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The Value of Life Histories in Researching the Adoption and Use of M-Services

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Abstract

Mobile services are a very important part of the e-commerce landscape. Although research has been conducted on what services people use and what value they attach to those services we know little about why people attach those perceived values. The theory of consumer value provides a theoretical framework to examine the adoption of mobile services. We use a life history research methodology to demonstrate that a biographical account can help in uncovering the "why" of perceived value. The life histories used in the paper highlight that the approach can be used to explain adoption and use of a product in relation to a person's lifestyle, needs, and experiences. From the examples, we can see that mobile services often have a functional value attached to them at the outset but social and epistemic value can follow when people are keen to experiment and feel part of a social community of use.

Keywords: Mobile Commerce, Value, life history, qualitative research, technology adoption

1   INTRODUCTION

The aim of this paper is to propose and investigate the value of an alternative framework and methodology to study m-commerce adoption and usage. It will begin by briefly explaining the growth and significance of mobile-commerce. It will then assess the applicability of consumer values theory for researching m-services adoption and use. The paper explains the benefits of using a life-history research approach for understanding the reasons underpinning different consumer value choice perceptions. Consequently the significance of both consumer perceived value as an explanatory theory at the individual level will be assessed and the value and contribution that a life-history research methodology can make.

1.1   BACKGROUND

Technological wireless developments such as 3G mobile phones (broadband), wireless application protocol (WAP), General Packet Radio Services (GPRS) and others have enabled new ways to communicate, entertain and transact using multimedia or text via computer networks (Clarke, 2001; Ho & Kwok, 2003). Commerce using an electronic interface is witnessing an unprecedented explosion of mobility, creating the domain of mobile commerce or m-commerce (Clarke, 2001; Ho & Kwok, 2003). It has been observed that e-commerce is positioning itself to take advantage of the growth of mobile devices in an attempt to achieve the massive adoption originally expected from personal computer based e-commerce (Anckar, 2002, Anckar & D'Incau, 2002; Clarke, 2001; Ropers, 2001; Lane, 1998). Some academics and practitioners believe that wireless devices will lead to an accelerated growth in e-commerce since technical expertise and hardware costs are lower compared to PC-based e-commerce (Anckar, 2002; Anckar and D'Incau, 2002; Ropers, 2001). Mobile commerce is part of a ubiquitous computing revolution that will have significant implications for society (Lane, 1999).

"Mobile devices have been the fastest adopted consumer products of all time; in 2001 more mobile phones were shipped than automobiles and PCs" (Clarke, 2001, pp134). In fact in 200l out of the 200 million wireless devices sold in the USA, 13.1 million were personal digital assistants (PDA) and the other 187 million were mobile phones (Strauss et al, 2003).

Industry analysts have high expectations of the consumers' willingness to adopt mobile commerce. However, the Information Systems (IS) research community has not yet produced enough theoretical bases to understand why an individual adopts electronic channels, and the intrinsic influential factors, such as consumers' attitudes and values in relation to electronic channels (Eastilick & Lotz, 1999; Amit & Zott, 2001; Han & Han, 2001; Venkatesh & Brown, 2001; Anckar, 2002). Anckar (2002. p3) pointed out that "the main reason value-adding elements in m-commerce, the consumers' actual reasons – the primary drivers for adopting m-commerce remain unclear".   The importance of understanding what motivates adoption becomes even more critical for m-commerce as adoption rates are expected to rapidly increase (Anckar, 2003). Some of the reasons behind this optimistic forecast are the low cost associated with m-commerce hardware (mobile phones) and consumers' familiarity with mobile phones (Ropers, 2001; Anckar 2003).

Mobile phones or cellular phones are one of the fastest adopted technologies with 1.1 billion million mobile phones sold worldwide in the past decade (Rogers, 2003). Factors that have contributed to this adoption include the technology's ability to be used at any time in any place, simple operation and compatibility – it connects to any phone system (Rogers, 2003). Also, mobile technology is continuously being upgraded and reinvented (Anckar 2002; Rogers 2003). Mobile phones have evolved from being a tool for businessmen always on the move to becoming part of "everyday" lifestyle, thanks to a growing stream of new services like short message service (SMS), the ability to buy a drink from a vending machine, pay for parking and access the Internet (Rogers, 2003). Too

much choice creates a challenge for consumers as well to organisations. On the consumer side the wide variety of services may generate confusion. On the organisation side, it becomes critical to make informed decisions in relation to what to offer and how to market these many different services, as any mistake might cause substantial losses in market share and/or profitability. The research problem can be summarised as: *Is the right mobile commerce products/service being offered to the right consumer groups?*

