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# Exploring Access to Financial Services by Visually Impaired People

Sam Goundar <sup>1,\*</sup> and Milind Sathye <sup>2</sup>

<sup>1</sup> Department of Information Technology, School of Science and Technology, RMIT University, Hanoi 100000, Vietnam

<sup>2</sup> Department of Banking and Finance, School of Business, University of Canberra, Canberra, ACT 2617, Australia

\* Correspondence: sam.goundar@gmail.com

**Abstract:** Though consumers with vulnerabilities, such as visually impaired or blind and partially sighted people (BPSP), face several marketplace problems and challenges, existing literature provides limited guidance. The present study aims to examine the issues faced by BPSP in accessing financial services in Fiji. The study is grounded in the digital divide literature and reports that BPSP do face many hurdles in accessing financial services. We suggest that appropriate policies and industry initiatives could help mitigate the severe vulnerability faced by this cohort of the population in Fiji. We envisage that similar studies in other developing countries are required on an urgent basis to understand the international ramifications of the problem.

**Keywords:** financial inclusion; financial development; financial services; digital banking; digital access; digital divide; disability ICT; visually impaired digital banking access



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## 1. Introduction

Though several researchers such as (Anderson et al. 2013), identified the marketplace problems and challenges that consumers with vulnerabilities face, few studies have actually offered solutions to these issues so as to ensure equal opportunity for all. Raja (2016, p. 5) notes “over a billion people globally, approximately 15 per cent of the world’s population, have disabilities and 80 per cent of them live in developing countries (WHO and World Bank 2011)”.

Financial institutions play a pivotal role in providing access to financial services to the unbanked and this is typically lacking in developing countries (Zequiraj et al. 2022). The issue becomes particularly critical for a small Pacific island country such as Fiji, given that it is a conglomerate of over 300 islands of which about 100 are inhabited. Reaching out to people spread far and wide across these islands is a major issue. “Expanding access to basic financial services for the poor and underprivileged population has become a policy priority globally to reduce poverty and increase economic growth” (Xu 2020, p. 1). According to UNESCAP, an estimated 17% of people or 1.708 million persons with disabilities live in the Pacific. Ozturk and Ullah (2022, p. 1) recommend that policy makers should formulate “policies that improve digital financial inclusion in order to achieve economic performance and environmental sustainability”.

Sustainable development requires that the needs of all sections of the society are properly addressed. Since people with disabilities are particularly vulnerable, it is important that development goals include special provisions for such sections of the population (Barykin et al. 2022a, 2022b; Candila et al. 2021). Moiseev et al. (2021) examines the issues relating to financial inclusion from a credit risk perspective. Mikhaylov (2021) emphasizes the advantages of digitalisation and its contribution to overall development and in particular that of vulnerable groups.

From the above literature one can conclude that difficulties of physical accessibility and social attitudes exclude people with disabilities from community life. As per the Pacific Disability Forum (PDF n.d.) less than 10% of children with disabilities in the region attend school, compared to 70% of children without disabilities. According to the International Labour Organization (ILO 2016), the rate of unemployment of persons with a disability in the Asia-Pacific region ranges from 50% to 90%. Digital solutions are a way to overcome some of the barriers commonly faced (Shen et al. 2021; Pradhan et al. 2021). Though Fiji has established a National Council for Disabled Persons and prepared a 10-year plan for 2008–2018, the extent to which it has helped resolve the problems faced by people with disabilities has remained unexplored so far. People with disabilities are a sub-set of consumers with vulnerabilities. The latter includes, besides disability, those people who become vulnerable due to old age, lack of education, limited income, or being part of a racial or ethnic minority (Andreasen 1975).

Against the above background, this study has three aims: to examine (a) the digital solutions available at present in Fiji for people with disabilities; (b) the gap between the needs for and the supply of digital solutions; and (c) the role of relevant service organisations, people, systems, and policies with particular focus on the blind and the partially sighted. Due to resource constraints, the present study is restricted to the blind and the partially sighted people (a sub-set of people with disabilities).

