2008

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ABSTRACT

South African consumers have moved from a situation where narrowband dial-up was very often the only option for home Internet access to where there is now a plethora of broadband and narrowband options to choose from. Very little research in information systems has investigated the phenomenon of consumer choice of technology. The purpose of this study was to investigate the factors influencing consumer choice of Internet access option in South African homes. By drawing from theories of technology adoption, 13 factors were identified, grouped into three categories, namely attitudinal beliefs, normative beliefs and control beliefs. Semi-structured interviews were conducted with 12 consumers who had Internet access in their homes. Their views on the 13 factors were gathered to ascertain if and how they influenced their choice of Internet access option. The findings show that the attitudinal beliefs of relative advantage, compatibility, ease of use, and prior experience have a bearing on consumer choice. Normative beliefs associated with friends and family, as well as secondary sources also had an influence. Finally, it was shown that control beliefs relating to costs of access, and support and service were key influences on consumer choice. These and other findings are discussed, and implications drawn.

Keywords

Internet access, technology choice, technology in the home, broadband

INTRODUCTION

Across the globe Internet access in the home, and the options available to users for gaining access have grown. There were estimated to be about 3.85 million Internet users in South Africa in 2007 (about 8% of the population) (WorldWideWorx, 2007). These users access the Internet at work, school/college/university, home, and to a less extent Internet cafes (Goldstuck, 2004). Some users have access from more than one location (e.g., both home and office). In 2004 about 1 million of these Internet users were home subscribers (Goldstuck, 2004). At that time, dial-up access was the predominant mode of home access. Since then various options have become prevalent, including fixed line broadband options such as ADSL (Asynscronous Digital Subscriber Line), and wireless broadband options such as 3G (third generation mobile) and HSDPA (High-Speed Downlink Packet Access). In 2007 there were estimated to be 650,000 broadband subscribers (WorldWideWorx, 2007). While the number of broadband subscribers has been increasing, the number of dial-up subscribers has declined. This indicates that many new broadband subscribers are mostly those switching from dial-up (WorldWideWorx, 2007). These users are faced with the dilemma of choice, where previously there was little to choose from. Table 1 below provides an overview of some of the options that were available to home Internet users in South Africa in 2007.

	Fixed Line Narrowband		Fixed Line Broadband	Wireless Broadband		Wireless Narrowband
Option	Dial –Up	ISDN	ADSL	3G/ HSDPA	Wireless (iBurst)	GPRS
Speed	56K	64K-128K	384K-1024K	Up to 1.8Mbps	Up to 1 Mbps	50-170K

Table 1: Typical Home Internet Access Options in South Africa

The plethora of options available is a fairly recent occurrence in South Africa. Not much is known about how consumer choices are made. The purpose of this study is to investigate the factors influencing choice of Internet access option in South African homes. Shedding light on this novel topic is of direct relevance and benefit to consumers and Internet Service Providers (ISPs).

In the next section, the conceptual background and research framework is outlined, followed by the research methodology. The data analysis and findings are laid out before a discussion of these findings. Limitations of the study are noted and ideas for future research recommended. Finally the paper is concluded.

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CONCEPTUAL BACKGROUND AND RESEARCH FRAMEWORK

Many studies in information systems (IS) have investigated the phenomenon of technology adoption. Theories underlying technology adoption studies have often drawn from behavioural theories, such as the theory of planned behaviour (Taylor and Todd, 1995). The behaviour investigated is typically the usage of a technology, and factors influencing usage behaviour are assessed as to their impact. Very few studies have investigated the issue of consumer choice of technology. Given that choosing a technology can also be considered a behaviour, it can be reasonably argued that theories of technology adoption can be used as the basis for examining consumer choice. The choice of Internet access option is furthermore for the purpose of using the Internet, hence factors identified as influences on technology usage may also be relevant as influences on choosing an Internet access option. Indeed, the few studies that have investigated consumer choice of technology (e.g., Szajna, 1994) have turned to theories of technology adoption .