1.2   MOBILE COMMERCE – DEFINITION & CLASSIFICATION

The term mobile commerce or m-commerce has been widely used by academics and by practitioners, although so far there is not a unanimously accepted definition. In this paper the term m-commerce is used to describe the ability to send and receive communication and purchase goods/services anywhere, anytime through a wireless public (e.g. Internet) or private network enabled device like a mobile phone or a personal digital assistant (Balasubramanian et al., 2001; Clarke, 2001, and Peterson et al 2002, Han et al., 2002; Junglas, 2002).

It could be argued that the main difference between e-commerce and m-commerce is that m-commerce is associated with wireless technologies (Clarke, 2001; Ankar & D'Incau, 2002; Han et al., 2002; Turban et.al 2002*)*. For example, Turban et al. (2002, p28) have defined m-commerce as the "Conduct of e-commerce via wireless devices". The basic definition of wireless is: The absence of a physical link between the sending and receiving devices (Balasubramanian et al., 2001). It is important to clarify the terminology since it is easy for the concept of m-commerce to be mistaken for its underlying technologies (applications and devices) (Balasubramanian et al 2001, Han et al., 2002). Three key characteristics of m-commerce are portability, ubiquity and addressability. These three concepts help us to define the conceptual significance of mobile commerce independent of the hardware.

2   THEORETICAL FRAMEWORK

Traditionally technology adoption has been studied using: Rogers' Diffusion of Innovation theory, Ajzen's Theory of Planned Behaviour (TPB) and The Technology Adoption Model (Davis et al 1989) which derives from Ajzen'& Fishbein's Theory of Reasoned Action (which TPB is based upon). In this paper Sheth, Newman & Gross' (1991a, 1991b) theory of consumption values is also analysed, although this model hasn't been directly applied to technology adoption, its unique perspective on consumption values can be a valuable insight to better understand m-commerce adoption drivers.

2.1   THE CONCEPTUALISATION OF VALUE AND VALUES

Sheth, Newman and Gross (1991a, 1991b) conceptualized a model to help comprehend how consumers make decisions in the marketplace. They based their model on the principle that the choices consumers make are based on their perceived values in relation to what the authors called "market choice" (see fig below), and that the perceived value contribute distinctively to specific choices. Because their model examines what are the product values that attract consumers it can be a viewed as a way to understand the attitude towards the product, making this a proactive way to understand to m-commerce adoption. In their theory, Sheth et al., (1991a, p16) explained market choice behaviour as a multidimensional model. Three dimensions were identified:
- Consumers' choice to purchase or not purchase a product (or service)
- Consumers' choice of one type of product over the other
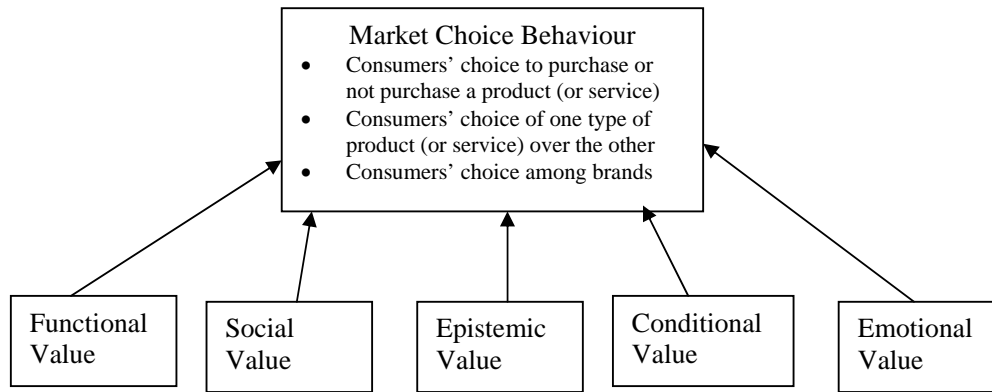- Consumers' choice among brands