The present study seeks to understand the relationship between disability status of the visually impaired and their access to and use of digital services. It also seeks to understand the ways service organisations (providers of services), people, systems, and policies in Fiji have helped solve problems of blind and partially sighted people (BPSP).

Academic research in this area is still at a nascent stage and studies, in the Pacific islands in particular, are limited. A small island country like Fiji provides a good context to examine these issues and could be considered representative of the entirety of Pacific island countries, hence our choice fell on Fiji. As already indicated, the scope of the study is limited to digital solutions for the blind and partially sighted people in the Fiji Islands only given the resource constraints.

The paper is organised as follows: Section 2 provides information about the Fijian context, Section 3 reviews the literature, Section 4 is about the data and method, Section 5 is about analysis and results, Section 6 is discussion and Section 7 concludes.

## 2. The Fijian Context

Fiji is a Pacific island country with a population of about 900,000. Pacific islands, including Fiji, often face climate change and disaster-related issues. Fiji consists of 330 islands of which only one-third are permanently inhabited. It used to be a British colony and became independent in 1970.

Fiji's per capita income has been estimated at above USD 4000. About one third of the population is poor, both in rural and urban areas. Fiji has a stock market and six commercial banks. The Fiji Society for the Blind is a non-governmental organisation that caters to the needs of its members.

## 3. Literature Review

As per the JICA (2002, p. 4)<sup>1</sup> the term “disability” means the loss or limitation of opportunities to take part in community life on equal terms with others. The Fiji National Council of Disabled Persons (FNCDP) uses the United Nations (UN) definition of disability as stated below: “Disability summarizes a great number of different functional limitations occurring in any population in any country of the world. People may be disabled by physical, intellectual, or sensory impairment, medical conditions or mental illness. Such impairments, conditions or illnesses may be permanent or transitory in nature” (FNCDP 2008).

This study is grounded in the literature on digital divide. According to the OECD (2001) the divide in the digital access of individuals within families, within companies, or

within regions is considered digital divide. It refers to the gap in accessing or using ICT services which leads to a socioeconomic imbalance notes the Korean Digital Divide Closing Act (2001). Park (2002) asserts that it encompasses both access to and usage of ICT.

However, digital divide is not just an issue of access to and usage of technology. It potentially creates or worsens the social stratification (Dobrinsky and Hargittai 2006; Van Deursen and Van Dijk 2014). Digital divide results in the creation of two classes: the information rich and the information poor (Hwang et al. 2019).

Prior studies have identified factors that increase the digital divide especially amongst people with disabilities. These factors include socio-economic conditions, usability of technology, people's motivation to use technology, and their readiness to accept new technologies (DiMaggio et al. 2004; Hargittai and Hinnant 2008; Van Deursen and Van Dijk 2011, 2014). Some additional factors like income, gender, age, education, employment, residence, and disability status were identified by Song et al. (2004). Similarly, skills in the use of the internet and ability to use its potential are also important (Dobrinsky and Hargittai 2006; Goggin 2018; Yu et al. 2019). (Wentz and Tressler 2017) assert "it is important to ensure that banking and financial systems provide equitable and full access for individuals who are blind".

Studies on digital solutions for the disabled with special reference to the blind or partially sighted are limited. We detected only one study by (Wentz and Tressler 2017) in the context of the US. We could not locate any study that particularly focusses on financial services for the blind or partially sighted in Fiji. Consequently, there is a gap in the literature in this area which the present study proposes to fill. The scope of the study is limited to the digital services for the blind or partially blind, that is, visually impaired people in Fiji. The present study seeks to understand the relationship between disability status of the visually impaired and their access to and use of digital services. It also seeks to understand the ways service organisations (providers of services), people, systems, and policies in Fiji have helped solve problems of blind and partially sighted people (BPSP).

Following from these aims, the research questions that we seek to find answers to are enumerated below:

1. What digital solutions have been developed and implemented by service organizations for BPSP?
2. What are the barriers faced by BPSP in the independent use of the financial services provided by their financial institutions?
3. What policies have been put in place by the Fijian government for the addressing the issues faced by BPSP in Fiji?
4. What policies are put in place by service organisations for providing services to BPSP?

