



Three decades of research on consumer adoption and utilization of electronic banking channels: A literature analysis

Hartmut Hoehle^{a,*}, Eusebio Scornavacca^b, Sid Huff^b

^a ANU College of Business and Economics, Australian National University, Canberra 0200, Australia

^b School of Information Management, Victoria University of Wellington, New Zealand

ARTICLE INFO

Article history:

Received 27 April 2011

Received in revised form 4 February 2012

Accepted 29 April 2012

Available online 9 May 2012

Keywords:

Electronic banking

Literature analysis

Adoption

Acceptance

Banking channels

ABSTRACT

The increased availability of electronically mediated self-service technologies in the banking industry has changed the way banks service their customers. Banking customers today can access, through a variety of different channels, sets of powerful tools which allow them to conduct analyses, make decisions and enact financial transactions via working from their home, office or elsewhere. Following practice, research into the adoption and use of electronic banking channels has grown substantially over the last three decades. However, banks seek further growth in consumer electronic banking. Prior research may not have identified all the issues involved in adoption and use and may be limited in other ways. Scholars face challenges researching this area due to fragmented findings and methods over three decades of study. The aim of this paper, therefore, is to empirically determine the 'state-of-play' of research in this field. Using a systematic and comprehensive review of 247 peer-reviewed articles from key research outlets, this paper reveals theories and methods used to study adoption of electronic banking channel at the individual level. Among other things, the findings indicate domains and issues which have been well- or under-researched, conceptual frameworks and principles which have been lightly- or substantially-drawn upon, as well as research methods which have been heavily- or under-utilized. In order to advance research in electronic banking, future researchers should consider diversifying their theoretical and methodological approaches using the opportunities uncovered in our findings.

© 2012 Elsevier B.V. All rights reserved.

1. Introduction

Over the past three decades, the proliferation of new information and communication technologies within the financial industry has impacted the way banks service their customers. In particular, self-service technologies have enabled banks to pursue an electronically mediated multi-channel strategy [11]. From the consumer's perspective these new technologies provide new modes of data access, analysis and decision-making regarding one's financial management [41,60,69].

The first self-service technologies in the finance sector emerged in the 1970s [83] when banks installed the first automated teller machines (ATMs) [19]. This was followed by telephone banking services in the 1980s [2], and in the 1990s, with the emergence of the Internet, banks further extended their existing distribution channels by offering web-based banking applications [9,10,91,93]. Over the past decade, the proliferation of mobile technologies such as mobile phones, PDAs, and smart phones have encouraged banks to provide mobile banking applications [7,57,88].

However, usage rates suggest that banks are missing opportunities to move even more customers to electronic banking channels [23]. While each month 73% of all European banking customers use ATM machines, only 30% use Internet banking services [23,25,26]. Similarly, although most North American and Australasian retail banks offer telephone banking and mobile banking services, only 5–10% of all consumers have used them [33].

Moving clients to e-channels is an important issue for the banking industry in regard to reducing operational costs [32,33,35]. For instance, E*TRADE's implementation of telephone banking resulted in an estimated cost saving at \$30 million per year [35]. What is more, financial institutions employ e-banking channels to cross-sell financial products and banks actively recommend and advertise financial instruments such as investment products, saving products or credit products through e-banking channels [30].

For the consumer, electronic banking channels comprise decision support systems, because they enable individuals to make real-time financial decisions conveniently independently of time and location (e.g., from home, at work or on the go) [14,70]. Electronic banking also helps consumers to decide which banking product fits best to their personal needs [41,60,69].

An extensive body of research has been developed to understand the adoption and use of electronic banking channels at the individual

* Corresponding author. Tel.: +61 2 6125 9505; fax: +61 2 6125 5005.

E-mail addresses: Hartmut.Hoehle@anu.edu.au (H. Hoehle),

Eusebio.Scornavacca@vuw.ac.nz (E. Scornavacca), Sid.Huff@vuw.ac.nz (S. Huff).

level. It is appropriate to review the existing body of knowledge in this area for two major reasons. First, practitioners should benefit from a literature synthesis. Many banks still “trial and error” their electronic banking applications [41]. For example, a recent report of Deutsche Bank research indicates that many German banks already incorporate social media tools into their e-banking strategies [26] – yet we found no academic research studying this topic. Based on interviews with several bank managers [41], practitioners would value summative analyses of research in this domain because it allows them to better understand consumer behavior towards innovative e-banking solutions.

Second, scholars should benefit from this study because we integrate research across four electronic banking channels spanning over three decades. This provides a rich picture because consumers are influenced by various factors when using each e-banking channel. Our analysis suggests that banks should not adopt a “one size fits all” strategy and thoroughly consider what drives consumers to use each e-banking channel [54]. We highlight the methodologies used and theoretical frameworks employed to study e-banking use at the individual level over the last three decades.