Figure 1:   Sheth et al's (1991) Theory of Consumption Values

Sheth et al., (1991a) classify five categories of perceived value. Functional values are associated with the utility level of the product (or service) compared to its alternatives. Social values could be compared with the subjective norm dimension in the Theory of Planned Behaviour, as it is associated with willingness to please and social acceptance. Emotional values are those choices made based upon feelings and aesthetics. A common example would be choice of sports products. Epistemic values can be used to describe the early adopters in the sense that it relates to the novelty or knowledge searching behaviour. Words such as "cool" and "hot" are often associated with this value. Finally, the conditional value, refers to a set of circumstances depending on the situation (e.g. Christmas, wedding etc.). Socio-economical and physical aspects are included in this value. These five values were conceptualised based on a diversity of disciplines including social psychology, clinical psychology, sociology, economics and experimental psychology (Sheth et al 1991a).

	Theory Abstract	Strengths	Limitations	Main References	Research Paradigm and Method of validation
Diffusion of Innovation Theory	Concentrates on how consumers learn about an innovation. It draws on the communication channels and on the fact that people from the same social system will depend on media and interpersonal communication differently	It has been the main framework used to study consumers' adoption of innovation over time. Empirically validated	Focus primarily on the communication issues and product life cycle. Does not proactively help to understand option behaviour	Rogers (1962) Bass (1969) Rogers (1995)	Positivist Quantitative
Theory of Reasoning Action	TRA states that Intention to adopt is affected directly by attitudinal components (beliefs about the outcome of the behaviour and beliefs of the consequences of the behaviour), and the subjective norm component (level of importance or desire to please significant others and/ or society).	Cognitive model Work at the individual and organisation level	Studies the attitude towards adoption behaviour Limitation in dealing with behaviours which people don't have or don't perceive to have complete control	Fishbein & Ajzen, (1973) Ajzen & Fishbein, (1980)	Positivist Quantitative
Theory of Planned Behaviour	TPB is an extension of TRA. It ads a third dimension The Perceived behaviour control component that looks at uncontrolled external circumstances.	Gives an understanding of the adoption process from the cognitive behaviour perspective	Studies the attitude towards adoption behaviour not attitude towards the product	Ajzen, (1991, 1988, 1985)	Positivist Quantitative
Technology Adoption Model	TAM can be described as an adaptation of TRA customised to technology acceptance. The intention to adopt is affected by two beliefs: Perceived usefulness and the perceived ease of use the new technology	Model customised for the study of user acceptance of information systems/technology.	Same as TRA Draw upon studying attitude toward behaviour not attitude toward the product	Davis, (1986) Davis et al., (1989)	Positivist Quantitative
Theory of Consumption Values	The choices consumers make are based on their perceived values in relation "market choice" and that the perceived values contribute distinctively to specific choices.	Studies attitude toward the product/service/ technology Business proactive identify adoption drivers Marketers can develop /promote products accordingly to its perceived consumption values The 5 values provide a simple and broad framework	Haven't been used towards technology adoption Don't address influential factors that affect purchase decision involving 2 or more individuals e.g. couples or organizations	Sheth et al., (1991)	Positivist Quantitative

Table 1:   *A Comparison of Adoption Theories*

Although this theory has not been used to explain adoption, its unique conceptualization of product values provides a multidisciplinary approach that would contribute towards the understanding of the attitude (adoption) toward the product. The limitation of this theory to understanding adoption is that it cannot be used to understand organisational adoption, as it does not address influential factors that affect purchase couples or group adoption. Another limitation is that this model cannot be used to understand adoption in cases where the buyer is not the user. Nevertheless, Sheth's model, (1991) "provides the best foundation for extending value construct as it was validated through an intensive investigation in a variety of fields in which value has been discussed" (Sweeney & Soutar, 2001 p205).

The application of Sheth's model can help to provide an understanding of the intrinsic influential factors, i.e. values about electronic channels such as m-commerce (Eastilick & Lotz, 1999; Amit & Zott, 2001; Han & Han, 2001; Venkatesh & Brown, 2001; Anckar, 2002). The Theory of Consumption Values can identify the main value-adding elements in m-commerce or the primary drivers for adopting m-commerce.

A summary of the strengths and limitations associated with the theoretical perspectives on adoption of technology are presented in table 1.

