To Choose or Not to Choose: Exploring Australians’ Views about Internet Banking

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ABSTRACT

This paper explores Australian domestic customers’ choices with regard to Internet banking, examining why it is taken up by some Australians and not others. The constructivist conceptual framework and the grounded nature of the method enabled in-depth exploration of key issues not undertaken before by the mainly positivist studies. The purposeful sample of 32 participants was selected to represent the major categories of people relevant to the research. Everett Rogers’ famous analysis of ‘diffusion of innovations’ was one theoretical framework used to illuminate the findings; the other was digital divide factors in relation to banking choices. The findings include 1) that the major motivation for people to adopt Internet banking is convenience, closely linked to time savings and ease of accessibility, as well as confidence and skill in Internet use; and 2) that, at the time of the study, digital divide factors were playing an important part in banking choices.

Keywords: age; banking; digital divide; gender; innovation; Internet

INTRODUCTION

I think once you get on [online banking], it's really simple and the getting onto it is really the biggest stumbling block for most people. (Research participant)

This is one comment made during a qualitative, interpretive study that explored Australian domestic customers’ choices with regard to Internet and other banking forms. The study is pertinent, given that Internet banking has been steadily growing in Australia (AC Nielsen, 2005), as is the case elsewhere including in many European countries (Forrester Research, 2003) and the United States (U.S.) (Pew, 2005a). In Australia, some 25% of the adult population employed Internet banking in 2002 (Barker, 2002), rising to approximately 34% of the adult population by May 2005, with 1.1 million new Internet banking users appearing over the previous 12 months (AC Nielsen, 2005). According to Bauer (1999), the motivation for banking
organizations to invest in and promote the use of technologies such as the Internet is largely connected with the perception of cost savings and efficiencies to be achieved.

While considerable attention has been paid to the activities of banks online, less has been written on customers' choices. Earlier studies have mostly employed a positivist approach, preventing exploration of the deeper issues that motivate customers to take up Internet banking, and the relationships between those issues as suggested by Black, Lockett, Ennew, Winklhofer and McKechnie (2002) in the conclusion of their paper reporting on the few qualitative studies in existence. The advent of several different banking channel options in recent years brings the opportunity to consider the 'relative advantage' (Rogers, 2003) of these various options in depth. It is also worth noting that recent societal changes, such as the maturing of electronic commerce (Beck, Wigand & König, 2003) and the rise of a society of individuals seeking individuated consumption and deeper support (Zuboff & Maxmin, 2002), have likely affected the issues involved, giving added reason for a fresh empirical study.

Taking the above into account, the questions of concern to the research discussed in this paper include: Why is Internet banking taken up by some Australians and not others? What are the attributes of various banking options that encourage or discourage choice? The study examined these questions in a social context, investigating perceptions of users and non-users about their banking needs and options. The issues that emerge from digital divide analyses are particularly important to the research (in this case gender, age, rural/city residence, and income in association with the first three variables) and were taken into account in the sample selection so that the perceptions of those less likely to be involved in Internet use and online banking would be strongly represented. For example, Locarek-Junge and Schwaiger (1998) argue that Internet-based banking is most attractive to those in higher income brackets. This was found in Kolodinsky, Hogarth and Shue's (2000) survey of banking consumers, and is still regularly forecast by industry research firms (e.g., Pew, 2005a). For the purposes of this paper, Internet banking includes monitoring accounts, paying bills and transferring money between bank accounts, including third-party accounts as well as those held at other banks.

Although past public concern about online security, privacy and trust is considered very important by the researchers and emerges in the data, these issues are discussed in-depth in related papers (see Lichtenstein & Williamson, 2005, 2006) and reviewed briefly in this paper in an Australian context.

Rogers' (1962, 2003) analysis of the diffusion of innovations, based on five key attributes that influence adoption of new technology, has explanatory value in the context of the adoption of Internet banking and, indeed, was used by Tan and Teo (2000) in this context. Zuboff and Maxmin's (2002) suggestion for deeper customer support, is also related to some of Rogers' constructs; for example, trialability and observability. Elsewhere, other theories are used to explore the findings (Lichtenstein & Williamson, 2006). In this paper, we used Rogers' framework and digital divide issues to focus the findings after participant perspectives emerged from a qualitative analysis.

From this point, the article proceeds to the 'literature review', which focuses specifically on the two major frameworks of analysis used in the research as well as a brief review of consumer concerns in online security, privacy and trust in Australian Internet banking. This section is followed by a discussion of the 'research philosophy and method'. The article then presents the findings and discussion, followed by the conclusion.

