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Proposing “Mobile, Finance, and Information” Toolkit for Financial Inclusion of the Poor in Developing Countries

Abstract. Since 2015, the Government of India has been designing policies for transforming the country with over 400 million unbanked adults into a cashless economy so that a majority of financial transactions can be carried over mobile devices, the most widely used information and communication technology in the country. However, over 200 million adults earning less than \$2 a day have a low or little mobile, financial, or information literacy. This short paper reports a newly proposed interdisciplinary, six-step toolkit operationalized using a survey questionnaire, focus group prompts, and hands-on training for developing mobile, financial, and information literacy among the poor in developing countries like India. Implications for public libraries, governments, and the poor in developing countries and beyond are discussed at the end.

Keywords: Financial inclusion, cashless economy, poor, mobile illiteracy, financial illiteracy, information illiteracy, India.

1 Introduction

1.1 Challenges to becoming cashless economy: Mobile, financial, and information illiteracy

Access to finance is a prerequisite to graduate out of poverty [1]. However, as of 2015, over 2 billion adults, who did not have access to banks, were mainly from developing countries. For instance, India had 400 million unbanked adults, one of the highest percentages of financially excluded citizens in any country in the world. Hence, in 2015, the government of India launched the most ambitious financial inclusion program in the world to provide affordable financial services to the unbanked poor, with support from State Bank of India (SBI), the largest lending institution in the country, Bill and Melinda Gates Foundation, and several international financial consulting firms [2]. As a result, over 111 million unbanked poor opened bank accounts for the first time in their lives. However, access does not guarantee appropriate usage of financial services; “use of financial services” is an important factor affecting one’s ability to achieve the goal of financial inclusion [3]. A majority of Indians who have access to finance do not seem to be using it optimally. For instance, in January 2016, SBI reported one of the highest credit-default rates ever since its inception in 1955 [4].

Financial information illiteracy, i.e. the inability of an individual to understand how money works or how financial service providers (FSPs) manage money [5], is prevalent in developing countries [6], and is one of the main reasons for the inability of the poor to use financial services responsibly. Financial information illiteracy is one of the key barriers to one's ability to succeed financially [7], since it could lower the confidence of even those who have access to finance and make them uncomfortable to use any services offered by formal FSPs like banks and credit unions [8]. It can compel such individuals to borrow from unregulated moneylenders and pawnshops that often charge usurious rates of 10 to 15 percent per month, which translates to more than 120 to 180 percent per year [9] [10].

On November 8, 2016, the government demonetized the entire country overnight, leaving millions of citizens with no or little cash. Since then as part of the Digital India mission, the government has been promoting the use of mobile apps for carrying out financial transactions, which requires the user to: (a) be literate, (b) own and operate a mobile phone, and (c) understand and be comfortable with the financial terms and jargons used by the banking industry. However, around 200 million Indians, who earn less than \$2 a day, have low or no information, mobile, or financial literacy [11].

Financial literacy programs in developing countries increase financial knowledge and information-seeking behavior of borrowers, thereby controlling their over-indebtedness [12]. However, existing financial information literacy programs in India do not reach, and hence, cannot serve over 200 million illiterate and semi-literate borrowers who earn less \$2 a day, since these programs: (a) are run mainly through websites that are not accessible or useful to a large majority of population whose native language is not English or is illiterate, (b) require potential beneficiaries to be affiliates of institutions like banks, schools, colleges, and local government agencies [13], and (c) do not involve, and hence, do not leverage the resources of pre-established network of public libraries in rural and urban India. Financial sector regulators like the Reserve Bank of India (RBI) and Securities and Exchange Board of India have launched "Project Financial Literacy" whereby financial education is disseminated to the target audience with the help of banks, local government machinery, schools and colleges through presentations, pamphlets, brochures, films comics, and also through RBI's website [14].

1.2 Proposed solution: Developing mobile, financial, and information literacy

In 2017, we developed a toolkit to educate the poor so that they can use mobile phones for carrying out financial transactions. This toolkit is based on a combination of (a) 2015 Toolkit for measuring financial literacy developed and used by the Organisation for Economic Cooperation and Development [5], (b) Reference and User Service Association's Guidelines and Best Practices for financial literacy education in libraries [15], (c) information literacy standards by the Association of College and Research Libraries [16], and (d) information literacy frameworks like the Seven Pillars of information literacy and I-LEARN model [17]. In 2018, we customized the toolkit by testing it with over 150 patrons earning less than \$2 a day at 10 public libraries in rural and

urban Gujarat, India. We considered socioeconomic opportunities, pre-existing operational network of FSPs, government regulations, and types of financial activities borrowers engage with for contextualizing our toolkit to local conditions in India.