2.2   THE PLACE OF LIFE-HISTORIES IN THE INTERPRETIVE RESEARCH PARADIGM

As this research aims to identify the "why" or underlying reasons for mobile commerce adoption and use, one can argue that an interpretive approach would be the most effective way to identify the major constructs at the individual level and to explain why certain communities of use recognise particular values in their m-commerce services of choice. Interpretive approaches are seen as appropriate for answering questions such as "why" and "how" (Walsham, 1995; Myers 1999; Klein & Myers, 1999).

The strategy of inquiry proposed in this paper is the life history approach. Although this approach have been explained either as belonging to the biographical approach (Creswell, 2002) or as ethnographical (Klein & Myers, 1999; Myers, 1999; Walsham, 1995), Denzin and Lincoln (2000) have presented life history as an independent strategy of inquiry, instead of a sub-set of another interpretive strategy of inquiry.

The life history research approach can be defined as "any retrospective account by the individual of his life in whole or part, in written or oral form that has been elicited or prompted by another person" (Watson and Watson-Franke, 1985 p2). However, the life history approach has different definitions depending on the perspective a researcher chooses (Tierney, 2000). The different definitions of life history do not necessarily disagree or contradict each other but as Tierney (2000, p 539) said: "they speak past each other". The aspect that all authors seem to agree upon is that life history is related to biography, as it is a retrospective report involving a narrative statement and it is falls within the interpretive paradigm (Klein & Myers, 1999; Myers, 1999; Walsham, 1995).

The life history approach has been recently used by Kunda, Barley and Evans (2002). Their study seeks to understand the underlying reasons for high skilled technical workers to work as contractors (contingent work force). For their study, the authors have interviewed 52 information technology contractors focusing on their career history, personal & family life, business practices and perception of contract work. The study demonstrates firstly that the existing views of contingent work (contractors) are oversimplified; secondly it identifies an overlooked area (occupational communities and communities of practice) and thirdly discusses the structure of the contingent labour market.

The life history approach helps to understand the relevance and impact of life-events on an individual's behaviour. The utilisation of life events to provide understanding of human behaviour has been widely used in sociology and psychology studies (Brown, 2002). According to some researchers (see Brown 2002, Jackson & Finney 2002) life-events not only shape behaviour, but also explain the way the event is handled and this may result in different future behaviour of the individual. It is possible to hypothesise that certain life events are common to the individuals belonging to the same community of use (i.e. people who have had similar life experiences /events, may have similar value perceptions). The use of life-histories allows a link to be made between the values attached to a service and an individual's characteristics, lifestyle, experiences, work practices and communities of use. This in turn will allow the investigation of what actually drives a person's adoption and use of m-services. For this purpose interviewees will be questioned upon their background (social, economical, cultural); family/personal life and personality issues.

2.3   LIFE HISTORIES AS A TOOL TO UNDERSTAND M-COMMERCE ADOPTION AND
        USE

Although interpretive research is recognised as a useful strategy to investigate "why" and "how"
questions (Klein & Myers, 1999; Myers, 1999; Walsham, 1995), there has been little interpretive
research done to understand m-commerce adoption. One of the reasons for this is that it may be
thought that the most common theoretical frameworks used to explain adoption were validated
through a positivist paradigm: Rogers' Diffusion of Innovation theory, Ajzen's Theory of Planned
Behaviour (TPB) and The Technology Adoption Model (Davis et al 1989) which derives from Ajzen
& Fishbein's Theory of Reasoned Action (which TPB is based upon) (Summary presented in table 1).
However, in this area as there is strong evidence that the constructs are both reliable and valid, it
would be appropriate to begin another interaction of the research cycle to examine the underlying
reasons for adoption by investigating the "how and why" questions using a qualitative approach.

The utilization of TPB to study adoption aims to identify the psychological and social cultural factors
that influence an individual to adopt technologies. Therefore, TPB studies the behaviour toward
adoption process. However, when applied to the study of the adoption behaviour, TPB tend to focus
on Rogers' model concentrating on the innovator linking TPB with the diffusion model. As an
attempt to identify a new model, Daghfous et al., (1999) presented a cross-cultural study focusing on
the individual personal values. In their study the authors have used human values to explain
"innovativeness". They argued that in the marketing literature the advantage of values is that it
exceeds geographical and social-cultural limitations. Nevertheless, their study was still an attempt to
identify specific drivers within the "innovators" group.

Sheth, Newman and Gross's (1991) theory of consumption model hasn't been directly applied to
technology adoption, however its unique perspective on consumption values can be a valuable insight
to better understand m-commerce adoption drivers.