LITERATURE REVIEW

Apart from the literature discussed in the introduction, there are two key bodies of theory and empirical findings that provide analytical frameworks for this paper. The first is Rogers' theory of the diffusion of innovations; second is the digital divide issues that were a very important focus of the research and this paper. In
addition, we provide a brief review of customer concerns regarding Internet security, privacy and trust, as these issues surfaced in the findings in some surprising ways.

**Diffusion of Innovations Theory**

The first strand of the conceptual framework involves the diffusion of innovations theory, especially based on the work of Rogers (1962, 2003). Everett Rogers, a famous name in the literature about the diffusion of innovations, published a landmark study in 1962, *The Diffusion of Innovations*, analyzing and critiquing 405 publications about the subject and developing a theoretical framework based on his analysis. Now in its fifth edition (2003), 5,200 publications are based on the updated theory. Rogers (2003, p. 12) defines an innovation as “an idea, practice or object that is perceived as new by an individual or other unit of adoption.” He describes five attributes of innovations: relative advantage, compatibility, complexity, trialability and observability.

1. *Relative advantage* is the degree to which an innovation is perceived as better than the idea it supersedes (Rogers 2003). According to Haythornthwaite (1998, p. 16), “relative advantage is perceived by comparing the ‘old’ way of doing things to the ‘new’ way.” The more the perceived advantage of adopting the new way, the more likely the innovation will be adopted.

2. *Compatibility* is the degree to which an innovation is perceived as consistent with existing values — for example, of a particular society or culture, with past experiences or ideas, and with needs of potential adopters (Rogers 2003). There are links here with two other attributes, “relative advantage” and “complexity.” An innovation compatible with previous procedures entails less learning (therefore complexity) and thus is more immediately perceived to have an advantage (Haythornthwaite, 1998).

3. *Complexity* is the extent that an innovation is perceived as difficult to understand and use. Rogers (2003) generalizes that the perceived complexity of an innovation is negatively related to its rate of adoption and suggests that the perceived complexity of home computers in the early 1980s retarded their adoption. Atkinson and Dowling (2000) cite Green (1999) and JISC (1998) with regard to the support users want with new technology.

4. *Trialability* refers to the opportunity for people to experiment with an innovation on a trial basis, without financial commitment (Rogers, 2003). This particularly applies to early adopters, as later adopters have more opportunity for trials as the innovation permeates their society and environment.

5. *Observability* is the degree of visibility of the results of the innovation (Rogers, 2003). The idea here is that some innovations are more observable and can more easily be described to others.

**The Digital Divide**

As mentioned above, a number of socioeconomic variables have been found to influence efficient, reliable access to information technology and, thus, would have an impact on customer choices with regard to Internet banking. If people do not have a computer, are not connected to the Internet at work or lack broadband access—and the literature indicates strongly that certain community groups are more likely to be in this situation (e.g., Pew, 2005b)—then this is likely to affect their banking options and choices. On the other hand, Mossberger, Tolbert and Stansbury (2003) see the emphasis on “access to technology” in “digital divide” discussions as too restrictive, and they advocate a broader definition that includes the need for awareness of a “skills divide.”

In relation to the digital divide, we chose to consider gender, age, place of residence (rural/city) and income by way of the latter’s association with the other three variables. We did not include ethnicity, although Australia is
a multicultural society. The reason is that there is such a wide range of ethnic groups, making this issue complicated to the point of possibly requiring a separate study.

There is particularly good U.S. evidence about digital divide characteristics in relation to computer ownership, access to broadband and Internet use through the Pew Internet and American Life Project (Pew, 2005b). The findings of this project are likely to be indicative of the Australian situation, although there is some direct Australian evidence, as well.

With regard to gender, research findings are mixed. While referring to the “well-documented digital divide that runs along economic lines,” Cooper and Weaver (2003, p. ix) stated that “another dangerous divide: Relative to boys, girls are being too often left behind on the road to technological proficiency.” On the other hand, a recent study suggests that in North America, women are now just as interested as men in the features, usefulness and usability of new technologies (Intel, 2004). In Australia, a recent government document (DCITA, 2004a) stated that, once effective access is available, Internet use takes place evenly between Australian males and females, with 84% of adult males and 84% of adult females who had Internet access using the Internet in the third quarter of 2004. This use does not necessarily go across all applications, however. In the Internet banking context, Australian female non-Internet banking users have been found to have greater security concerns than their male counterparts, possibly influencing their banking channel choices (ACNielsen, 2005).