#### 4. Data and Method

We obtained the relevant statistics of people with disabilities from the Fiji Disabled Persons Federation. The available statistics are from the end of December 2017. The population of people with disabilities in Fiji was 113,325 (spread by provinces: Ba (17,556); Bua (1160); Cakaudrove (2274); Kadavu (734); Lau (675); Lomaiviti (1300); Macuata (4741); Nadroga (2990); Naitasiri (13,794); Namosi (458); Ra (2416); Rewa (8018); Serua 1627); Tailevu (4556); Rotuma (155)). The spread by type of disability was as follows: Visually impaired (40,710), hearing impaired (3898), disability (inability to walk) (10,965), memory impaired (inability to remember) (4460), self-care disability (inability to take care of themselves) (844), communication disability (speech impaired) (2027). The present study is confined to visually impaired people given the resource constraints.

Semi-structured interviews with financial institutions, technology firms providing digital solutions, government policy-makers, and officials of the federation for BPSP were conducted. Initially, a list of BPSP was obtained from the office of the federation of BPSP. From this list, using systematic random sampling, 50 BPSP were chosen.

The interviews were conducted via telephone given the resource constraints and the population scattered across various islands of Fiji by five suitably trained research assistants

(10 BPSP each) in the local language. The questionnaire consisted of 29 questions including demographic questions. The questionnaire is attached. It has been developed from prior studies and amended as required given the context of Fiji. A total of 59 responses were received—10 were from fully blind and 15 from partially blind people, all others did not respond concerning their sightedness.

We received 21 responses from BPSP members who were using the web to access banking and financial services. Another 38 responses were received from those BPSP members who were not using the web to access banking and financial services. The interview transcripts were translated into English by a qualified translator. Common themes emanating from the interviews were discerned. As our focus was on BPSP members using the web, we focus on this cohort in this report.

### 5. Analysis

The responses of those who were using the web to access banking and financial services, are analysed in below paragraphs. From the responses received it was evident that access to financial services is considered to be of high importance by BPSP respondents.

#### 5.1. Usage Patterns and Preferences

The responses received are recorded in the table below (Table 1):

**Table 1.** Frequency of usage of banking/finance websites.

I Use Banking and/or Finance Websites or Apps:	Total	%
a. Daily	4	19.05
b. Weekly	11	52.38
c. Monthly	3	14.29
d. Once or twice a year	2	9.52
e. Not at all	1	4.76

As can be seen from the above table, prepared collating the responses to question 1, 70 per cent (15 out of 21) of the respondents used banking and finance web at least once a week with over 19 per cent using it daily. Over 95% of the respondents used it at home as the responses to question 2 of the survey revealed.

Over 80 per cent of the respondents accessed banking and finance systems from mobile phones while 38 per cent used desktop or laptop computers. The percentages do not add up to 100 as some of the respondents used both devices (responses to question 3).

In response to question 4, whether respondents would like to talk to a bank via phone or in person versus using the website or app, 43 per cent preferred talking via phone or in person while 29 per cent were comfortable with using the bank website or app.

In response to question 5, concerning the preference of the respondents to the use of a website or an app, over 57 per cent preferred use of an app, while 38 per cent were ok with the use of a website. Close to 24 per cent, however, experienced difficulties while installing the app (response to question 6).

In response to question 7, what problems the respondents faced in the use of the app the following comments were made:

“I did have difficulty tried a lot still have not install it”

“App was not downloading-Network issues”

We observed that 38 per cent (8 out of 21) of the respondents preferred using the official website or app of a bank compared to the third-party or aggregator system which was favoured by about 19 per cent of the respondents (response to question 8). Reliability of the bank website or app was the rationale for the above usage pattern. Respondents using aggregator third party apps, overwhelmingly chose Good Budget (76% or 16 out of 21 respondents).

In response to question 10, which bank's website or apps respondents used, an overwhelming 67 per cent of the respondents stated that they used the American Express website or app. Only about five per cent of the respondents noted that they used the Bank of America website or app.

