

This is a self-archived version of an original article. This version may differ from the original in pagination and typographic details.

Author(s): Shaikh, Aijaz A.

Title: Identifying Critical Determinants of 'Digital Customer Services' Usage : An Exploratory Study

Year: 2019

Version: Accepted version (Final draft)

Copyright: © Springer Nature Switzerland AG 2019

Rights: In Copyright

Rights url: <http://rightsstatements.org/page/InC/1.0/?language=en>

Please cite the original version:

Shaikh, A. A. (2019). Identifying Critical Determinants of 'Digital Customer Services' Usage : An Exploratory Study. In F. J. Martínez-López, J. C. Gázquez-Abad, & A. Roggeveen (Eds.), NB&PL 2019: Advances in National Brand and Private Label Marketing, Sixth International Conference (pp. 190-196). Springer. Springer Proceedings in Business and Economics.
https://doi.org/10.1007/978-3-030-18911-2_24

Identifying Critical Determinants of ‘Digital Customer Services’ Usage – An Exploratory Study

Aijaz A. Shaikh, PhD

Postdoc Researcher

Jyväskylä University School of Business and Economics, P.O. Box 35, FI-40014, University of Jyväskylä, Finland

aijaz.a.shaikh@jyu.fi

Abstract. Digital technology has reinvented retail business as well as commerce. This study aims to examine consumers’ perception and usage of digital customer services (DCS) and investigate three significant post-adoption and marketing consequences: simplicity, awareness, and usefulness. Using a purposeful sampling technique, 10 semi-structured, in-depth interviews were conducted with banking customers in Finland in January 2019. The research findings suggest that simplicity regarding DCS occupies a key position in their prolonged use, while awareness and usability are also important. This study offers some valuable theoretical and managerial implications and suggests an agenda for future research.

Keywords. Digital customer services, simplicity, awareness, usefulness, Finland.

1 Introduction

Digitalization, which is also known as digitization, means transforming analog data into digital data. However, research has provided a more comprehensive explanation of the term “digitization.” For example, Sklyar et al. (2019) stated that it involves the use of digital technology to provide new and innovative value-creating and revenue-generating opportunities to business firms. By contrast, a “digital service” is an activity or benefit that can be offered over electronic networks, which are essentially intangible (Gimpel et al., 2018).

In this era of digitalization/digitization, tech-savvy consumers expect digital customer services (DCS), which is the context of this study, from service providers across different industries, such as e-commerce or online retail, banking and payment, insurance and e-business, etc. The proliferation of handheld devices has further augmented consumers’ expectations of DCS. To meet demands for more innovative and convenient digital services, various organizations have developed and offered downloadable service applications that are meant for portable devices, including smartphones and tablets.

The scope of this investigation covers only the non-financial aspects of the DCS that are provided to regular bank account holders via downloadable mobile banking applications. Thus, the scope of this study covers neither mobile banking transactions nor mobile financial services and their usage per se but rather examines DCS that are integrated on the same platform (i.e., mobile banking). Anecdotal evidence and a growing body of research have suggested that extensive research (Karjaluoto et al., 2018; Glavee-Geo et al., 2017; Shaikh and Karjaluoto, 2015; Janne et al., 2016; Shaikh et al., 2015a) has examined mobile banking applications and services using various models and their modifications. Unlike these studies, this study has conducted a critical analysis of DCS applications in the retail banking context. This is an important gap because mobile banking applications differ regarding which DCS options are embedded in them.

This study tested the effects of three significant post-adoption and marketing consequences: simplicity & usability of digital services, awareness of & familiarity with digital services, and usefulness & functionality of digital services. This research provides significant implications and valuable directions for the banking industry, especially regarding the new regulatory framework: the revised payment system directives (PSD2). These regulatory developments, introduced and implemented by European Commission in May 2018, have radically transformed the financial services industry because PSD2 allows greater collaboration and competition as well as increased access to strategic customer accounting data to non-banking entities, such as financial technology firms, for designing and providing financial and payment services to various customer segments.

The following sections provide a brief overview of the post-adoption consequences, the research methodology used, and the study's findings. This paper concludes with a discussion on the study's contributions, implications, limitations, and future research possibilities.

2 Literature Review

2.1 Simplicity & Usability

Although research on simplicity is considered recent in the human-computer interaction field (Choi and Lee, 2012), it is an important design feature (Eytam et al., 2017); it has notably been defined as one of the key factors in designing easy-to-use services and products to develop the usability of information (Lee et al., 2013). Simplicity of digital services promotes usability (or ease of use). It includes design features that provide a clean, concise, clear, and intuitive layout, which require less effort toward achieving the desired task, and language features that are crisp, clear, simple, and easy to understand (McKinsey and Co., 2009).

