Exploring older people's challenges on online banking/finance systems: Early findings

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ABSTRACT

Use of technology is a prerequisite to conduct a normal life and people recurrently use online financial services (i.e., any website which involve monetary transactions, for example, Internet banking, online shopping, transport service websites etc.) in everyday contexts. Information interactions are affected by the nature of specific digital services as well as a number of behavioural characteristics of users. Older people aged 65 and over are often digitally excluded from the use of online financial services. We identified some reasons for non-use of financial services through semi-structured interviews with older people and employees who assist older people with digital services. Preliminary findings demonstrated that fear of financial scams, lack of digital skills and lack of help are some of the main factors which inhibit them from using digital financial services efficiently.

CCS CONCEPTS

• **Human-centered computing -> Human computer interaction (HCI)**;

KEYWORDS

online financial services, older people, challenges

1 INTRODUCTION

Approximately 12 million people (18%) are aged 65 and over in the UK [1]. Recent ONS (Office for National Statistics) data demonstrate that Internet is extensively used by people in the UK; however, statistics portrayed that 65-74 and 75+ age groups had the lowest proportion of Internet users (85.5% and 54% respectively) compared to other age groups (over 90%) [2]. Since data have proven that Internet is scarcely used by older people, their usage of online financial services is also relatively low. In this research, online financial services are defined as any website which has a financial component of transaction, for example, Internet banking, buying ticket to events and buying or renewing insurance policies. Older people might not adopt online financial services due to several reasons such as fear [3], disabilities [4] and interface issues [5].

This study investigates older people's interactions with online financial services and explores the barriers confronted by them in the use of these services. Previous studies have only included common demographic factors such as age, gender and occupation [6, 7]. Therefore, a larger project has been undertaken at the University of Strathclyde whose overall aim is to identify the key human/behavioural, technological and societal challenges experienced by older people aged 65 and over whose first language is not English and those from ethnic minority groups – these attributes are important since their issues have not been addressed before. The main objective of this study is to propose solutions such as training, recommendations and tech-related solutions which would facilitate older people to use digital financial services.

Although the larger research intends to concentrate on two key variables: language and ethnicity of older people, this paper only focuses on the preliminary data acquired from older people whose first language is English and data obtained from employees who provide support to vulnerable people on digital services. Older people whose first language is English were incorporated in the study as the data procured from them will aid to produce comparisons with other variables chosen for the next phase of the study. Employees were also included in the research and some key challenges experienced by older people were established through the interviews with them.

2 LITERATURE REVIEW

2.1 Human-related issues

There are numerous human-related factors that could affect older people's intention to use online financial services. For instance, socio-economic factors are significantly influencing older people's Internet use [8]. Employed individuals are more likely to use digital banking services compared to those who are unemployed [9]. Also, some older citizens do not use Internet as they lack experience or knowledge [10]. In major advanced economies and major emerging economies, financial literacy is lowest in adults aged 65 and over, young people have the most knowledge about finance and financial skills are more evident in rich people than poor people [11]. An individual requires a high level of digital financial literacy to use all the available financial technology (FinTech) products effectively; therefore, financial literacy is a requisite for financial inclusion [12].

Along with these factors, disabilities can also influence an individual's adoption of digital financial services. Intellectually disabled

people [13] and visually impaired older people are having difficulties in using Internet due to the proliferation of computing technologies [14]. As well as disability issues, ethnicity barriers exist on financial services. In 2020, Chinese ethnic group had the highest proportion of Internet users compared to other ethnic groups and Bangladeshi ethnic group had the lowest number of Internet users [2]. Older people with Asian ethnicity in 65-74 and 75+ age groups are less likely to use Internet than the older people in White ethnic groups [15]. This depicts that certain ethnic minority groups have a lower usage of online financial services. There are five basic digital skills which contribute to digital inclusion: a) seeking information through a search engine, b) using Internet to communicate with other people c) online transactions d) utilizing online help to solve problems e) online submission of application forms [16]. Older people from ethnic minority groups often do not possess these skills as research has found that many older migrants are not interested in learning computers [17]. Furthermore, some minority groups have difficulties with English language and their knowledge on financial institutions is lacking [18]. On top of this, there are difficulties in teaching digital skills to those who lack these skills and have a lack of English language proficiency [19]. Hence, language is a major barrier for those who would be interested to adopt digital financial services.

2.2 Technology

In order to differentiate the gap where some individuals have access to technology and some don't, the term 'digital divide' was formed [20]. Lack of access and lack of skills are components of digital divide [21]. In UK, 80% of the households where an adult aged 65 and over resides have an Internet connection and this is the lowest percentage compared to other households [22]. Besides, 76% of the UK adults aged 65 and over have zero basic digital skills [23]. Even though the existence of digital divide is visible in diverse age groups, it is also discovered in older people from wide socioeconomic groups [24]. A high degree of digital skills is found among older people who have higher socioeconomic background [25].