To question 10, whether respondents sought help from others in the use of bank websites or apps, 38 per cent reported that they did. The textual responses to what help they sought were as noted below:

"To print out statement and to transfer money"

"I was not able to read . . . . [needed] help in guiding steps using banking".

### 5.2. Accessibility

In response to question 12 whether the respondents faced any accessibility issues nearly 67 per cent responded that they did not. Only 19 per cent responded that they did. Those who responded "yes" noted in response to question 13 that

"Staff not useful in giving information";

"Website couldn't load and takes lots of time".

### 5.3. Security and Login Problems

Only 38 per cent of respondents felt that they feel secure in using the bank websites as responses to question 14 revealed. In response to question 15, whether the respondents save login information on the web or on the app, more than 57 per cent of the responses were in the affirmative.

In response to question 16, whether the respondents experienced difficulties in the use of passwords, more than 15 per cent of the respondents noted that they did. When asked to describe the difficulties (question 17), the textual responses were as noted below:

"Account has been hacked"

"I forget my password"

"I have many passwords, not sure which one I use where".

When asked if "any of your banking and/or finance app or websites use CAPTCHAs (security image or sound)?" (Question 18), 33 per cent responded in the negative, while 62 per cent noted that they were unsure. In response to question 19, whether those CAPTCHAs were audio or visual CAPTCHAs, more than 38 per cent responded that they were unsure.

### 5.4. Bill Payments and Mobile Deposits

To question 22 whether respondents ever had a problem with making a bill payment because of the accessibility of a banking and/or finance website or app, 33 per cent responded in the affirmative, the remaining 57 per cent in the negative. In response to question 23 asking respondents to describe the problem, the following textual responses were received:

"aap not responding" or "not working"

"Was not able to read properly".

### 5.5. Use of Additional Features

In response to question 24, whether respondents use mobile check deposit features on banking apps, only 14 replied in the affirmative. 24 per cent noted that their bank does not provide these features. Those who answered "yes" to question 24, were asked whether respondents ever had difficulty with knowing whether the camera is capturing the entire check, close to 29 per cent answered in the negative.

In response to question 27, whether respondents used any apps to identify money (such as the KNFB reader), only about five per cent responded in the affirmative. In response to question 29, whether respondents experience any difficulties in the use of

these apps, close to 29 per cent responded in the negative while others did not answer the question.

## 6. Discussion

This study documents the experience of BPSP respondents in Fiji. As could be seen from the above, limited digital solutions have been developed and implemented for BPSP in Fijian banks. Some of the respondents found it difficult to navigate bank websites or use the apps. This study also provides directions for banks and software providers what changes are required in the apps and websites so that these are BPSP friendly. The Fijian government has devised a national plan to address issues faced by people with disabilities, but its implementation has been slow so far.

Banking and financial services marketing to the BPSP opens up business opportunities for entrepreneurs. It is estimated that people with disabilities represent a buying power and market size equal to the population of China (Donovan 2012). From the perspective of CSR too, banks and financial services organisations would do well to remove obstacles experienced by BPSP as indicated in this study. This will also demonstrate their positive contribution to equity and inclusion.

## 7. Conclusions

This study aimed to understand the relationship between disability status of the visually impaired and their access to and use of digital services. It also sought to develop our understanding of the ways service organisations (providers of services), people, systems, and policies in Fiji helped solve problems of blind and partially sighted people. It was detected that BPSP generally experienced difficulties in accessing the websites and the apps. Other problems such as security and privacy issues also came to the fore.

From the standpoint of CSR, equity, and inclusion, banks and financial service provider firms may like to take into account the results of the study and frame suitable strategies. For the policy-makers too this study has a considerable take-away message in the sense that policies need to be put in place that improve access to banking and financial services by BPSP.

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## Note

<sup>1</sup> [http://siteresources.worldbank.org/DISABILITY/Resources/Regions/East-Asia-Pacific/JICA\\_Fiji.pdf](http://siteresources.worldbank.org/DISABILITY/Resources/Regions/East-Asia-Pacific/JICA_Fiji.pdf) (accessed on 16 October 2022).

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