This short paper presents the details of our original toolkit which can be customized for building mobile, financial, and information literacy among the poor in any developing country in the world.

2 Related work

Existing theoretical frameworks and models on financial information literacy are mainly based on or related to information literacy of students in the developed world [18]. Significantly distinct contextual factors and socioeconomic conditions in the developing world warrant for literacy programs catering to the financial information needs of individuals in the developing world. Moreover, individuals in different life stages have different financial information needs [2]. Hence, it is necessary to develop a range of financial information literacy programs specifically tailored to the needs and abilities of diverse groups of library patrons (e.g., youth, seniors, unemployed, low-income families, small business owners, etc.) [19].

3 Toolkit for building mobile, financial, and information literacy among the poor

We developed a survey questionnaire, focus group prompts, and hands-on training exercises in Gujarati, the native language of our study participants, for operationalizing and testing our toolkit. We helped illiterate study participants take the survey. Our interactive sessions with the poor involved several hands-on activities to reinforce the key message in the following six steps of our toolkit.

3.1 Identify

Using our toolkit, the poor can identify and determine the nature and extent of the financial information needed. They can also assess their current financial knowledge and identify gaps. Sample questions in our toolkit are: List your top-3 financial needs, Can you define the following financial concepts: collateral, interest rates, and demonetization? What is the difference between simple interest rate and compound interest rate? What is the difference between savings account and checking account? Our toolkit also makes sure that study participants learn that: new financial information is constantly being produced and that there is always more to learn; financial information literacy involves developing a learning habit so new financial information is being actively sought all the time; ideas and opportunities are created by investigating/seeking financial information; types of financial information, characteristics of the different types of financial information source available to them and how they may be affected by the format (digital, print); and various issues of accessibility, and finally, various services that are available to help and how to access them.

3.2 Plan and gather

The toolkit trains the poor to locate and access needed financial information effectively and efficiently. They learn to construct strategies for locating financial information. Sample relevant questions from our toolkit are: Do you know how public libraries provide access to various types of financial information? Have you ever used mobile phones or computers to collect (search, seek, or receive) financial information? What are the pros and cons of seeking and searching for financial information from formal vs. informal sources? We also explain the difference between formal sources such as banks, cooperative banks, credit unions, public libraries, books, news articles, etc. and informal sources like family, friends, local moneylenders, colleagues at work, etc.

With the help of our survey questionnaire, focus group prompts, and hands-on exercises, study participants understand: a range of searching techniques available for finding financial information, the differences between search tools, recognizing their advantages and limitations, why complex search strategies can make a difference to the breadth and depth of financial information found, the need to develop approaches to searching so that new tools are sought for each new question (not relying always on the most familiar resources), the need to revise keywords and adapt search strategies according to the resources available and / or results found, how financial information and data is organized, digitally and in print sources, how libraries provide access to resources, how digital technologies are providing collaborative tools to create and share financial information, the issues involved in collecting new financial information, the need to keep up to date with new financial information, the difference between free and paid-for resources, the risks involved in operating in a virtual world, and the importance of appraising and evaluating search results.

3.3 Evaluate

Using our toolkit, the poor can compare and evaluate financial information and its sources critically, and incorporate selected financial information into their knowledge-base and value system. Toolkit includes the following questions: Are you aware of any of the following digital payment methods: banking cards, USSD, AESP, UPI, mobile wallets, micro ATMs, mobile banking, Internet banking, point-of-sale, and banks pre-paid cards? Report the most valuable aspect or characteristic of financial information for you (with the following choices: reliability, validity, accuracy, authority, timeliness, point of view or bias, and other: ____). Hands-on-training demonstrates calculations including but not limited to: the interest they would end up paying if they borrow INR 5,000 for a year with 10% interest rate, and the rate of inflation by comparing prices of sugar, cooking oil, rice, and diesel, among other commodities, in 2001 and 2011.

