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# THE FIRST STEP TOWARDS THE INDEPENDENCE OF THE VISUALLY IMPAIRED IN ENTREPRENEURSHIP

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## ABSTRACT

*Like other members of the community, people with visual impairments also have a need for banking services. However, not all banking services are accessible to them because of their disability, whereas banking services are important for them to start an entrepreneurial business. Therefore, this study aims to map the needs of people with visual impairments in terms of banking services, including aspects of technology assistance. The method used is a descriptive case study, with data collection through questionnaires, interviews, observation, and literacy studies. The results show that government-owned banks are the first choice in opening an account, with the type of transactions carried out in the form of cash withdrawals, transfers, ATMs, SMS banking, banking, debit shopping, multi-payment, and credit purchases. System constraints faced when carrying out these transactions include, among others: weak ATM network, vague navigation buttons, lack of Screen reader facilities at ATM machines, and not all ATMs providing facilities for people with low vision. Service quality can be improved by considering the location of ATMs equipped with ramps, the availability of Screen reader facilities, strengthening ATM signals, additional audio features on ordinary screens and ATM touch screen screens, accessibility of button facilities on ATMs equipped with braille letters, and changing captcha with audio challenge.*

**Keywords:** Entrepreneurship, Banking Services, Disability, Visual Impairment.

## INTRODUCTION

As individuals who have visual impairments, people with visually impaired are aware about the limitations of employment. So, people with visually impaired who follow the rehabilitation program in Wyataguna Bandung tend to choose entrepreneurship, as a job they aspire to. Wyataguna as a special rehabilitation institution for the visually impaired that owned by the government in Indonesia, seeks to provide participants with basic knowledge, training and skills in entrepreneurship. So that the blind can live financially independent. The participants came from various ages, genders, educational backgrounds, and various regions in Indonesia. One known challenge is financial planning and management constraints involving banking services.

Banking services are a basic community needs. Several types of banking facility transactions carried out by the community using banking facilities including savings deposits, taking out cash, making transfers, applying for credit, and paying bills. Banking services make it

easier for people to conduct transactions efficiently in terms of time and energy, and they can take advantage of benefits such as interest.

Previously, banking institutions highlighted their interest rates; now they are competing to attract the interest of prospective customers by prioritizing service quality elements, such as branch offices and easily accessible support facilities, friendly and responsive banking staff, and other excellent services that highlight the element of convenience that will be accepted by the community if they join to become customers of the bank. Therefore, a study states that the majority of bank customers are aware of the benefits of saving money in banks (Malik et al., 2017). The quality of this service is what banks try to highlight in order to attract loyal customers.

However, there are still groups of people whose needs are not fully met by banking services. Among them are people with disabilities. This is illustrated in several studies that are used as references, including one on banking barriers to serving disabled customers (Kasih, 2016) and one on the rights of blind people opening bank accounts, linked to the principle of non-discrimination (Elkas & Ramli, 2016). Research relating to the accessibility of public services focuses on Malang City, East Java (Wirawan, 2007), and disabled access to public transportation as part of daily mobility (Wahyuni et al., 2009).

People with disabilities do need special services that are different from those of the general public. One example is that, when opening a new account, customers are expected to be able to provide a signature on the application form. This is not simple for people with visual impairments. Likewise, a narrow ATM space that customers must enter to conduct transactions is a problem for people who use wheelchairs.

The problems faced by people with disabilities in utilizing banking services should be taken into consideration when designing the service features offered to the public. However, there is a presumption that the number of people with disabilities using banking services is so small that the profits obtained by banks from disabled customers would be relatively insignificant compared to the money and effort that must be invested to adjust banking facilities to meet their needs. Even though there may be no explicit benefits generated from serving disabled customers, disabled customers have the same rights to banking services.

Along with technological developments and stakeholder awareness, banks are beginning to target their services to disabled customers. This is also driven by policies imposed by policymakers at the national level, both in the form of rules issued by Bank Indonesia (BI) and by the Financial Services Authority (OJK). This opens up opportunities for disabled customers to start actively using banking services.

However, there are still some obstacles faced by disabled customers related to banking services, one of which is related to technologies such as ATMs and Internet banking. This obstacle may not have been identified by the bank, nor has it been followed up on due to some technical matters. Therefore, the aim of this study is to simplify the description of the needs of customers with disabilities in banking technology services through mapping the obstacles faced by one type of disability in the community, namely people with visual impairments.

## METHODS

Along with the development of research that carries marginal issues, there are also researches that have a focus on banking services for customers from marginalized groups, including: banking services for marginalized people such as immigrants (Sichtmann & Micevski, 2018), institutional services microfinance for people with disabilities in Kenya (Nasimiyu, 2013),

and ATM accessibility for people with visual impairments (Omari & Zachary, 2013), Accessibility rights in public spaces (Yarfi et al., 2017). while research related to the use of technology for disabilities includes: educational technology (Echenique et al., 2016), library utilization (Kumar & Sanaman, 2013), and the use of screen reader technology (Hafiar et al., 2018).