With regard to age, a study by Fox (2004) indicated that 22% of Americans in the 65+ age group were working on computers and online. More recently, Pew (2005a) found that only 25% of the 60+ age group had used Internet banking. In Australia, in June 2003, 29% of those aged 55+ (the only comparable age group available) had accessed the Internet in the previous month (DCITA, 2004b). In Australia, the large majority of the elderly are also women. The elderly and women are also likely to have lower incomes than men, and the US figures (Pew 2005b) show that income also affects Internet use.

Consumer Security, Privacy and Trust Concerns in Internet Banking Choices

With the advent of Internet banking, damaging security and privacy risks have emerged, such as identity theft, enabled by phishing (fraudulent messages to obtain sensitive data), spamming, spyware and hacking. Such risks are the subject of considerable recent regional attention (IDC, 2005). A few years ago, Sathyve’s (1999) study identified the presence of Australian customer concerns regarding security and privacy issues and their influence on Internet banking adoption. Hain, Tootell and Alcock (2003) noted further that non-Internet banking customers (non-users) were more concerned about security and privacy issues than Internet banking customers. They found that non-users were particularly concerned about the lack of a paper trail in banking transactions. The security concern has also been recently associated more with female than male non-users (ACNielsen, 2005). According to McCullagh and Caelli (2005), Australian personal computers (PCs) should be made more secure to improve the security of Internet banking. They suggest that emerging plans for two-factor authentication are an insufficient response to the increasing incidence of phishing. A recent survey of Internet banking use showed that so far, Australian uptake of Internet banking has not slowed due to customer security concerns, unlike the US (ACNielsen, 2005; Pew, 2005a). To partly address security, privacy and trust concerns with Internet banking, experts have suggested a need for greater consumer awareness and management of the issues involved (ASIC, 2005).

RESEARCH PHILOSOPHY AND METHOD

Because we wanted to gain deep understandings about banking choices, we chose a qualitative, interpretivist approach to our study, rather than the box-ticking processes of a positivist-style survey, which usually results in
broad, superficial data lacking the "rich picture" perceptions of interpretivist studies. Supporters of interpretivist or qualitative research argue that it allows greater flexibility and, therefore, results in the discovery of new insights (Sutton, 1997) and that "it can produce new and unexpected data, evidence we did not know was there" (Madjar & Walton, 2001, p. 41). In other words, it is the serendipity encouraged by this approach to research that is a major strength.

"Interpretivism" is an umbrella term under which various paradigms, such as constructivism, phenomenology and critical theory, fit (Williamson, 2002). All of these paradigms are about the meanings made by human beings, but each has a different emphasis. For example, whereas phenomenographists categorize individual meanings or experiences, constructivists are concerned with reflecting the range of multiple realities in their research. The present study is guided by constructivist paradigms, both personal and social. The former is explained by a range of theorists who have postulated that individual reality is determined by each person's perceptions of what is real, and the notion that the "meanings" that each person makes may differ from those of others (Kelly, 1963; Lincoln & Guba, 1985; Hammersley, 1995; Saule, 2002). Social construct theory, which places emphasis on the ways people develop meanings together, emerges from philosophical roots similar to those of personal construct theory. Well-known proponents of social construct theory are Berger and Luckmann (1967), who argue that meaning is developed through the interactions and social processes involving people, language and religion. As Schwandt (2000, p. 197) states: "We do not construct our interpretations in isolation but against a backdrop of shared understandings, practices, language and so forth."

We believe that there usually is a range of cultural influences, both macro and micro, on each individual and that, when people experience similar cultural impacts, they are likely to have at least some needs and understandings in common. The activity of all our participants, vis-a-vis banking (regardless of mode), means that they are likely to have at least some shared perceptions of needs, as well as insights about how banking services can be improved. Therefore, we have taken the approach that the patterns that emerge from shared meanings can be used to understand customers and improve banking services for them. To this end, we set out, through our qualitative research, to discover the meanings shared by participants, as well as those that were not (consensus and dissonance).

The Sample

Samples are used for empirical studies in interpretivist research, although they differ from those used in positivist research in that they are usually small in size and purposefully selected to be appropriate to the research. As Patton (1990, p. 169) observes, while quantitative enquiry typically depends on larger samples selected randomly, qualitative samples focus on small samples selected purposefully. He argues that:

... the logic and power of purposeful sampling lies in selecting information-rich cases for study in depth. Information-rich cases are those from which one can learn a great deal about issues of central importance to the study, thus the term purposeful sample.