2.2 Awareness & Familiarity

Customer awareness, which is at the top of the marketing funnel, regarding digital services is widely considered a pivotal element in the continuous use of services (Glavee-Geo et al., 2017; Hanafizadeh and Khedmatgozar, 2012; Howcroft et al., 2002). Here, the awareness, knowledge, and/or familiarity of a DCS refers to both the understanding and the acknowledgement of the services offered via a downloadable mobile banking application as well as the content and functions that are available to customers. Perhaps, a lack of awareness can damage a service's usefulness, usage frequency, and adoption.

2.3 Usefulness & Functionality

Several studies (Kim et al., 2019; Bhattacharjee, 2001) have used the term "service usefulness" interchangeably with "service benefits" and "service performance." In general, the term "usefulness" refers to the issue of whether an application or information system can be used to achieve the desired goals of the consumer (Zhang et al., 2019). To better understand the usefulness of a system, research (Zhang et al., 2019) has divided this aspect into "utility or functionality" and "usability." Here, functionality refers to the number of features that are included in either the product, service, or system and how well a system (in principle) can do what is needed. The product's functionality influences its perceived usefulness, which is a key component of the technology acceptance model (Eytam et al., 2017). By contrast, usability is how well users can use that functionality to perform a desired task (Zhang et al., 2019).

3 Research Methodology

The examination of DCS is a relatively new area for research; therefore, to gain a deeper understanding of the field in a developed country context, a qualitative research approach was used to collect and analyze the data. A pre-tested interview protocol was used to conduct face-to-face, semi-structured, in-depth interviews in Finland during January 2019 with ten key informants. Here, the study participants were selected using the purposeful sampling technique (i.e., the study participants consisted of ten bank customers, both male and female, in different age groups, who owned a smart phone, had been using the mobile banking application for a minimum of six months, and had used the DCS options). Participation in the study was voluntary, and the interviews were conducted in English.

The interview location was carefully selected to ensure that it offered a quiet place for the researcher to record the interviews on an MP3 player (Shaikh et al., 2015b). Therefore, all interviews were conducted in a meeting room that was provided by a local university in Finland. The interview participants were sufficiently

informed about the study's objectives and its implementation prior to the interviews. The interview conversations lasted between 20 and 25 minutes and were recorded after securing consent from the study participants. The interviews were transcribed using a simple Word application. The author followed a three-step qualitative content analysis approach, as suggested by Shaikh et al. (2015a) and Hsieh and Shannon (2005). This three-step approach involves qualitative data reduction, data display, and data verification. In the first stage, the interviews were transcribed around the three major themes of the study: simplicity, awareness, and usability of the studied digital services. The data analysis began immediately after the first interview.

4 Findings

4.1 Simplicity & Usability

The study participants were asked about the level of simplicity when accessing the application on their cell phones. In general, the participants verbally claim to be satisfied and stated that the access method (entering a four-digit pin) was convenient and easy to use. Nonetheless, a few noted their concerns and proposed an alternative method to accessing the application. For example, a few participants suggested activating biometric functions for accessing the application. When explicitly asked why they had made this suggestion, some of the respondents said that it would increase both security and ease of use.

"I like the very simple and easy sign-in mechanism of using the four-digit code, but it would be a lot easier and nicer for me to access using biometrics, such as my fingerprints. Then, I do not need to remember anything" (User 8).

A few respondents considered simplicity a process that involves different steps versus a one-time or click activity when accessing and using digital services. The best consumer experience empowers customers to customize the application layout of the DCS per their needs and requirements.

"For me, simplicity is like a process—a mini-customer journey—from log-in to actions that I perform and sign-off from the application. This process should be simple and should not trigger any strong emotions, such as anger. I should be able to customize the layout myself for increased simplicity and according to my needs and requirements" (User 5).

A simple complaint resolution mechanism should be in place for the timely address of consumer complaints to increase consumer trust, positive experiences, loyalty (stickiness), and commitment. Trust and positive experiences with DCS increase customer advocacy intentions and referrals.

“... because of the easiness, when I have to complain, I prefer to lodge it using the online/mobile banking application. The bank should provide a multi-lingual service”(User 2).