Based on the results of these studies, it is known that research is needed to uncover the public services needed by people with various disabilities, who deserve equal rights. Therefore, this research seeks to uncover the needs of the blind in terms of public services, namely banking, in order to increase their equality in Indonesia.

Referring to some research results that have been stated in the previous paragraph, the researcher conducts research by taking different perspectives and methods but still within the scope of these topics. This research was conducted using a descriptive case study method, and selected populations from residents of the Wyataguna hostel, which is a national rehabilitation center, for blind persons with disabilities in Indonesia, located at Padjadjaran Street, Bandung City. We used purposive sampling, with a sample of 48 people, and data were collected through questionnaires, semi-structured interviews, observation, and literacy studies. The selected respondents were blind people who were bank customers and had availed themselves of banking services.

## RESULTS

Forty-Eight (48) respondents were high school students who were residents of the dormitory and attended Special Schools of State A (SLBN A), where the school was located in the Wyataguna area. While most of the other respondents were dormitory residents who were continuing their studies at various universities in the Bandung and Cimahi regions, as well as social rehabilitation participants who were held in the formation of social ministries. Therefore, the age range of respondents ranged from 17 to 32 years. Most of the respondents came from outside the city of Bandung, even outside the island of Java, such as Sumatra, Kalimantan, or Maluku. This condition led to the emergence of the need for banking services to receive remittances from families to cover the costs of study and daily needs.

The social and health problems experienced by people with disabilities do not hinder their desire to participate in the business world, so they also need access to microfinance institutions (Nasimiyyu, 2013). Indeed, opportunities exist for people with disabilities to engage in the business world. However, the conditions of people with disabilities might cause banks to deny them business loans (Mersland, 2005). Persons with disabilities often face difficulties to work as employees; as a result, they choose entrepreneurship to support the family economy, for example: opening a small shop, selling retail in the market, or opening an online shop business. For entrepreneurship requires capital costs. These cost loans are somewhat difficult to obtain because of community stereotypes that assess the ability of people with disabilities to return funds. This has become a challenge for persons with disabilities in entrepreneurship. It means, the challenges of entrepreneurship involve cultural, family, social and human capital, and institutional factors (Njaramba et al., 2018).

People with disabilities might also be at a disadvantage due to a lack of education and skills in finance and management, or a lack of collateral (Nasimiyyu, 2013). This factor is often a deterrent to obtaining bank loans. The community stereotype of disability creates a certain assessment of the ability of disability to repay loans.

In an interview session, it was found that there were customers who had disappointments about banking services that imposed double standards-that is, one branch allowed customers with a visual impairment to submit an application for opening an account, but another branch rejected the application for certain reasons. This gives disabled customers a negative perception and makes them reluctant to recommend the bank to others with disabilities. This condition shows that SERVQUAL dimensions significantly affect service quality, which significantly influences brand image and relationship equity. This implies that high service quality will improve brand image and relationship equity (Kurniawan & Sidharta, 2016), including the image of banking institutions in the eyes of the disabled customers they have served.

Another finding from this research is the time span of conducting banking transactions, which ranges from two to three days to once a month. Examples of the banking facilities used can be seen in Table 1.

<b>Table 1</b>
<b>BANKING SERVICES USED</b>
Banking services used
Cash withdrawal
Transfer
ATM
SMS banking
M-banking
Shopping debit
Multi-payment
Purchase credit dormitory
Source: Research data

Based on respondents' answers, cash withdrawals, transfers, and ATMs are facilities that are widely stated as reasons why disabled customers deal with banks. Banks should ensure that their services meet the needs of all their customers, including those with visual impairments.

In cases encountered in the field, not all respondents who have bank accounts apply for ATM facilities, and not all of them access ATMs or use SMS or Internet banking. However, all respondents who use the Internet banking facility decided to choose the bank they used to conduct transactions via ATM, even though they had accounts in several other banks. This means that respondents' trust in ATMs and online banking is in line with customers' trust in the mobile banking system (Chaouali & Hedhli, 2019) offered by a banking institution. This shows that the most vital factor that influences client confidence in the Internet-based banking system is the e-banking system (Skvarciany & Jureviciene, 2017). Therefore, banks should begin to consider investing in electronic payment channels, because in addition to facilitating disability customers to make payment transactions without having to travel, also to maximize profits and enhance performance (Mustapha, 2018).

In addition to the types of transactions carried out and the banking services that are available, a number of other needs were expressed by customers with visual impairments. These are given in Table 2; the majority reveal difficulties when using ATM facilities.