As this quotation implies, purposeful samples are also often premised on the concept of "theoretical sampling," as discussed by Glaser and Strauss (1967). Theoretical sampling means selecting subjects who represent the important characteristics that researchers consider of interest to the study. With this approach, there is no compunction to sample multiple cases that do not fit with or extend emerging theory (Pidgeon & Henwood, 1996). In the study under consideration here, 32 participants were recruited through community groups and libraries. They were purposefully selected to emphasize the views of those who could be placed on the wrong side of the digital divide, as seen in Table 1.
Table 1. The sample from a digital divide perspective

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
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<tbody>
<tr>
<td>Women</td>
<td>About two-thirds of the sample (22 women and 10 men made up the sample). Women also represented lower-income groups, as only 25% were working full-time, about 40% were working part-time, and the remainder were either unemployed (mostly students or married with spouses who worked full-time) or retired.</td>
</tr>
<tr>
<td>Older Australians</td>
<td>One-quarter, older than age 50.</td>
</tr>
<tr>
<td>People from a rural area</td>
<td>About one-third of sample.</td>
</tr>
<tr>
<td>Lower income earners</td>
<td>About one-third of the sample earned less than AUD$20,000 and just more than half less than AUD$40,000.</td>
</tr>
<tr>
<td>Note</td>
<td>Lower-income earners were not specifically targeted for the fieldwork because of the sensitivity of the issue, but were strongly represented as a result of the focus on the other three variables.</td>
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Data Collection

To collect the data, researchers used an ethnographic technique, the interview, choosing to employ it in two different ways—to collect data from individuals and also in focus groups.

The semi-structured interview schedule was piloted with four participants, to ensure that the questions worked well. Because of difficulties with the questions concerning security, privacy and trust, changes were made to the schedule, thus necessitating re-piloting. Once the questions were considered satisfactory, the semi-structured interviews were undertaken with either individuals (5 participants) or focus groups (27 participants), totaling 32 interviewees, during July 2002-February 2003.

The interviews lasted from 1 to 1.5 hours. Examples of core questions asked are included in Table 2. Although all of the questions were asked of each participant, prompts were used as necessary to encourage elaboration, or answers led to follow-up questions.

With the permission of participants, the interviews were audio-taped and transcribed by an experienced transcript typist. Each participant also filled in a short demographic questionnaire, which asked questions—for example, about gender, age, place of abode, education levels and income, and computer and Internet use.

Data Analysis

The analysis of data by identifying specific categories and broader themes within the data is a typical method of analyzing qualitative data (e.g., Huberman & Miles, 2002). It is the

Table 2. Examples of interview questions asked

- What is your preferred method of banking and why?
- How often and for how long have you been doing online banking (note that online banking is defined as Internet banking)?
- Have any of the following factors influenced your decision regarding online banking: access to computers, lack of familiarity with computers, lack of familiarity with online banking technology, difficulty in understanding and using online banking facilities; concerns about speed of download and/or reliability of technology; unfriendly Web site design, and 24-hour access. (Where relevant, participants were also asked to explain why and how the factors were influential.)
- Are security, privacy and trust a concern for you with online banking? (Lay definitions of these terms were given to participants.)
- What kinds of people does online banking suit best? Why? What kinds of people does online banking not suit?
Table 3. Examples of themes, categories and quotations

<table>
<thead>
<tr>
<th>Themes</th>
<th>Categories</th>
<th>Quotations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information about online banking (publicity and information provided and distributed by the banks)</td>
<td>(1) Attention-grabbing advertisements</td>
<td>(1) I give things a quick once over and if it doesn't grab my attention real well, I may not finish reading it.</td>
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<tr>
<td></td>
<td>(2) Lack of media publicity</td>
<td>(2) You never hear about it on television or radio, about how easy it is to use online banking</td>
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<td></td>
<td>(3) Lack of other bank initiatives</td>
<td>(3) [The bank could use a] television screen while you are in the queue to show people how easy it would be.</td>
</tr>
<tr>
<td>Issues for women (all gender issues concerned with access and use)</td>
<td>(1) Convenience of banking option</td>
<td>(1) I can just do it another time whenever I feel like it, late at night or something, when it is usually quieter.</td>
</tr>
<tr>
<td></td>
<td>(2) Work-related issues</td>
<td>(2) I have privacy issues at work because there've been lots of situations where e-mails have been intercepted and what have you.</td>
</tr>
<tr>
<td></td>
<td>(3) Technology-related issues</td>
<td>(3) We're on the Internet, but I don't dare touch the thing in case I spoil it.</td>
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approach used by grounded theorists (e.g., Glaser & Strauss, 1967; Charmaz, 2003). There were five steps to the data analysis:

1. Data were transcribed into printed form.
2. Two researchers read through the data, making notes about the tentative themes (with definitions) that appeared to be emerging.
3. Passages of data were labeled with categories and linked to one of the themes, so that identically labeled or categorized data could be retrieved as needed. Further themes (broadier than categories) were identified and defined as necessary. As with themes, categories were given a short title and a definition if needed. Initially, categories were sometimes broad and sub-divided to be more precise as the analysis progressed.
4. Categories were conceptually organized, meaning that thought was given to the similarities, differences and relationships among the categories.
5. Final themes were developed in preparation for presentation of the research findings.

Table 3 contains examples of themes, categories and associated quotes related to two sections of the findings (trialability and observability and gender), which follow later in this paper.

The thematic and category analysis was able to interrogate the data in terms of digital divide issues and Rogers’ framework. The latter analysis provided insights about: (1) the relative advantage or disadvantage of Internet banking and competing banking modes, as well as the degree of compatibility with past and existing modes of undertaking banking tasks; (2) whether perceived complexity is a deterrent to adoption; and (3) whether present trialability and observability are sufficient to attract potential customers’ attention. Some of the outcomes from the diffusion of innovation analysis are entwined with Internet adoption as affected by digital divide issues, as discussed below.

**FINDINGS**

This section begins with the characteristics of Internet banking that were encouraging adoption at the time of the study, followed by the impediments to adoption, which include the attributes of other banking modes that made them more attractive than Internet banking to
some participants. The discussion, which is very much from the perspective of the participants in the research, in true interpretivist style, is undertaken within Rogers' (2003) framework. This is followed by insights from analysis based on digital divide characteristics.

We found that at least one internet banking service was used by 13 participants (or 40.6% of the sample). The remaining 19 participants (59.4%) found internet banking not applicable to their circumstances.

**Attributes Encouraging Adoption of Internet Banking**

Attributes encouraging adoption of internet banking come within Rogers' (2003) categories of "relative advantage" and "compatibility," with "relative advantage" characteristics being particularly encouraging to adoption.

**Relative Advantage and Compatibility**

As has been suggested by findings in a recent Australian study (ACNielsen, 2005) and earlier American studies such as Pew (2002), a major advantage of internet banking was its convenience. This was raised many times in the individual interviews and focus groups. For example:

*I think convenience overrides all the other issues here.*

*I actually got the Internet partly out of convenience.*

At least for some participants, the convenience of internet banking overrode any misgivings they might have with regard to security or privacy:

*[Security] is an issue, but I kind of suppress it in view of convenience.*

*I am aware of the privacy issue—how, for example, my e-mail address is given to other companies, and so on. But overall, the convenience factor outweighs all of that.*

Internet banking convenience was mostly described in terms of ease of access and time savings: through "24 hour-a-day, 7-days-a-week" access, not having to wait especially in long queues in banks, the easy accessibility of the internet in the workplace, the convenience for those who are relatively housebound, and not having to travel. Most such comments amounted to ease of access and time saving in some way—being mostly seen as more important than cost savings. For example:

*I don't think it can save me money; just time is the biggest saving for me. It might equate to money.*

*I find banking online very good, because of not having to travel to a local branch or anything like that. I can do it 24 hours a day.*

*Now that I'm home with young children, I've got too many things on during the day to be doing the banking. So it suits me to sit up there at night at a quiet time and just get it all done.*

*[Also] advantageous ... is the update speed. Your transaction and statements are instantly updated so you have access to those, so you can see a running tally of your bank account rather than waiting for your statement.*

*We sit in front of a computer 8 hours a day and it's easy just to click in and do your banking.*

Internet banking users were aware of a range of other benefits of this form of banking, including the ability to view accounts, access timely account data and make the most profitable use of available funds through fund transfer between multiple accounts on-screen. A user commented:

*I prefer online banking to telephone banking because I like the visual impact. If I do it over the phone, I have to imagine the figures. If I use online banking, I actually see the numbers and have a record.*
It was clear that “compatibility,” in terms of Internet banking and especially related to past and present experience of Internet use, played a part. Where participants were experienced users of computers and the Internet, taking the next step to banking online was seen by some as relatively easy:

I learnt how to use computers when I was working and started Internet banking then ... The actual software part I learnt by myself ... The hardware or general use of the Internet banking I learnt through having to do it at work.

I find the Internet quite familiar, and it was no big deal for me to do Internet banking.