4.2 Awareness & Familiarity

A significant relationship was found between the sustained usage of DCS and consumer awareness and familiarity with these services. Here, most of the respondents explicitly said that they would have used the DCS offerings more frequently and for different purposes if they had known which functionalities were provided via the mobile banking application. Hence, this lack of awareness resulted in the limited use of digital services, damage to the user’s long-life value, and increases in visits to the bank branch. Discussion with the study participants suggested that the use of digital services is lagging far behind consumer awareness.

“One day, my boyfriend introduced me to the digital services offered by my bank. I am, therefore, learning how to use different services and applications from other people and not from my bank” (User 4).

Another finding suggest that the consumers in Finland prefer periodical newsletters and emails from their service providers about new products and services or changes in any services. They do not like to be contacted by phone about any service or products. In addition, some respondents noted concern regarding their lack of awareness about different digital services that are either available in or added to their mobile banking application. Due to this lack of awareness, the users could not fully benefit from the digital services.

“If I were aware of the digital banking services, I would have used them because I consider them very important” (User 9).

4.3 Usefulness & Functionality

Although the formation of customer loyalty with their bank was largely found to be associated with the availability as well as the usefulness of the application, the study participants, in general, were difficult to impress. For example, some of the study participants suggested designing digital services in a way that reflects their individual needs and can evolve as those needs change. The tendency in digital services to believe that one-size-fits-all is neither useful nor beneficial; thus, it should be considered void and ineffective. Mobile banking applications were considered an important component of the everyday life of the user, as described by a few participants. Therefore, uselessness or ineffectiveness of such digital services could trigger the consumer toward either a switching behavior or the discontinuation of these services.

"I have been using online/mobile banking and associated digital services for many years now, and I consider these services a necessity and not luxury" (User 1).

Some study participants explicitly suggested that a continuous and uninterrupted availability of a comprehensive range of mobile banking offerings and services are the face of new banking, and anything less is unacceptable.

"I am a single mother, and it's easier to use my cell phone for payment than to take my four-year-old child and stand in a queue for a cash withdrawal or payment. It is very convenient and easy to use online services. I am satisfied with the mobile application because it offers various value-added features, including digital customer services" (User 10).

The increased use of digital services has significantly changed the old habits of using branch banking and ATM Banking.

"I think the last time I visited my bank was seven months ago. Based on my need, I visited my bank an average of twice a year. My bank is taking care of my mortgages and other matters very nicely and, as such, I do not feel it is necessary to visit my bank branch without an unavoidable reason. Online/mobile banking and digital services have radically transformed my banking and customer experience" (User 3).

5 Conclusion, implications, and limitations

This study augments the extant literature on DCS from the consumer viewpoint by identifying three major post-adoption components of DCS. The societal context of this article is the developed country of Finland, which is widely considered a pioneer in the digitalization of payments. Moreover, unlike in other developed countries, mobile payments found their way into the Finnish market a few decades ago due to an increasing consumer appetite for cashless transactions and the use of mobile technologies and devices that allow greater adoption and use of digital services.

The findings of this study suggest that simplicity occupies a key position in adopting and using DCS. Simplicity develops a positive consumer experience and influences consumers' behaviors and attitudes toward digital services that are offered on various channels, including mobile. This positive experience with DCS increases customer advocacy intentions and referrals. Consumer awareness and familiarity with DCS increase their usage and satisfaction. Earlier explorations (Hanafizadeh and Khedmatgozar, 2012; Howcroft et al., 2002) argued that one of the most important causes of customers' reluctance to adopt retail digital banking services, such as net banking, was their lack of awareness of the retail service and

its advantages. Findings about the usefulness and functionality of DCS suggest that consumers will most often exploit payment systems when they find them useful (Luarn and Lin, 2005). From the viewpoint of the study participants, the convenience, accessibility, interactivity, and ease-of-use of the application were considered highly significant in their continuous usage of digital services. Referrals and word-of-mouth also play a significant role in the adoption of digital services (Susanta et al., 2013).

In summation, the banking industry should ensure greater simplicity and increase the usability (or ease of use) of all DCS for all consumer segments, either through in-house innovations or in collaboration with non-banking entities that specialize in designing and implementing DCS. Awareness of DCS is central to the successful implementation, adoption, and usage of mobile applications. The results of this research indicate that the initiative taken by the industry (to date) in promoting consumer awareness of DCS has been thin and has not resulted in any fruitful outcomes. A comprehensive awareness program that addresses weak DCS know-how will empower consumers to access and use value-added DCS. Finally, the perceived usefulness of DCS largely suggests that the continuous and uninterrupted availability of a comprehensive range of DCS is the face of new customer relationships, and anything less will be considered unacceptable.