2.4   ILLUSTRATIVE APPLICATION OF LIFE HISTORY APPROACH ON MOBILE
        COMMERCE

An exploratory study using the life-history approach was conducted in 2003 focusing on university
students using m-services. The aim of that study was to illustrate the relevance of this approach to
explain the consumer perceived values (Consumer Value Theory - Sheth et. al. 1991) in m-commerce
adoption. A convenience sample of five students was used, and individual interviews lasting between
forty minutes to an hour involving closed and open-ended questions were carried out. The reason for
such a small sample was that we were seeking only to illustrate the potential of the life history
approach. The questions asked aimed to address issues related to the respondents' backgrounds,
personal and family life (significant life events), and personality traits. The respondents started by
answering questions about their personal profile including age, nationality, parents' social, economic
and cultural background etc. Then questions were asked about the mobile services they use, usage
intensity and reasons for using those particular services/ features. An assessment of motives for using
particular services were analysed based on Sheth et. al.'s (1991a & b) five perceived values. Questions
related to past experience or life events were asked focusing on the respondent's family history,
primary school, high school and work experiences.

3   RESEARCH FINDINGS

The life-histories are reported in this section as biographical summaries in order to provide a personal
profile of the interviewee.

Interviewee 1:

Morris is a male who is 23 years of age. He is a citizen of France who is studying an MBA in Australia. He is an only child. He bought his first mobile phone at the age of 18. The main reason was because at that time a mobile phone represented independency from his parents.

"I got my first mobile phone at 18 because my mother was bored of doing the receptionist job...So, one day I got back home and told her that I had bought a mobile phone she said "good!". My current deal in France is one with an incredible promotion...It's like unlimited every night from 8pm til 8 am and every week-end 24h free and unlimited..."

The main reason driving the purchase of a mobile phone in this case was that the user was not satisfied in having to rely on others (his mother) for convenient communication with others. The importance of relying less on his mother to take messages can be described as the desire to be more independent. By being more independent Morris gained better control over his communication with others. This benefit or perceived value was achieved through ownership of a mobile phone. We argue that Morris' perceived value was partly emotional, as independence is a very emotive concept.

He started to use additional mobile services after he had become familiar with Short Message Services (SMS):
"Yes. I started using SMS. It is so convenient! And sometimes it is better when you just have something to say like "I am gonna be late, sorry". It is very useful!

In this case, SMS attributes such as instantaneous, asynchronous and ubiquitous have driven the adoption of this service.

When asked about other services Morris started to talk about Multi-media message service (MMS):
"I didn't use MMS (at that time) because my mobile was not compatible. But now I can because I bought a new one here. It's a Samsung, it's great! I think it's interesting to see how the Internet and the Web are converging on WAP mobile phones. I find it interesting because I was working in the IT industry!"

The choice of words by the respondent reflected that curiosity and novelty were the main reasons for him to start using additional services. In Sheth *et al's* model, curiosity and novelty fall under the epistemic value.

Morris has a history of interest in technology going back to his early school days. This become clear when he is presenting some key life-events:

"One of my best friend when I was at school...We have our first PC together and all the stuff, we were playing all nights long! It was crazy!! He was even better than me for the technical aspect in computers...He showed me how it can be useful for everything...And I said: "Oh that's cool. I should try it". I get back home and I asked my parents to have one.

I've always loved computers. I got my first computer at 10. It was one of those old Atari. I then had my "real" first PC at 17. I've always been interested by IT stuff! I've learned everything I know about computers by myself, sitting by myself"

It appears that Morris is developing his interests in technology through mobile technology. In other words, curiosity in relation to technology at least is a character trait and hence the emphasis on the epistemic value from an early age. However, there is a strong social aspect (value) to his interest in technology since he shared the computer with a friend and played computer games with him for many hours at a time.

Interviewee 02:

Bryn is 24 years of age, a citizen of Norway and currently studying in Australia. He is the older of two sons. He got his first mobile phone when was 18 years of age from his parents.

"The main reason was that my parents could not get me whenever they wanted, that was the main thing to get a mobile phone. They are accessible for other people."

"The best thing about a mobile phone is both you can communicate and it is a miniature database, for example you can store phone numbers and addresses for every friend."

Those two statements highlight product characteristics: Mobile phone is a two way communication tool, portable, and it can be use to communicate asynchronously and synchronously. The respondent and his parents recognise these characteristics and see them as useful. The functional value is strongly present.