[At work] ... I have limited hours on the Internet, so (given) the amount of work I need to do with banking, I will use the telephone.

Another interesting finding was the role that the qualifier “convenient enough” played in the decision:

[Phone banking] is convenient enough, even though I can see that the Internet would be that nanosecond faster.

Telephone banking was not the only mode that satisfied participants’ needs and was perceived as more compatible with their past experience. For example:

[I do not use it because] face-to-face and ATM already fulfil what I need.

I don’t see any advantage in [online banking]. Not for me. I go shopping at least once a week or once a fortnight and I don’t find going to the Post Office an inconvenience really. So I see no need to use online banking ...

Not related to preferences for other modes, the lack of access to the Internet itself or the relevant Internet banking package clearly gave other modes relative advantage. In this category, too, was lack of time to undertake the set-up procedures for Internet banking (which is also related to “complexity” issues discussed as follows) and which, therefore, gave a relative advantage to other modes.

We’ve all got computers at home, but not access to the Internet at home.

Internet banking once you use it is simple, but it’s getting set up, and if you require changes to any of your account operations, there’s a lot of downtime involved with paperwork.

For me, it is a bit of a time factor issue, actually finding the time to sit down at the computer and going through that process both at work and at home.
Computer purchase, Internet access and online banking transactions incurred various charges. Participants also mentioned the recent introduction of fees for Internet banking, where previously there were none. As one non-user explained:

One of the reasons I have avoided this [Internet banking] is being charged again for using what I consider to be a more sophisticated service—and, because I don’t need that sophistication, I try and avoid using it.

The issue of security also gave “relative advantage” to other modes:

One of the things that has been a barrier, I guess, is that hacking thing ... [phone banking] seems to be more secure or something. I don’t know why I get that impression.

This happened also with the issue of privacy. For example, one non-user had received poor advice from the bank, resulting in her account details ending up in non-bank hands. This had influenced her preparedness to take up Internet banking:

We’re putting this technology in place, but the safeguards are not there in a lot of instances to make it work. So, I’d be very reluctant to ever do that again.

Finally, several electronic bankers commented on the sadness of losing personal relationships with branch staff, suggesting that for some people, such costs are factored into the decision about “relative advantage” and whether new banking modes are “compatible.”

Complexity

Complexity, as perceived by participants, appeared to be a deterrent to adoption of Internet banking and related to perceptions of “relative advantage.” Several non-users commented on their lack of confidence with the Internet and the general complexity of the banking application itself:

In terms of online banking, I don’t feel highly confident with my own ability to use online services. I don’t feel I’m strongly computer literate.

I think online banking allows you to do 50 different things, and if you only need a couple of different things, it can throw you.

I do have a computer at work ... but I am not computer literate. I’ve got no wish to be any more literate than I have to be to use it at my job.

I tried to fill out the form for online banking and I couldn’t even figure that out. I don’t know how to use online banking.

The banks and financial institutions want everyone to go online but they haven’t set up their systems so that people can actually use it. (From an experienced Internet user)

The ____ bank [site] is so cumbersome, and ... I wished I could ring someone and say how bad their system is ... It [wouldn’t] hurt for them to have more prompts on the Web page that helped you to navigate easier.

These perceptions of “complexity” could have been ameliorated by opportunities to “observe” Internet banking and to “trial” it, as discussed in the next section.

Trialability and Observability

It seems that opportunities to “observe” and “trial” were not available to participants or, at least, this was their perception. Several participants talked about the need to capture customers’ attention, indicating that this is not easily achieved:

I give things a quick once over and if it doesn’t grab my attention real well, I may not finish reading it. It should get your attention. If it doesn’t, a quick flick and it’s gone.
[What is missing is] probably a ‘wow’ factor there to get your attention.

Others were more specific, believing that information and support had not come their way.

You never hear about it on television or radio, about how easy it is to use online banking.

If the bank showed me how to do [online banking], I’d be able to assess whether it was too complicated or not.

[The bank could use a] television screen while you are in the queue to show people how easy it would be. I haven’t seen any big advertising campaign to show somebody like me how uncomplicated it would be, so I assume it is complicated.

I think a tutorial would get more people interested, and the best way to have it would be in a bank location, because you are getting the people that are using the bank.

Sadly, [Internet banking] could suit a lot more people if the banks were more proactive about supporting people in the use of it.

Thus, there was considerable feeling that more attention by the bank to informing customers and providing support would encourage them to consider Internet banking.

