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The Adoption of Internet Financial Services: A Qualitative Study

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Executive Summary

- Little empirical research exists which addresses consumer adoption of internet financial services and yet understanding this process is essential for the development of more effective marketing campaigns to promote the use of this form of delivery.

- Exploratory, qualitative work was considered the most appropriate starting point given the lack of prior evidence on this issue.

- Focus groups were used and were divided into three categories, namely, non users of the internet, users of the internet who did not use internet banking and users of the internet who did use internet banking.

- Banking was the main way in which respondents used the internet; in most cases this was for current accounts only but a significant minority mentioned savings accounts. A large number of respondents in both category two and category three used the internet for information on financial services prior to making a purchase through more conventional channels.

- Adopters of internet financial services do recognise significant benefits (accessibility, convenience, cost, control) from the internet for although many expressed reservations with respect to more complex financial products. Non adopters retain a high level of concern with respect to the use of the technology, the risks involved and the loss of face to face interaction.

- For many users telephone banking and internet banking are not strongly differentiated and a significant group of consumers struggle to see the benefits of the internet when compared with the telephone

- The degree to which an innovative channel such as the internet is compatible with the individualôs past experiences and values appears to have a significant impact on

willingness to adopt; respondents in category one clearly felt uncomfortable with the internet while those in category three were much more relaxed about computers in general and the internet in particular.

- Trialbility is crucial. However, although web based demonstrations are helpful, other opportunities for trial need to be extended to non-computer owners. Furthermore, the fact that such trials are available needs to be communicated more efficiently to potential adopters.

- The perception of complexity seems to be related to previous experiences and varies across categories. All categories contained respondents expressing concern about complexity and all categories contained respondents who believed internet banking to be straightforward.

- Categories 1 and 2 lack self-confidence when compared to category 3 and thus tend to perceive much higher degrees of risk. Regarding security, categories 1 and 2 participants engaged extensively in story telling about "hackers" thus, it appears that fear was still a deterrent in using the internet for financial transactions, which was far less prevalent in category 3. However, participants across all segments acknowledged that this fear was irrational.

- Although these societal concerns (job losses, branch closures) were raised as problems consequent on the development of the internet, the extent to which they would deter people from using this channel is less obvious, although they did appear to contribute to a rather negative perspective on the motivations and behaviour of financial institutions.

Managerial Implications

Although the current study is exploratory and is to be followed by a more extensive quantitative analysis of these issue, the results to date do have important managerial implications. While there is widespread recognition of the importance of the internet as a channel of distribution in financial services, particularly in relation to more routine, simple services, there is considerable progress to be made in overcoming consumer resistance.

For many consumers, the benefits are not obvious; for those who prefer branch based banking, there is a clear need to consider the extent to which the internet can be used to replicate some of the interactivity that the branch offers. Thinking about the service levels more broader rather than just the technology may contribute to this process and well managed e-mail systems can provide both interaction and some of the reassurance which is important to the less confident customer groups.

In addition to thinking about the nature of service levels over the internet, it is clear that there is a need for much more effective communication of the attributes that the internet offers and they was in which it can provide real value for customers.

Trialability is important and the demonstrations that took place in focus groups had a very immediate impact on the way in which respondents viewed the idea of using the internet for financial services. Demonstrations on web pages are valuable in this respect but there may be a case for thinking further about bringing the internet to those without computer access. Television on in branch demonstration may be of particular value in this respect.

Respondents did identify a number of social concerns and these contributed to rather negative perceptions of the financial services sector. In particular, there was a strong feeling that the bank branch was an important part of local communities. While clearly the existence of branches does impose significant costs, there may a case for considering how best to manage networks in order to reduce the negative effects of closures on the image of individual companies in general and the sector in particular.

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Abstract:

The vast majority of products and services which are launched fail at considerable cost to those involved (Foxall, 1984). It is therefore important to identify which of the perceived attributes of an innovation are of most importance to the potential early adopters who will be most receptive to the new service. The following paper examines the case the consumer adoption of Internet financial services, which may be viewed as an innovation in service delivery. The qualitative study employed Rogersô (1962) model of perceived innovation attributes augmented by Bauerôs (1960) perceived risk. The perceived innovation attributes were found to be important determinants of consumersô adoption decisions. However, two additional dimensions were found to influence peoplesô adoption decisions highlighting the complexity of the adoption decision for Internet financial services.