Bryn continued:

"I have one now, this one has both colour display and a camera. I've taken pictures but I can't send them because I don't have a prepaid card in Australia. But that wasn't the reason I bought it. I don't like to buy yesterday's technology because technology is going so fast that if you don't keep up you get behind. "

This statement could be mistakenly interpreted as entirely epistemic in value. However, the driver in the desire to upgrade his mobile phone is not solely curiosity or the novelty aspect as such, but a sense of having the most updated version that ultimately will provide the user with a sense of belonging to a community of use. Therefore there are social value aspects in the decision making process. The social value in this context is related to self-image and what others will think.

The life history indicates that although the original driver to adopt technology was the functional value, the social value played a significant role in his relationship with technology.

"When I was in High School I didn't understand what the Internet was at all. As an undergraduate I had to learn the hard way and I found out that email is really smart to have. I really think that I have the potential to use technology well. The way technology is going is really interesting and makes life so much easier."

Interviewee 3

Mike is 22 years of age, Mauritian, and currently studying in Australia. He has three sisters, two older and one younger than him.

The functional attributes of the device and services were the main drivers to adopt and to keep upgrading the technology. However, the emotional value is also present as a brand preference.

"I started using mobile phones in 1997. My parents bought it for me, but this one I bought it myself. It is easy to use and has got calendars and Internet access, multi media messages if you want to send them. It's basically an organizer and that's what I like about it."

"I always wanted a Nokia because I reckon they are so easy to use, first one I had was the first Nokia and that was really good. I upgraded to this one because I went back home and started setting up a business. I can purchase investments and use multi media messages to get in touch with my dad regarding the business. That was one of the reasons I bought because it is helpful."

The statement "…to get the best things that's out there" could be interpreted as novelty as if the user seeks to change or upgrade a product because he/she is bored with the current version. On the other hand, if the user places emphasis on the latest version because it would be viewed positively by his/her peers then there are emotional values involved. The emotional value could also drive upgrading in order to avoid feelings of inadequacy.

"I'm not much of computer person and I use it just for basic functions. You know like I do not know all the features on it and I don't go into it so much. I use mostly email sometimes and downloading music sometimes and that's it. But I always like to have laptops like the latest technology, just to get the best thing that's out there."

Examining his lifestyle, background and specific uses of the technology brought to light that much of the mobile phone usage is related to the family business. His father's attitude towards technology seems to have had a deep influence on his perception of technology.

"My dad is very into technology, he is not that old, he is like 50, he likes some really good technology. He owns a chain of clothing stores and he loves the Internet now for he relates everything back to it now. He got a zoom camera on the Internet and connects with all the stores like a neighbourhood network, so he can see what is happening in every store. He is very much into technology."

"My mum sort of she is working with my dad. She stands at the counter… she handles stuff like that. It's sort of a business family. My dad always wanted us to get involved. My sister did fashion and the other one did marketing, she studied marketing and IT and my youngest sister is studying IT now but she doesn't like it."

Interviewee 04

Roy is 25 years of age, Indonesian, and currently studying in Australia. He is an only child.

The value that led to the original adoption was functional since it was simply seen as a way of keeping in touch with his parents. Once again the technology was chosen due to its utilitarian attributes.

"It was from my parents and I needed a mobile phone because I seldom stayed home and I am a mobile person so it is better you give me a phone wherever I am so you can call me."

There was a perceived social value attached to the services, as the user felt that having a mobile phone would be an additional sign of belonging or acceptance by his peers.

"It was just a trick from my parents so they could contact me anytime, actually I needed it because of a couple of my friends, most of them have a mobile phone."

The epistemic value was also a clear factor as the interviewee had demonstrated interest in learning more about the technology:

"I want to know what the technology is and I want to know whether I should buy this or should use it. It is important for me this new technology and I am curious about it. It's really fun and I like it."

Roy's expertise in relation to computer systems was a source of pride and feeling of social acceptance. In his case the social value becomes quite heavy:

"People ask me" Roy do you know this" and I can say "oh yes I know this". So I can talk with them otherwise I am just silent and get dumb."

Interviewee 5

Jack, 28 years old. Has an older sister.

Jack partly adopted a mobile phone for social reasons and work pressure:

"There seems to be a kind of pressure to have an updated mobile phone you know by peer and by advertising itself."