Insights from Digital Divide Characteristics

While the analysis using the Rogers’ attributes was revealing, insights about the key groups targeted in the sample needed to come from a specific focus on those groups. The digital divide characteristics of gender, age and location (rural/urban) are discussed below, with a brief mention of income at the end.

Gender Issues

With women making up two-thirds of our sample, of whom only 27.2% were Internet bankers (compared with 70% of the men), we were particularly interested in exploring issues from the female perspective. We found that many of the women had busy lives with children, house duties or work. Those who were banking on the Internet mentioned valuing the convenience of 24/7 access, with the ability to get onto the Internet late at night while their children slept or when there was a spare moment:

[I can] just do it another time whenever I feel like it, late at night or something, when it is usually quieter.

Interestingly, female users, even when they had part-time or full-time jobs outside the home, were mostly doing Internet banking at home rather than at work. Those with part-time jobs mentioned that they could not use valuable time at work for Internet banking. The few women with full-time jobs either did Internet banking at home—expressing concerns about the issues involved in workplace use—or had chosen phone banking. For example:

I have privacy issues at work because there’ve been lots of situations where e-mails have been intercepted and what have you.

It would appear that the kinds of jobs held by women (often part-time to accommodate their family responsibilities) may play a part in their access to online banking at work and thus may be an element in their ability to bank online, when compared with men.

In general, women who had chosen telephone banking also cited convenience reasons. However, this group either had fewer Internet access opportunities than the female Internet bankers or expressed various concerns about the technology, such as possible difficulty in use and level of risk. For example, one female non-user expressed her concern as:

We're on the Internet, but I don't dare touch the thing in case I spoil it.
This is in keeping with the differences said to exist still between men and women as discussed in the digital divide literature, including in relation to the “skills divide” (Mossberger, Tolbert & Stansbury, 2003). Morahan-Martin’s (1998) suggestion that, compared to men, women have more fear of and less interest in new technologies, such as the Internet, appeared to hold for some (but by no means all) women in the sample.

On the other hand, male non-users interviewed did not express such concerns as reasons for not using Internet banking (although, of course, this does not prove that they had none). Most of the males with the Internet at work used the Internet there, citing the convenience of high-speed, dedicated access and their having been trained in Internet use through normal work activities. Thus, our study has highlighted some important differences in how and why males and females choose, or do not choose, Internet banking. While these are Australian findings, they may yet help to enlighten results from a recent study in the US revealing a higher rate of uptake of Internet banking by males compared with females (Pew, 2005a).

Age Issues

Older people are often slower to adopt new technology than younger people (Williamson, 1995, 1998), and the take-up of the Internet has certainly been slower with the older age group, as discussed above. Age, therefore, could be considered as a potential barrier to adoption of Internet banking, as has been suggested in the U.S. in the findings of Pew (2005a), where only 25% of the 60+ age group had used Internet banking. Although needing to be treated with caution because of the small size of our sample, our data showed that indeed this appears to be the case. Twelve of our 13 Internet bankers were younger than the age of 50, and the one older than that age was only an occasional user. There was also some evidence that older users, who had grown up with bank staff handling all transactions, retained a preference for visiting bank branches rather than using electronic services:

My mother was like that. She was nearly 80. The way she got cash out of the bank was she used to write herself a check and go and get it cashed. She'd never use an ATM.

Some participants talked about the physical handicaps of age that discouraged particular activities:

I think there are barriers of actually using a keypad even with the ATM, pressing keys and also reading that script that's not that easy to read even when your eyesight is fine. That's a real barrier for older people ... They might use the Internet, but I doubt they would be comfortable with banking.

Conversely, a rural resident felt age was not a barrier to uptake of Internet banking services:

Older people can learn it. They've got the time to learn it and if they're interested, they'll do it.

It is the older age group that particularly needs encouragement and support—as discussed above—if they are to be included more frequently among Internet bankers. There are often issues for them related to lack of experience and exposure to information and communication technologies and more physical disabilities than for younger people (e.g., poorer dexterity and eyesight). The “skills divide” (Mossberger, Tolbert & Stansbury, 2003) as well as the “access divide” is very important with this group.

Rural Issues

The participants from a rural community provided some insights specific to rural locations. The majority of rural participants were non-users of Internet banking and “digital divide” issues seemed to be strongly at play. There was resentment and distrust in this rural area where, as in other Australian rural areas, people have been battling drought and falling incomes. Participants here felt the loss of the security or reliability of the physical banking
presence in the community; yet believed they were not receiving support to take up new banking modes:

[I] ran the city about getting some training [for Internet banking]. We thought that would be as easy as anything for them to send out their online specialist to talk to our group, and they said "No, we don’t"...[unless there is] a minimum of 15 to come. We’ve only got four or five computers and we can share, but she won’t come unless we get 15 people.