In addition to the aforementioned issues, usability is another key factor which influences individuals' acceptance of digital services [26]. Several usability obstacles are encountered by older people; issues are related to layout, navigation and other design problems [27]. Older people are at risk of digital exclusion due to the difficulties in accessing content on websites; website content are created by targeting the young people [28]. A very well-designed website would drastically increase customer satisfaction [29]. Financial security is one of the elements which affects customer satisfaction on e-commerce [30]. A study demonstrated that some older people are non-users of online banking websites as they are concerned about security; some older participants stated that they would only use Internet banking if security is guaranteed [31]. Due to security concerns, individuals want to know how their data is collected, how it is used and how long it will be recorded for [32].

Additionally, accessibility is also a factor which influences people's intention of accessing digital services. A study defined the term 'accessibility' as the ability of an individual to access their account; sometimes older people will not have the required devices to access their accounts; therefore, they will feel that they lack the skills to use banking websites [33]. It is not feasible for many users to access Internet services due to the cost of Internet connection and devices [4].

2.3 Society

Charity organisations like the Age UK aims to diminish financial scams and assist older citizens, including disabled people with the knowledge and skills they require [34]. The Fair4All organisation provides support for people who go through financially vulnerable circumstances; their objective is to make amendments to financial sector in order to aid all the people in the society [35]. As well as this, there are voluntary organisations like churches that provide help for vulnerable people [18]. Some older people conduct online transactions with the assistance of relatives [36]. Results from a study carried out in Finland indicated that 60% of older people use online services with the aid of voluntary groups, relatives or friends [10].

Moreover, existence of policies such as EDI (Equality, Diversity and Inclusion policy) aspire to incorporate all the people, including marginalized individuals in every activity/service [37].

In spite of the fact that society provides help for older people in diverse ways, financial scams are rising in the society which prohibits them from using online services. In the first six months of 2021, £753.9 million was lost through scams; fraudsters trick people through fake websites, phone calls and messages to obtain personal details [38]. Despite of all the scams in the society, some older people utilize Internet due to negative and positive social persuasions by family and friends [39].

3 METHODOLOGY

In line with the objectives of the overall project, this research will be undertaken in various ways. Phase 1 of the larger study consists of semi-structured interviews with older people whose first language is not English, older people from ethnic minority groups, older people whose first language is English and intermediaries. However, this paper only reports the findings obtained from older people whose first language is English and employees who help them with digital services.

This paper presents the findings from five interviews: 3 English participants who were aged 65 and over and 2 employees who work for Glasgow's Golden Generation[1]. As previously mentioned, preliminary findings of phase 1 are discussed in this paper; more qualitative data will be produced once more interviews are held.

A number of organisations were approached to recruit participants for phase 1. Glasgow's Golden Generation, which is a non-profit organisation, shared research information with their learners and employees; individuals who were interested in the study participated in the interviews. As well as this, a few were recruited through snowball sampling. Older people's challenges on online financial services were derived through individual interviews. Five popular digital financial services used by older people were procured from ONS data [22]. These services were Internet banking, online shopping, buying or renewing existing insurance policies,

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[1]https://www.glasgowgg.org.uk
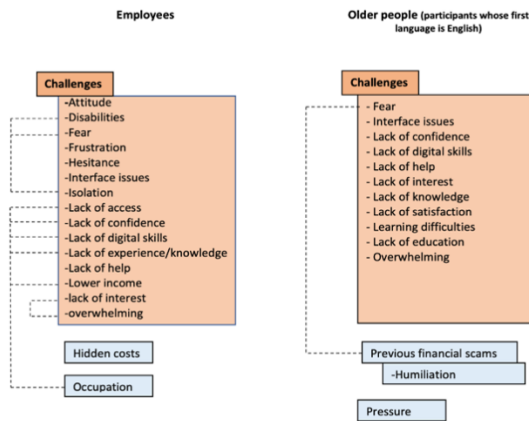
Figure 1: Themes and Codes

buying transport tickets and tickets for events. Questions[2] regarding these services were asked during each interview. Different set of questions were asked to older people and employees. Interviews with older people began by gathering demographic information such as education level, income and gender.

Participation was voluntary and ethics approval was obtained from university before beginning phase 1. Each semi-structured interview was recorded using laptop or phone and the length of each interview was roughly 25-30 minutes. Around 7-8 questions were asked to each participant. Virtual interviews and phone interviews were conducted depending on participants' preferences. Prior to actual interviews, a pilot study was carried out with two individuals to ensure that the voice recorder and questions were adequate. Each participant was given a participant sheet, instructions sheet, privacy notice and consent form. A participant was only allowed to take part in the interview if consent form was signed.

4 DATA ANALYSIS

Interview data retrieved from participants were uploaded to a transcription software[3] which produced a transcript for each interview. Any information which appeared personal were excluded from the transcripts. These transcripts were exported to a data analysis software[4]. Six stages were followed to carry out thematic analysis on the transcribed data [40]. Themes and codes were generated as shown in Figure 1 below. Dotted lines are used to illustrate the interconnections between the codes.

5 RESULTS

Different set of codes were derived from data obtained from employees and older people whose first language is English. Majority of the codes fall under the theme 'challenges' and a number of separate themes were also discovered.