Key words: Innovation, Financial services, Internet

1. Introduction

The launch of new products and services is an important area for both academics and practitioners given the increasing rate of change of technology, competition and consumersô needs. However, the vast majority of products and services which are launched every year fail at considerable cost to those involved (Foxall, 1984). It is therefore important to identify which of the perceived attributes of an innovation are of most importance to the potential early adopters who will be most receptive to the new service. The following paper examines the case of the consumer adoption of the innovation of delivering financial services through the medium of the Internet. The dominant theoretical framework for analysing the perceived attributes of an innovation has been Rogersô (1962) model; with many subsequent studies also including the additional dimension of Bauerôs (1960) perceived risk (e.g. Ostlund, 1974; LaBay and Kinnear, 1981; Holak, 1988; Lockett and Littler, 1997). The above research has largely been conducted in the context of the consumer adoption of tangible innovative products. However, the innovation of delivering financial services through the Internet may be considered to be a complex interaction between the intangible service and medium of service delivery. Therefore, the objectives of the following paper are, first, to re-evaluate the applicability of Rogersô (1962) model in the context of Internet financial services. Second, to attempt to identify any potential additional dimensions that may influence a personôs decision

to adopt. The following paper presents the results from an in-depth qualitative study employing a focus group method of data collection.

2. Literature Review

The perceived attributes of an innovation affect the rate at which it is adopted within a social system. Rogersô (1962) seminal text outlined a schema for evaluating the perceived attributes of an innovation that involves five constructs: relative advantage, compatibility, trialability, observability and complexity. In addition, a large number of studies have also employed the variable of perceived risk, as highlighted by Bauer (1960) (see: Ostlund, 1974; LaBay and Kinnear, 1981; Holak, 1988; Lockett and Littler, 1997). The first four characteristics are positively related to adoption of an innovation and the remaining two, complexity and perceived risk, negatively related (Rogers, 1962; Bauer, 1960). The relationships between the different constructs and the nature of their influence on adoption are detailed below.

Relative advantage is concerned with the degree to which an innovation is perceived by potential adopters as being better than the idea, product or service it supersedes (Rogers, 1962). Second, the compatibility of an innovation is the degree to which an innovation is perceived as consistent with past values, experiences and the needs of the potential adopter (Rogers, 1962). Third, trialability is the degree to which an innovation is perceived as being trialable on a limited basis prior to any decision to adopt (Rogers, 1962). Finally, the observability of an innovation relates to the extent to which an innovation is visible to other members of a social system (Rogers, 1962).

The two perceived innovation attributes that are negatively related to the adoption of an innovation are complexity and perceived risk. The complexity of an innovation is the degree to which it is perceived as relatively difficult to understand and use by members of a social system (Rogers, 1983). Existing research indicates that the complexity of innovations was more highly related (negatively) to their rate of adoption than any other characteristic of the innovations except relative advantage (Graham, 1956; Singh, 1966). In addition, uncertainty plays a role in adoption decision in the form of perceived risk (Bauer, 1960; Ostlund, 1974; Shimp and Bearden, 1982; Merdock and Franz, 1983).

In the case of the financial services industry there have been a number of studies into the adoption of related new technologies for distribution. The relative advantage of the

convenience of being able to conduct oneôs banking outside of branch opening hours has been found to be important in both the case of the adoption of ATMs (Marr and Prendergast, 1991; Rugimbana and Iversen, 1994) and telephone based direct banking services (Lockett and Littler, 1997). In comparison, a major factor in people not adopting innovative financial services delivery channels is the fact that customers may like to interact with human tellers; this was found to be the case for ATMs (Zeithamal and Gilly, 1987; Leblanc, 1990). In addition, perceived risk and the perceived complexity of the innovation were found to be important negative influences on adoption in the case of both ATMs (Rugimbana and Iversen, 1994) and telephone based direct banking services (Lockett and Littler, 1997).