<b>Table 2</b>	
<b>CONSTRAINTS FACED WHEN USING BANKING SERVICES</b>	
<b>System constraints</b>	<b>Personal Constraints</b>
ATM network is weak	Don't know where the features are
The navigation button is less clear	Not familiar with the touch screen
Difficulty finding the menu button	Cannot operate an ATM

There is no screen reader facility at the ATM	English speaking features
ATM button and touchscreen that do not provide audio facilities	Less understanding of instructions given by ATM
Difficult because the touch screen increases the risk of pressing the wrong button	Concerns about mistakes entering a card or PIN
There is no language selection menu	Concern that ATMs will swallow the card
Not all ATMs provide facilities for people with low vision	Concerned that the wrong amount of money would come out of the ATM
Source: Research data	

Table 2 indicates that customers with visual impairments, both those with low vision and those who are totally blind, experience difficulties in accessing banking services. In principle, elements of communication and electronic technology that can be accessed by the public should be equipped with alternative modes of accessibility for users who have disabilities (Mada Assistive Technology Center, 2017). Therefore, an ATM should also be operable by customers with special needs.

Therefore, it is necessary to implement statutory regulations on banking obligations to provide ATM facilities that are accessible for people with disabilities, which should reduce the purchase of ATM systems that are not accessible to disabled people (Omari & Zachary, 2013). If it is possible to develop an ATM that can be integrated with biometric security features, this would simplify the process of identifying disabled customers.

This development is also expected to encourage the establishment of a rule that if a system is offered to customers who do not have visual impairments, it must also be offered to customers who have limited vision (Knisely & Morris, 2013); this is what is meant by equality. Therefore, it is recommended that each new system be created to incorporate accessibility for users with disabilities.

There is a particular concern about the wrong amount of money coming out of the ATM. Visually impaired customers cannot check the denominations and total amount of the money withdrawn. In the case of banknotes for the visually impaired, each country has its own way of dealing with this problem. Therefore, it is hoped that one day a universal solution can be created (Kyrychok, 2018). This is one of the challenges for technology developers tasked with ensuring equality for people with disabilities. The last finding of this research is the expectations of disabled customers for additional facilities, namely:

<b>Table 3</b>
<b>ADDITIONAL EXPECTATIONS FOR BANKING SERVICES</b>
<b>Expected Additional Facilities</b>
Complete the ATM location with a ramp
Provide Screen Reader facilities
Strengthen ATM signals
Add audio features on regular screens and ATM touch screens
Buttons are easier than a touch screen for ATMs
Add braille facilities to the number buttons on the ATM
Change captcha with audio challenge/text
Source: Research data

Uneven ground contour and population density in large cities, such as Bandung, which is the location of the study. Forcing several buildings to add stair facilities as part of the building's

accessibilities. One of the expectations of disabled people with visual impairments is the provision of a ramp to facilitate their accessibility. Accessibility means adapting public places for each individual, including people with disabilities or special needs. For example, ensuring wheelchair users can access public facilities and participate in daily activities (Yarfi et al., 2017). The existence of a ramp not only facilitates customers with visual impairments, but also helps clients who usually use crutches or wheelchairs (Table 3).

Banking reform involves elements that are unique to each country's history, economy, and institutions. This reform is the result of demands to reorient, reposition, and revitalize banking institutions (Ilori & Ajiboye, 2016). People with disabilities claiming their rights as customers will certainly influence the dynamics of banking policies. Therefore, financial institutions including banks must begin to consider cooperation with technology developers to produce innovations that can be aimed at serving customer needs with special specifications. The systemic characteristics of the innovation process are the result of interactions between the complexity of innovation and the ability of innovators to manage innovation (Wonglimpiyarat, 2017), including innovation in the banking sector that is directed and supervised by the government. However, this process is expected to happen in stages considering the bank's ability to implement it, as this type of technology may be expensive. For this reason, this policy must be initiated by government banks with certain assets, and other banks can follow along in stages.

## CONCLUSIONS

The banking services that commonly used are cash withdrawals, transfers, ATMs, SMS banking, Internet banking, online shopping, multi-payment, and credit purchases. There are system constraints faced when carrying out these transactions, including a weak ATM network, the navigation buttons being less clear, difficulty finding menu buttons, no Screen reader facilities at the ATM, ATM buttons and touchscreen that do not provide audio facilities, a touch screen increasing the risk of choosing the wrong thing, not knowing the language selection menu, and not all ATMs providing facilities for people with low vision. As for personal constraints, these included limited knowledge about the location of features at the ATM, unfamiliarity with touch screens, inability to operate ATMs, English-language features, a lack of understanding of the instructions given by ATMs, concerns about incorrectly entering cards or PINS, ATMs swallowing the card, and the wrong amount of money coming out of the ATM. Therefore, to improve and develop service quality, banks must address the location of ATMs equipped with ramps, ensure the availability of Screenreader facilities, strengthen ATM signals, add audio features to ordinary screens and touch screen ATMs, ensure the accessibility of button facilities at braille ATMs, and replace captcha technology with an audio challenge/text.

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