It is evident from Figure 1 that more codes are displayed under the theme challenges for employees compared to the codes created for older people. This indicates that employees are more aware

of the constraints encountered by older people on online services. One employee mentioned that older people "might not want to use online banking". This implies that most older people's negative attitude prohibits them from adopting online financial services.

Also, some older people cannot learn online activities due to lack of help. Employees explicitly spoke about the ignorance experienced by older people from their family: "they're just really impatient....it happens in families, like some family members can't be bothered to help each other and sit with them using their phones for ages". Even though some older people are avoided by family members, organisations offer help on digital services but there's a limited amount of assistance provided by employees to older people on online financial services. An employee stated, "...it's dealing with sensitive information, it's dealing with personal information like bank accounts, bank numbers, making up passwords. I've tended to stay clear of directly helping somebody with their online banking."

Figure 1 depicts the relationship between disabilities, fear and isolation. It was discovered from an employee's interview that older individuals who are isolated are lonely and some of them are ill and they are scared to carry out any online task by themselves.

Lack of access, lack of confidence, lack of digital skills, lack of experience/knowledge, lower income and occupation are challenges which are interconnected in one way or another. It was identified through interviews with employees that people with lower paid jobs who do not come into contact with technology have lower digital skills. They are not fully confident to use it since they lack experience and they might not have the income to spend on technology. Previous studies have corroborated this finding [25, 41].

Moreover, older people lose interest when too much tech-related information is shared with them as they already feel overwhelmed by the technology. Hence, employees tend to slow their process of teaching digital skills to them. Some older people are even hesitant to ask for help, they feel they are bothering others.

In addition to all these barriers, interface issues were frequently declared by the employees. Someone who regularly uses websites will be aware of the buttons and icons whereas an individual who do not have prior experience will have difficulties in understanding the meaning of icons. As well as this, the employee stated that all the different drop-down menus, filters and words on websites can be overwhelming and it's quite complicated.

Data obtained from older people were quite similar to the ones retrieved from employees. However, an interconnection between previous financial scams and fear was recognized as shown in Figure 1. An older participant said that they are very wary of online services since they have experienced a financial scam before. As a result of the scam, the participant felt humiliated for not being careful. Fear was a factor mentioned by majority of the participants; one participant said, "it's just the fear of pressing that last button, and then thinking, oh, have I done it properly, have I made a mistake or something." Older people have a fear of making mistakes on Internet and this has been reported in previous research [42], they do not want to experience the hassle of cancelling and repeating the whole process.

In terms of interface issues, one participant stated that they weren't familiar with icons but once they started to use it several times, they understood how it works. The participant also said that they are not satisfied with online shopping since they cannot see the

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[2]https://doi.org/10.15129/87314ddb-4ec9-4db9-87d7-49da8318122a
[3]https://otter.ai
[4]https://www.qsrinternational.com/nvivo-qualitative-data-analysis-software/home

items. Even though the participant wasn't satisfied, they received help from their partner or son to conduct any online transactions. Participant required reassurance before pressing the final button. Another participant mentioned about carrying out holiday bookings and other financially related tasks for their siblings. This indicates that most family members act as digital carers to provide aid to older members of family.

Furthermore, older people take time to learn everything and they will only learn digital services after several attempts: "Maybe the first time I wouldn't really know, because I wouldn't know what different things were. But with guidance and advice, you become more familiar and competent."

It was unmistakably obvious from the interviews with older people that highly educated individuals had more digital skills compared to those who had lower qualifications. One participant who had a postgraduate degree knew how to use technology and knew how to tackle technological problems without seeking help from another person. This finding supports the results of other similar research [25, 43, 44].

A number of separate themes were established through thematic analysis (see Figure 1): hidden costs, occupation, previous financial scams and pressure. Occupation and previous financial scams were briefly mentioned earlier on. With regard to hidden costs, an employee said that older people have to travel to a bank to carry out basic tasks. This implies that they spend time and effort on activities which could be easily carried out through digital financial services. As well as this, one employee highlighted about the importance of occupation: "if you had a job, like, I don't know, working in an office or teaching or something like that, then you're more likely to have been working with technology throughout." In terms of pressure, majority of the older people are required to use technology; one participant pointed out that the traditional methods will cease in future.

6 CONCLUSION AND FUTURE WORK

On the whole, preliminary findings proved that fear of financial scams, lack of digital skills and lack of help are some of the main factors which were identified through semi-structured interviews. Themes obtained from data analysis signals the need to develop thought-provoking solutions to resolve the challenges encountered by older people. As part of future work, interviews will be held with older ethnic minority groups and those whose first language is not English; this could produce new key challenges and comparisons would be made with the data acquired so far. Additionally, a final set of themes and codes which represents the common challenges found in older people would be generated. Following the completion of all the interviews in phase 1, simulated websites would be developed and older participants' interactions on these websites would determine more obstacles confronted by older people on online financial services. Later on, this research will propose solutions which would address the challenges to some extent.

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