Our survey questionnaire, focus group prompts, and hands-on exercises cover the following topics: the financial information and data landscape of their local context, issues of quality, accuracy, relevance, bias, reputation and credibility relating to financial information and sources, how financial information is evaluated and published, to

help inform personal evaluation process, and the importance of consistency in data collection.

3.4 Manage

With the help of our toolkit, the poor, individually or as a member of a group, can organize and communicate financial information to accomplish a specific purpose like financial planning. Sample questions in our toolkit include: what key steps do you plan to take or have you already taken to secure your future financially? Are you aware of any mutual funds, stocks, bonds, fixed deposits, etc.? What factors could possibly affect your financial planning for the future? Our survey questionnaire, focus group prompts, and hands-on exercises make the poor understand: the need to keep systematic records, the role of professionals such as data managers and librarians, who can advise, assist and support with all aspects of information management, that different forms of writing/presentation style can be used to present information to different communities, that data can be presented in different ways, and that individuals can take an active part in the creation of information through traditional publishing and digital technologies.

3.5 Use

The toolkit educates the poor for understanding the economic, legal, and social issues surrounding the use of financial information professionally, ethically, and legally. Sample survey questions include: What are some of the ethical and legal challenges (e.g., your privacy, security of your financial data, etc.) to deal with financial information? Can you recollect three recent instances of using financial information sought, searched, or received from any of your formal or informal sources? How was the process of using financial information in those three instances? What are some of the key lessons of using financial information? Hands-on training focused on: connecting to Wi-Fi, searching information on the Internet over mobile phones, security options available on the study participants' mobile phones, and using BHIM, a mobile app developed by the Government of India for mobile payments. Our survey questionnaire, focus group prompts, and hands-on exercises make sure that the poor understand: their responsibility to be honest in all aspects of financial information handling and dissemination (e.g., copyright, plagiarism and intellectual property issues), the importance of storing and sharing financial information and data ethically, and the need to adopt appropriate methods for handling financial information.

3.6 Reflect and learn

Using this toolkit, the poor can reflect on the process of using financial information and learn from their experience for future instances of using similar knowledge to make financial decisions. Sample questions in our toolkit are: Can you share any of your mistakes while seeking, searching, storing, managing, processing, or using financial information in the past? What advice would you offer to others for using financial information carefully or not committing the same mistake you did? Our survey questionnaire, focus group prompts, and hands-on exercises make sure that study participants

understand: the significance of reflecting on the process of planning, accessing, gathering, managing, evaluating, and using financial information, and the importance of learning new knowledge and applying it for making financial decisions.

4 Implications

Due to lack of innovation and resources, public libraries in a majority of developing countries are in the state of despair. A drive to becoming a cashless society presents a timely opportunity for these knowledge hubs to be more relevant. Public libraries can serve the financial information needs of their communities without a sales pitch or a hidden agenda [20] by educating citizens to use their finances smartly [21]. The UNESCO Public Library Manifesto (2016) advocates that a public library should facilitate the development of information and computer literacy skills [22]. For instance, our toolkit offers a novel opportunity for over 200,000 public libraries in developing countries to play a key role in building financial information skills and capabilities among millions of poor. Public librarians will be able to make patrons more confident and independent for carrying out financial transactions. Public libraries could demonstrate their value in implementing financial inclusion initiatives undertaken by governments in developing countries. The pre-existing network of public libraries could serve as a key partner for governments with minimal investment.

People of all ages across the world need help managing money, and with uncertainty about jobs, paying for credit and debt issues, and complex decisions about investing, public librarians in the US are taking a leadership role in financial education [23]. Our toolkit could also guide public libraries in the US to develop customized financial information literacy programs for targeting different audiences in local communities. Librarians could learn how to develop appropriate content, use our toolkit, and deliver services in the form convenient for diverse patron populations. Our toolkit could inform ongoing efforts like the ALA/FINRA Smart investing@your library program and the ALA/Federal Reserve Money Smart Week@Your Library program to boost financial information literacy in the US.

5 Conclusion

The interdisciplinary toolkit presented in this short paper presents a timely learning and partnership opportunity for thousands of public libraries, governments, and millions of poor across the world. Our survey questionnaire, focus group prompts, and hands-on-training exercises effectively operationalize the toolkit for librarians and the poor to build mobile, financial, and information literacy.

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