"I guess being in the industry I guess to some degree you need some credibility and so having decent mobile will give you some sort of credibility."

Jack links his interests to his adoption of technology:

"I think I try and think logically rationally I think I tend to think not emotional but technically when I was younger, instead of looking at an issue with the softer and emotional side of thing, just the technical approach as well as that maybe some form of identity with the male role."

"The youngest is always the technical wiz because they the youngest and you know they are brought up with the latest gadgets."

Some of the epistemic value was evident:

"I actually use MMS but started with it just for the experience."

4 DISCUSSION

In this section of the paper we discuss the overall usefulness of the life history approach in explaining the adoption and use of m-services within a consumption value framework.

A range of values have been identified as reasons for the adoption and use of m-services. The consumptions value theory is a useful tool to understand what the drivers are behind individual adoption and use of mobile services. Most of those interviewed emphasized the importance of the functional value as a reason for initially adopting the basic technology. In particular, the value of mobility of communication access was perceived as convenient. A secondary stage of adoption and use was evident in some cases that emphasised the epistemic value. The social value was a factor in one case since the person used the services to identify with a group and be accepted by them. In particular, this was in relation to the updating and type of services used.

The life history approach provides deeper insights and explanation in relation to the values driving m-commerce services adoption. The reasons underlying the emphasis on a certain value(s) are highlighted though the respondents past experiences, personal characteristics and background (Brown, 2002; Jackson & Finney, 2002). For example, a number of respondents have a history of using computer technology and identify with it. The life history approach has identified other significant aspects requiring further investigation. For example, the relevance of being the only child or only son may have influenced the perceived need to keep in contact with parents.

The "community of use concept" is probably quite complex and may not be just a matter of simple demographics age/sex/occupation. The five respondents were all males, full time students' and in their twenties. However, it is not possible to state that they were members of the same "community of use".

There are great expectations in relation to the adoption of m-commerce. This paper has discussed the utilisation of theory of consumption value (Sheth et. al. 1991) as an alternative framework to understand m-commerce adoption and use. The value theory provides a deeper explanatory ability because it examines the underlying rationale in the decision making process. This can more easily be used for predictive purposes. For example, a main driver for teenagers using mobile phones is the relatively low cost for text messaging, however the motivator for use is the intrinsic social aspect of the service which caters and builds upon an existing community of use.

Product and service developers need to examine these deeper factors to come to a sophisticated understanding of their adoption related decisions. Previous theoretical explanations for technology adoption are low in terms of predictive capabilities. The combination of the Theory of Consumption Value and a Life History perspective provide a contingency approach which integrates theoretical and methodological frameworks. It is argued by some that this integration is likely to provide a way forward in marketing research (Zeithaml, Varadarjan, Zeithaml, 1998).

5 CONCLUSION

This paper has suggested and illustrated the utilisation of an interpretive life history approach as a tool to understand the underlying reasons for adoption of m-commerce at the individual level. The use of life-histories allows a link to be made between the values attached to a service and an individual's characteristics, lifestyle, experiences, work practices and communities of use. This in turn allows the researcher to investigate what actually drives a person's adoption and use of m-services.

References

Ajzen, I. (1991). The Theory of Planned Behaviour. *Organizational Behaviour and Human Decision Process, 50*(2), 179-212.

Amit, R., and Zott, C. 2001. Value creation in e-business. *Strategic Management Journal,* 22: 493-520

Anckar, B. (2002). Adoption drivers and intents in the mobile electronic marketplace: Survey findings. *Journal of Systems and Information Technology, 6*(2), 1-17.

Anckar, B., & D'Incau, D. (2002). Value creation in mobile commerce: Findings from a Consumer Survey. *The Journal of Information Technology Theory and Application (JITTA), 4*(1), 43-64.

Balasubramanian, S., Peterson, R. A., & Jarvenpaa, S. L. (2002). Exploring the Implications of M-Commerce for Markets and Marketing. *Journal of the academy of Marketing Science, 30*(4), 348-36

Brown, G. W. (2002). Social Roles, context and Evolution in the Origins of Depression. *Journal of Health and Social behavior, 43*(September), 255-276.

Clark III, I. (2001). Emerging value propositions for m-commerce. *Journal of Business Strategies, 18*(2), 133-148.

Creswell, J. W. (2003). *Research Design Qualitative, Quantitative, and Mixed Methods Approaches* (2nd ed.). Thousand Oaks, California: Sage Publications.