3. Methodology

Given the exploratory stage of the research it was decided that a qualitative approach, using focus groups interviews was appropriate. They are flexible by nature and allow for the exploration of consumer reactions to new product concepts (see Tull and Hawkins, 1984). In total six focus groups were conducted, each comprising between 10 and 12 participants. In selecting the participants two screening criteria were employed. First, all participants had to be involved in the purchasing of financial services in their own household. In addition, the degree of participant's involvement with the internet was employed. The three segments identified were:

Segment 1:	internet users but have not purchased anything over the net
Segment 2:	purchased goods/services over the internet but not financial services
Segment 3:	purchased goods/services over the internet including financial services

The segmentation procedure was deemed necessary because it would facilitate a more meaningful dialogue between group members than if the groups had been heterogeneous. Each segment comprised of two focus groups with segments 1 and 2 requiring a demonstration of WebPages from financial service providers in order to familiarise them with the topic.

In order to gain more background information on the participants they were asked to complete a questionnaire before the start of the session. The results showed that the income increased significantly for segment 1 to 2 and from 2 to 3, while at the same time the working hours between the three segments did not differ. In terms of product category involvement, financial

product usage significantly increased from segment 1 to 2 and from 2 to 3; segments 1 and 2 own fewer telecommunications products than segment 3. No differences could be found across the groups in terms of consumer independent judgement making and innate innovativeness (based on the scales by Manning et al, 1995).

The interviews were taped and transcribed which facilitated a detailed two-stage analysis. First, the transcripts were coded, the codes were partly based on the attributes of innovations as identified in the model by Roger (1962) and partly emerged from the interviews. As a second stage, the three groups, as described above, were contrasted in order to identify possible differences. The following section is structured along the codes developed and differences between groups are highlighted.

4. Results

Relative Advantage:

Compared to telephone banking, category one and two did not identify any additional advantages, except from having the details visually available. However, they highlighted several disadvantages related to availability, accessibility and level of service. More specifically, it was mentioned that the time to log on might take longer than making a phone call, while once on-line, the transaction might take longer because the respondent felt that he had to "check and recheck" the form filled in on-line, as he was worried of making mistakes.

> *"It would take longer because I would be extra careful checking to make sure I haven't made a mistake reading it through, you know." (S2)*

Regarding accessibility, the use of a mobile phone was seen as leaving one more freedom with regard to where the transaction is taking place (e.g. from a bus). Telephone banking, as well as visiting the local branch was also seen more positive due to the possibility of asking questions and having a contact person.

In contrast to the above, category 3 identified a number of additional advantages compared to using the phone. Highlighted were issues such as better overview of financial situation, (i.e. just-in-time transactions) and the hope of cheaper rates due to cost savings on the part of the banks. Groups 1 and 2 regarded human interaction as an advantage.

"Now they wouldn't have told me that on the net" (S1)

However, participants in group 3 expressed their dissatisfaction with the service they are given in bank branches or over the telephone, and appeared to feel that using the Internet was less of a hassle.

When you go to the bank generally, its on lunchtime, that's when everyone else goes. That's a disadvantage (S3)

Category 1 and 2 participants also expressed their view that using the internet compared to other channels *should* lead to economic advantages due to the savings of the financial institutions, however, they were aware of none. On the other hand, category 3 participants stressed the good interest rates offered by an Internet-only bank and the advantage of comparing interest rates. The running costs related to conducting financial transactions on the internet compared to other channels elicited a wide range of responses. Category 1 and 2 participants mentioned that it depends on the branch location, or expressed a view that the potentially lower usage costs would not convince them to change to the internet. Category 3 participants stressed that off-peak time can be used to reduce the cost.

One of the major advantages identified by users of internet banking was the greater control afforded to them by the use of this channel.

ñ *...you've got complete control of your account".*

This was in sharp contrast to respondents in groups 1 and to a lesser extent in group 2 who sensed a possible loss of control, not least because of their dependence on a technology that they did not understand and a feeling that somehow, the machine might control what happened to them.