The goal for this paper is twofold. First, we aim to review, analyze, and synthesize the extant body of literature of the last three decades on e-banking adoption and utilization at the individual level. This helps us to characterize the development of this research stream and show where it is today. Second, and, most importantly, we provide recommendations where effort should be focused in the future and outline future research avenues.

The next section of the paper briefly defines each electronic banking channel, followed by a discussion of the method used to gather and analyze the study data. Next, the results of the analysis are presented, discussed and synthesized. The paper concludes with a summary and recommendations for future research on the adoption of electronic banking channels.

2. Electronic banking channels

This research focuses on the consumer adoption and use of four electronic banking channels and their associated transaction- and decision-assistance tools: ATMs, touch-dial telephone banking, Internet banking, and mobile banking. In light of this study, adoption is understood as the initial use of e-banking [48] whereas use behavior refers to the repeated usage of electronic banking technologies [9]. A short definition of each electronic banking channel is presented below.

ATM banking includes computerized telecommunication devices that allow customers of financial institutions to directly use a secure method to access cash as well as their bank accounts [19].

Telephone banking services are computer-based keypad response or voice recognition technologies allowing customers to perform banking activities over the telephone [2]. Telephone ‘voice-to-voice’ conversations between banking customers and bank staff (e.g., call-center personnel) are considered to be face-to-face branch banking, not telephone banking.

Internet banking is a banking channel that allows consumers to perform a wide range of financial and non-financial services through a bank's website [10,93].

Mobile banking is defined as a channel through which customers interact with a bank through non-voice applications such as text- or WAP-based banking services using a mobile device, such as a mobile phone or personal digital assistant (PDA) [42].

The following section describes the research method used for this study.

3. Research method

There is an established tradition in information systems research of examining the research literature itself to better understand the

‘state of play’ of research in the field, and to discern patterns in the development of the field [5,74,88,89]. Having a broad portrait of the existing literature on electronic banking adoption at the individual level will facilitate future debate on theoretical and methodological research perspectives in this field [5,75,81,88,98].

Thus, following the information systems research tradition, the subsequent steps were followed:

- Identifying, reviewing and analyzing the existing literature on the adoption and utilization of electronic banking applications and tools at the individual level;
- Identifying theoretical and methodological approaches commonly used to investigate the adoption and utilization of such applications and tools at the individual level;
- Identifying research gaps within the existing literature which addresses the adoption and utilization of electronic banking channels and their associated applications and tools at the individual level.

Since the adoption and utilization of electronic banking channels at the individual level have been researched across various disciplines, we anticipated that relevant articles would be spread across various disciplines such as information systems, decision support systems, electronic commerce, information technology, finance, management and marketing. In order to cover a broad range of journals, we explored the bibliographic databases shown in Table 1.

A keyword search was conducted on these databases in order to identify relevant papers. The search strategy included keywords such as adoption/acceptance/use of electronically mediated self-service technologies, as well as ATMs, telephone banking, Internet banking, and mobile banking. We limited the search to peer-reviewed articles more than two pages in length. This strategy circumvented book reviews, editorials, and opinion statements. Likewise, trade magazine articles and similar ‘non-scholarly’ work were not considered in the search. To cross-check and confirm the relevance of the results, the articles’ abstracts were reviewed. The next step was to scrutinize articles found in the initial search for additional references in this field [97].

Articles that did not focus on the adoption and use of electronic banking channels at the individual level (e.g., articles which concentrated on technical issues of banking transactions) were excluded from the study. Similarly, articles that studied the adoption and utilization of electronic banking channels from a business-to-bank perspective were also not included. The search yielded in 247 peer-reviewed research publications.

In order to guide the analysis of the research literature the following questions were posed:

- Which electronic banking channel was studied?
- What was the research approach (empirical, non-empirical)?

Table 1
Selected online databases for the literature search.

Online database	Subject focus
ABI/inform database	Business and management
ACM digital library	Computer science
AIS library	Information systems research library
Business source premier	Accounting, business, economics, management
Emerald fulltext	Marketing, management, information systems, finance, general management
Google scholar	Web search engine for scholarly literature across an array of disciplines
IEEE Xplore	Engineering and computer science
Inderscience publishers	Electronic commerce, management, information systems
Proquest	Arts, business, science, law, psychology, social science
Science direct	Computer science, economics, business and management, social sciences

Download English Version:

<https://daneshyari.com/en/article/552206>

Download Persian Version:

<https://daneshyari.com/article/552206>

[Daneshyari.com](https://daneshyari.com)