The group felt that adequately supported training made available to non-online users would encourage greater use of Internet services:

If the community doesn’t have a bank presence...[Internet banking] would be of tremendous value to a community like this.

Income
As mentioned above, we did not systematically designate “income” as a variable to be considered in building our purposive sample. As it turned out, no participant refused to specify their income in the short demographic questionnaire each filled out. However, “income” can be a sensitive issue. While the implications of cost arose in the individual interviews and focus groups, we did not set out to relate income levels to cost issues. We do know that participants with higher incomes were more likely to bank online (64% of those earning $40,000 or more, compared with 36% of those earning less than this amount). This finding must be tentative, as it is based on a small sample, but it is in keeping with the claims in the literature that Internet-based banking is most attractive to those in higher income brackets (Locarek-Junge & Schwaiger, 1998; Kolodinsky et al., 2000; Gartner Group, 2003; Pew, 2005). Moreover, people on low incomes are likely to be less attractive customers for banks, resulting in fewer efforts being made to encourage them to bank online.

CONCLUSION
This study used a constructivist approach to explore the shared and individual meanings or perceptions of study participants who were banking customers. It elicited a rich picture of the influences on their banking choices; the attributes that encourage and discourage the adoption of Internet banking; as well as the issues for three groups who often are seen to be on the wrong side of the digital divide. The application of Rogers’ framework gave a clear focus on the likely motivations behind people’s banking choices. The relationship among key influences also emerged. Although it is not possible to generalize the findings, the study confirmed some existing research findings from the literature, and also broke some new ground. It generated new ways of thinking about online banking in relation to the specific groups who were the focus of the study. It explored ideas in-depth, offering important data on how and why some people choose, or do not choose, Internet banking. This could assist in the framing of a questionnaire for a survey of the groups that have been particularly targeted in this study—to enable the extent of support for various options to be measured, along with the motivations behind those choices, including the prevalence of digital divide issues.

The main findings from this study suggest that convenience now gives “relative advantage” to Internet banking, as was also found in the Pew (2002) survey of American customers and recently proposed as a reason for the recent boom in Internet banking in Australia (ACNielsen, 2005). While in earlier studies, security risks dominated Australian customer concerns about Internet banking (e.g., Unnithan & Swatman, 2002; Sathy, 1999), the growing importance of convenience is not surprising in light of an increasingly busy society. Convenience was found to be closely linked to time saving and ease of accessibility, as well as confidence and skill in Internet use.

The study found that the key reasons for people not having adopted Internet banking focused on the “relative advantage” and “compatibility” they perceived for their present
banking modes, particularly telephone banking and sometimes face-to-face service, plus their lack of access to the Internet mode. Barriers to adoption of Internet banking involved “complexity,” “trialability” and “observability” issues: fear of or lack of proficiency with the technology; perceived lack of support from the banks to assist people to adopt Internet banking; and failure of the banks to attract attention to the benefits of the Internet service.

There is some evidence from the study of the relationship of digital divide to banking choices. With women well represented in the sample, but much less well-represented than men as “Internet bankers,” there was a good opportunity to explore issues from the female perspective. A key finding was that, where they were banking online, the nature of Internet banking convenience for them was different from that of the men in the sample. They particularly valued the ability to bank at home 24/7; but when they lacked high levels of Internet access at home, did not feel confident with Internet use or anticipated difficulties with the banking application, they tended to view Internet banking as “not convenient.” Female views of convenience were more strongly linked to speed of the actual banking activities.

Older age and rural location meant less likelihood of Internet banking at present. The researchers concluded that these groups would particularly be likely to respond positively to deeper levels of support from banks, as recently discussed by Zuboff and Maxmin (2002), to encourage them to adopt Internet banking. This requires that bank employees be specially skilled in customer service and know more than customers. In Australia, some banks are already moving in this direction (Blount, Castleman & Swatman, 2005). To conclude, while improvements are certainly needed in the Internet banking application and environments of use, our study suggests that banks could do much more to address customer fears and misconceptions about the technologies involved, and to assist in bridging the “skills divide” that continues to inhibit the opportunities of many to be part of the information and technological age.

REFERENCES


Blount, Y., Castleman, T., & Swatman, P. M. C. (2005). E-commerce, human resource strategies, and competitive advantage:

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ENDNOTE

1 Phenomenography is the method used within the phenomenology paradigm. For a discussion of phenomenography, see Marton, 1988.

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