"Yeah, if you click on that one (the wrong one) then what do you do" (S1)
"The mouse runs away and...you .may end up putting too many zeros on the end" (S2)
You never know when the computer will shut down anyway (S2)

Clearly then, adopters do recognise significant benefits (accessibility, convenience, cost, control) from the internet for banking services although many expressed reservations with respect to more complex financial products. Non adopters retain a high level of concern with respect to the use of the technology, the risks involved and the loss of face to face interaction.

Compatibility:

For many of the non adopters of internet banking, compatibility with their experience and values appeared to be a major issue. Many participants in group 1 did not use computers and reject technical banking equipment such as ATMs, and some did not use credit cards. This contributed to a noticeable degree of resistance to the internet as a distribution channel.

> *I don't want to think that (having to use the internet), I'm getting old (S1)*

> *I think there's a big difference in the generation gap. I mean our generation is terrible but the younger generation now accept this technology for what it is…….I'm trying to understand it all and for them its just a way of life. (S1)*

At the same time, this group of participants emphasised their interest in using the television to access the internet, as the television and operating the remote control were seen as familiar and thus, trustworthy.

Participants in group 3 often referred to their busy lifestyle and the inconvenient opening hours of branches, as well as telephone banking. Typically, these people were also highly familiar with IT and communications technology and thus felt comfortable with the idea of using such systems for banking.

> *"If you are happy or familiar with using a desk top computer then the banking service or whatever doesn't hold much fear for you.*ò

Consequently, the degree to which an innovative channel such as the internet is compatible with the individualôs past experiences and values appears to have a significant impact on willingness to adopt; respondents in category one clearly felt uncomfortable with the internet while those in category three were much more relaxed about computers in general and the internet in particular.

Trialability:

Only category 3 participants were aware that the WebPages of financial service providers contain demonstration facilities. Having seen the demonstrations, category 1 and 2 participants emphasised their usefulness and suggested that banks could offer such demonstrations in their branches.

> *"Perhaps if they had demonstrations in the bank."(S1)*
> *"The sites have the demonstration to promote it. I mean if you go through a demonstration, I think it's pretty easy to pick up."(S2)*

This highlights the fact that trialbility is crucial. However, although web based demonstrations are helpful, other opportunities for trial need to be extended to non computer owners. Furthermore, the fact that such trials are available needs to be communicated more efficiently to potential adopters.

Observability:

The use of the internet for purchasing financial services is not visible for other members of the society, it is not even widely discussed in a social setting. This is a theme, which emerged from all three categories. Category 3 participants mentioned that they knew of others who conduct their financial transactions over the internet, while this was only mentioned by one participant in categories 1 and 2.

Thus, it appears that using the internet for financial transactions has little associated social esteem and thus the extent to which others can observe its use does not appear to be a contributor to adoption.

Complexity:

The perception of the complexity involved when conducting financial transactions on the internet was inversely related to a participant's experience with computers. Responses of category 1 members varied, while some (after seeing the demonstration) described it as ñstraight forwardò and ñself explanatoryò, others noted that it was complicated as many forms needed to be completed and this appeared a ñdauntingò task. Thus, the perception of complexity seems to be related to previous experiences.

"…I'm not comfortable…."(S1)

"…I think its quite simple…."(S1)

"It seems very straight forward…doesn't seem at all difficult…." (S2)

*"I mean Internet is fine, I mean its brilliant **if** you know where you're going. It's the most frustrating thing if you don't know where you're going. I mean with Sky, its on your remote control and it just seems like it might be a lot easier*.ò (S2)

ñ*I mean I like the facility but I couldn't find out how to do it"* (S3)

Although there are different views of complexity across all three groups, clearly the third group and to a lesser extent the second group have overcome their concerns about complexity to become users. The first group have not and even those who recognise that internet banking is not that complex are obviously encountering other barriers to adoption.

