Ho
Ho <sub>44</sub>	33,628	5,991	Reject Ho

The result of test on the hypothesis shows that the perception of respondents is different from region to region related to the easiness in finding the place for collecting assistance fund, using of cell phones for SMS banking, understanding the features of cell phones and obtaining assistance for doing transactions.

**Perceived desire**

Table 10 indicates the perception of the respondents related to the desire to use e-money. In general, through the 3 indicators inquired, the desire of the respondents to use e-money is still very low. The score of perception related to use of e-money is on average 3 namely less disapproved of using e-money. Based on observation in the regions, the Respondents in Jakarta tend not to use e-money, in Cirebon rather approved of using e-money and in Pasuruan rather disapproved.

If viewed from the efforts of the respondents to ask people around them or other people to use e-money, the perception of the respondents is very low. On average, the respondents in Jakarta and Pasuruan disapprove of asking others to use e-money. Meanwhile, the respondents in Cirebon are rather disapproved of asking oth-

ers. Related to the respondents' supports of the government program, the majority do not support use of e-money in the distribution of social assistance. The Respondents in Jakarta and Pasuruan disapprove use of e-money while the respondents in Cirebon rather disapproved.

The result of test of hypothesis indicates that the perception of the respondents differ between regions both from the aspect of personal desire to use e-money, the desire to ask others to use e-money and the desire to support the government program.

**Conclusion**

The result of research indicates that the perception of PKH beneficiaries related to the cost, benefits and security of e-money is relatively positive. This means that they deem the cost not a significant constraint in the use of e-money. They also deem that the e-money system is beneficial and quite secure as the media to distribute assistance and save funds. However, from the aspect of ease of use and the respondents' desire to use e-money, the perception is quite low. They still deem it difficult using e-money and are not desired to use it.

**Table 10:** Average perceived desire to use e-money

Region	Perceived desire		
	Using e-money	Asking others to use e-money	Supporting the e-money program
Cirebon	4	3	3
Jakarta	2	2	2
Pasuruan	3	2	2
Total	3	2	2

\* rounding up for the score with the decimal of over 0.5 and rounding down for the score with the decimal of below 0.5.

**Table 11:** Result of Test on the Hypothesis of Perceived use of SIM cards (e-money)

Hypothesis	K statistics	Chi Square Table	Decision
Ho <sub>51</sub>	93,128	5,991	Reject Ho
Ho <sub>52</sub>	64,225	5,991	Reject Ho
Ho <sub>53</sub>	66,419	5,991	Reject Ho

PKH recipient's perception of the distribution of aid by e-money generally differ significantly between regions. Each area has a specific perception. The perception of costs, benefits, ease and security in Pasuruan lower than other regions. Another interesting finding was, on average, the recipient of PKH in Jakarta disagree and do not support the use of e-money.

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