Daghfous, N., Petrof, J. V., & Pons, F. (1999). Values and adoption of innovations: A cross cultural study. *Journal of Consumer Marketing, 16*(14), 314-331.

Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1989). User Acceptance of Computer technology: A comparison of two theoretical Models. *Management Science, 35*(8), 982-1003.

Denzin, N. K., & Lincoln, Y. S. (2000). Introduction: The Discipline and Practice of Qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of Qualitative Research* (2nd ed., pp. 1062): Sage Publication, Inc

Eastlick, M. A, and Lotz, S (1999), "Profiling Potential Adopters Of Interactive Teleshopping," *International Journal of Retail and Distribution Management*, *27* (6), 209-228.

Han, J., & Han, D. (2001). A framework for analysing customer value of internet business. *Journal of Information Technology Theory and Application (JITTA), 3*(5), 25-38.

Han, S., Harkke, V., Landor, P., & Mio, R. R. d. (2002). A foresight framework for understanding the future of mobile commerce. *Journal of Systems & Information technology, 6*(2), 19-39.

Ho, S. Y., & Kwok, S. H. (2003). The attraction of personalized service for users in Mobile commerce: An empirical study. *ACM SIGecom Exchanges, 3*(4), 10-18.

Jackson, P. B., & Finney, M. (2002). Negative Life Events and Psychological Distress Among Young Adults. *Social Psychology Quarterly, 65*(2), 186-201.

Junglas, I. A. (2002). *U-Commerce an experimental investigation of ubiquity and uniqueness.* Unpublished Dissertation, University of Georgia, Athens.

Klein, H. K., & Myers, M. D. (1999). A set of principle for conducting and evaluating interpretive field studies in Information Systems. *MIS Quarterly, 23*(1), 67-94.

Kunda, G., Barley, S. R., & Evans, J. (2002). Why do contractors contract? The experience of highly skilled technical professionals in a contingent labor market. *Industrial and Labor Relations Review, 55*(2), 234-226.

Lane, R. J. (1998). The computer model for the information age. In Tapscott, D. (Ed.), *Blueprint of the Digital Economy* (pp. 239-259). New York: McGraw-Hill.

Myers, M. D. (1999). Investigating Information Systems with Ethnographic Research. *Communications of AIS, 2*(23), 1-19.

Rogers, E. M. (2003). *Diffusion of Innovations* (5th ed.). New York: Free Press A division of Simon & Schuster , Inc. 1230 Avenue of the Americas.

Ropers, S. (2001). New business models for the mobile revolution. *EAI*(February), 53-57.

Sheth, J. N., Newman, B. I., & Gross, B. L. (1991b). Why we buy what we buy: A theory of consumption values. *Journal of Business Research, 22*, 150-170.

Sheth, J. N.; Newman, B. I.; & Gross, B. L. (1991a). *Consumption values and market choice: Theory and applications* (1991 ed.): South-Western Publishing Co.

Strauss, J., El-Ansary, A., & Frost, R. (2003). *E-Marketing* (3rd ed). Upper Saddle River, New Jersey: Pearson Education Inc.

Sultan, F. and R. B. Henrichs (2000). "Consumer preferences for Internet services over time: Initial explorations." Journal of Consumer Marketing **17**(no. 5): 386-402.

Sweeney, J. C., & Soutar, G. N. (2001). Consumer Perceived Value: The development pf a multiple item scale. *Journal of Retailing, 77*(2001), 203-220.

Tierney, W. G. (2000). Undaunted Courage -Life History and the Postmodern Challenge. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (2nd ed., pp. 537 -554). Thousand Oaks: Sage publications

Venkatesh, V., & Brown, S. A. (2001). A longitudinal investigation of personal computers in homes: adoption determinants and emerging challenges. *MIS Quarterly, 25*(1), 71-102.

Walsham, G. (1995). Interpretive case studies in IS research: nature and method. *European Journal of Information Systems, 4*, 74-8

Watson, L. C., & Watson-Franke, M. (1985). *Interpreting life histories*. New Brunswick, NJ: Rutgers University Press.

Zeithaml, V. A., Varadarjan, P. R., Zeithaml, C. P. (1998). The Contingency Approach: Its Foundations and Research in Marketing. European Journal of Marketing, 22(7), pp.37-64.