Perceived Risk:

Perceived risk is analysed here in terms of risk of error and the level of security compared to telephone banking or visiting a branch. Major differences could be observed across the three groups. While group 3 felt that internet banking enabled them to be in control and they are unlikely to make an error, on the other hand, category 1 and 2 participants found this as a daunting responsibility and appear to have more trust that bank clerks are less prone to errors than they are.

"I think that you yourself are more likely to make an error, because the people at the bank do it day in and day out."(S1)

"I think if you're in control, you tend to be more precise…they (bank staff) are in a working environment, rushing around …but if you are dealing with your financial services you get it right." (S3)

Therefore, it appears that segments 1 and 2 lack self-confidence when compared to group 3 and perceive a higher degree of risk, largely in relation to their own ability to use the channel effectively. Regarding security, categories 1 and 2 participants engaged extensively in story telling about "hackers" thus, it appears that fear was still a deterrent in using the internet for financial transactions, which was far less prevalent in category 3. However, participants across all segments acknowledged that this fear was irrational.

Additional Factors Raised:

In addition to the factors included in the Roger's model, the following issues were raised which also need to be considered in the adoption of an innovation like using the internet for financial transactions.

Participants of all groups raised their concern for societal issues that may arise as a result of increased use of the Internet for financial services. Job losses, lack of opportunities to socialise and the development of a lazy society were mentioned. Group 3 participants, on the other hand, also mentioned that there would be no real job losses but only a shift, as new jobs will be created. Although these societal concerns were raised, the extent to which they would deter people from using the internet is less obvious, although they did appear to contribute to a rather negative perspective on the motivations and behaviour of financial institutions.

> *"They're just cutting down on staff."(* S1)
>
> *"The big advantage is for the banks because they're getting all their customers to do their work for them."* (S3)
>
> *"But then there will be less branches, less employees….more profits…but there's less jobs."* (S3)

A further new factor is related to the nature of the innovation, which can be summarised as "sense of fatalism". In order words, participants in all three categories raised concerns that financial institutions have redesigned their services in a way which forces customers away from the traditional high street channels towards high-tech channels such as ATM's and telephone banking. The internet was viewed as a continuation of this development. Thus, the adoption of the internet to purchase financial services is almost not perceived as a choice but as a "natural development". The following quote exemplifies this:

"it's only a matter of time isn't it, before it becomes the way of life, like credit cards."(S1)

This fatalistic view was mainly present in category 1 and 2, while the internet was more openly embraced in category 3.

Finally, the analysis noted a number of more emotional responses across all categories which were generally critical of technology based channels.

S1 "I don't know, I just tend to think at the bank it would be best."

S1 "It's cheating in a way …we did it the hard way."

S3 "I'm worried that this country….. become such a lazy society."

S3 "I do feel that people feel left behind."

Again their precise impact of these feelings on consumers actual behaviour is less apparent but they did appear to feed in more generally to respondents attitudes towards the internet and the companies that used it.

5. Conclusions

This paper focused on the innovation of delivering financial services through the internet and re-evaluated the applicability of Roger's (1962) model. The focus groups members used for data gathering were selected based on their usage of the internet. Those who use the internet to purchase financial services (category 3) differ from those who use the internet to purchase goods/services, but not financial services (category 2) on the basis of higher income, and more use of information technology. Category 2 compared to category 1 participants (users of the internet but have not yet purchased anything over the net) differ in terms of higher income and a larger product related involvement.

Contrasting these three groups revealed that based on the factors of the Roger's model, category 1 and 2 have very similar attitudes in terms of the advantages perceived by using the internet compared to using bank branches or telephone, and share a similar attitude towards the risk involved. Their attitude was far less positive than their category 3 counterparts. As one of the strongest influencing factors for adoption of the internet to conduct financial transactions emerged compatibility with a person's values and previous experience with the product category, i.e. computers. Trialability was regarded as important for future adoption, however, its availability needs to be better communicated.

Although the Roger's framework for evaluating the perceived attributes of an innovation is a useful starting point, other issues emerged which need to be considered, namely societal issues and the sense of fatalism. While the former could have a negative effect on adoption, the latter seems to have a positive effect. Future research is needed to shed more light on this issue.

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