This study is not without limitations. For example, generalizations of the findings cannot be made because the study was exploratory in nature and data were collected from a single location. Therefore, it would be difficult to establish cause-and-effect relationships. The consequences of prolonged use of DCS are not limited to simplicity, awareness, and usefulness; therefore, future research should consider additional outcomes of DCS. Finally, future research should consider and recruit study participants from a wide variety of backgrounds and examine other markets for more comprehensive results (Shaikh et al., 2015a).

References

- Bhattacharjee, A. (2001). "An empirical analysis of the antecedents of electronic commerce service continuance." *Decision Support Systems*, 32(2), 201-214.
- Choi, J. H., and Lee, H. J. (2012). "Facets of simplicity for the smartphone interface: A structural model." *International Journal of Human-Computer Studies*, 70(2), 129-142.
- Eytam, E., Tractinsky, N., and Lowengart, O. (2017). "The paradox of simplicity: Effects of role on the preference and choice of product visual simplicity level." *International Journal of Human-Computer Studies*, 105, 43-55.
- Gimpel, H., Kleindienst, D., and Waldmann, D. (2018). "The disclosure of private data: measuring the privacy paradox in digital services." *Electronic Markets*, 28(4), 475-490.
- Glavee-Geo, R., Shaikh, A.A., and Karjaluoto, H. (2017). "Mobile banking services adoption in Pakistan: Are there gender differences?" *International Journal of Bank Marketing*, 35(7), 1088-1112.

- Hanafizadeh, P., and Khedmatgozar, H. R. (2012). "The mediating role of the dimensions of the perceived risk in the effect of customers' awareness on the adoption of Internet banking in Iran." *Electronic Commerce Research*, 12(2), 151-175.
- Hepola, J, Karjaluoto, H., and Shaikh, A.A. (2016). Consumer engagement and behavioral intention towards continuous use of innovative mobile banking applications - Case study of Finland. International Conference on Information Systems (ICIS-2016), Dublin, Ireland, December 11-14, 2016.
- Howcroft, B., Hamilton, R., and Hewer, P. (2002). "Consumer attitude and the usage and adoption of home-based banking in the United Kingdom." *International Journal of Bank Marketing*, 20(2), 111-121.
- Hsieh, H. F., and Shannon, S. E. (2005). "Three approaches to qualitative content analysis." *Qualitative Health Research*, 15(9), 1277-1288.
- Karjaluoto, H., Shaikh, A.A., Saarijärvi, H., and Saraniemi, S. (2018). "How perceived value drives the use of mobile financial services apps." *International Journal of Information Management* (In press).
- Kim, K., Altmann, J., and Kim, W. (2019). "On the Time Lag of the Effect of Network Position on Service Performance in Software Service Networks." *Information & Management* (In press).
- Lee, J., Lee, D., Moon, J., and Park, M. C. (2013). "Factors affecting the perceived usability of the mobile web portal services: comparing simplicity with consistency." *Information Technology and Management*, 14(1), 43-57.
- Luarn, P., and Lin, H. H. (2005). "Toward an understanding of the behavioral intention to use mobile banking." *Computers in Human Behavior*, 21(6), 873-891.
- McKinsey and Co. (2009). The consumer decision journey. <https://www.mckinsey.com/business-functions/marketing-and-sales/our-insights/the-consumer-decision-journey> (Accessed 15 February 2019).
- Shaikh, A. A., Karjaluoto, H., and Chinje, N. B. (2015a). "Continuous mobile banking usage and relationship commitment—A multi-country assessment." *Journal of Financial Services Marketing*, 20(3), 208-219.
- Shaikh, A.A., and Karjaluoto, H. (2015). "Mobile Banking Adoption: A literature review." *Telematics, and Informatics*, 32 (1), 129-142.
- Shaikh, A.A., Karjaluoto, H., and Nathalie, C. (2015b). "Consumers' Perceptions of Mobile Banking Continuous Usage in Finland and South Africa," *International Journal of Electronic Finance*, 8 (2), 149-168.
- Sklyar, A., Kowalkowski, C., Tronvoll, B., and Sörhammar, D. (2019). "Organizing for digital servitization: A service ecosystem perspective." *Journal of Business Research* (In press).
- Susanta, A., Taher, I. M., and Nimran, U. (2013). "The effect of relationship quality on customer advocacy: The mediating role of loyalty." *Journal of Business and Management*, 10(4), 41-52.
- Zhang, L., Geertman, S., Hooimeijer, P., and Lin, Y. (2019). "The usefulness of a Web-based Participatory Planning Support System in Wuhan, China." *Computers, Environment and Urban Systems*, 74, 208-217.