The most prominent theories employed in technology adoption studies have been the technology acceptance model (TAM), theory of planned behaviour (TPB), and diffusion of innovations theory (DOI) (Venkatesh et al. 2003). Venkatesh et al. (2003) in addition identify several other theoretical frameworks. These were integrated to develop the unified theory of usage and acceptance of technology (UTAUT) (Venkatesh et al., 2003). Many of the studies employing such theoretical frameworks have assumed as the context a work environment. In a break from this tradition, recent research has focused attention on the adoption of Internet and mobile device applications by consumers in society (Hong and Tam, 2006; Pavlou and Fygenson, 2006). Studies investigating technology adoption in the home environment specifically have been few. The few studies that have been conducted have very often been based on the TPB (Brown and Venkatesh, 2005). Brown and Venkatesh (2005) extended and modified the TPB to create the model of adoption of technology in the home (MATH). The MATH identifies three major categories as influences on technology adoption – attitudinal beliefs, normative beliefs and control beliefs. These categories were used in this study to group factors influencing choice of Internet access in the home. The factors themselves were drawn from the decomposed TPB and other studies that have examined technology adoption amongst consumers in society (e.g., Tan and Teo, 2000).

Table 2 below shows the factors identified within each of the three categories, and the key references for the factors. Each of the factors identified in Table 2 will be briefly discussed, and propositions will be formulated.

Attitudinal beliefs

Some of the attitudinal beliefs identified from literature include relative advantage, compatibility, perceived ease of use, prior experience, perceived risk and status gains. Each will be discussed in turn.

Relative Advantage refers to the extent to which an innovation offers a person an advantage over other methods of performing the same task (Brown et al., 2003). Horrigan (2005) identified the desire for speed as a reason for consumers

choosing to get broadband Internet access. Convenience was identified as being a factor that influenced the choice of electronic distribution channel for financial services (Black et al., 2002). The advantages that one Internet access technology has over others, in terms of speed and convenience will therefore influence its choice among consumers. Hence the proposition:

A1: The relative advantage (higher speed and convenience) of a home Internet access technology influences consumer choice.

Perceived Compatibility. A technology is perceived as being compatible if it fits well with an individual's needs, values, and lifestyle (Brown et al., 2003). The greater the compatibility of a technology, the more likely it will be adopted (Tan and Teo, 200). The proposition suggested is:

A2: The perceived compatibility of a home Internet access technology influences consumer choice.

Perceived Ease of Use has been defined as the degree to which using a technology is free from effort (Brown and Venkatesh, 2005). Consumers in the home are less likely to choose an Internet access technology if they perceive it to be complex or not easy to use. Thus the proposition is as follows:

A3: The perceived ease of use of a home Internet access technology influences consumer choice.

Category	Factor	Key Reference(s)
Attitudinal Beliefs	Relative Advantage	Tan and Teo (2000)
	Compatibility	Tan and Teo (2000)
	Perceived Ease of Use	Brown and Venkatesh (2005)
	Prior Experience	Tan and Teo (2000)
	Perceived Risk	Tan and Teo (2000)
	Status Gains	Brown and Venkatesh (2005)
Normative Beliefs	Friends and Family Influence	Brown and Venkatesh (2005)
	Secondary Sources Influence	Brown and Venkatesh (2005)
	Workplace Referents' Influence	Brown and Venkatesh (2005)
Control Beliefs	Self-efficacy	Tan and Teo (2000)
	Costs	Brown and Venkatesh (2005)
	Support and Service	Tan and Teo (2000)
	Knowledge	Brown and Venkatesh (2005)

Table 2: Factors Influencing Consumer Choice of Internet Access Technology

Perceived Risk. Security is a major influencing factor around the acceptance and use of new technologies (Tan and Teo, 2000). In terms of the choice of an Internet access technology in the home, the need for security of consumers' personal details is very critical. As a result, the lower the perception of risk involved in using an Internet access technology, the more likely it will be chosen by consumers. The proposition is hence:

A4: The perceived risk associated with a home Internet access technology influences consumer choice.

Prior Experience. It has been shown that an individual who has Internet experience is more likely to adopt Internet banking (Tan and Teo, 2000). Those that have experience of Internet access are likely to draw from this experience in choosing an Internet access option for the home. The proposition supported is:

A5: Prior experience of Internet access influences consumer choice of a home Internet access technology.

Status Gains have been defined by Brown and Venkatesh (2005) as the increase in prestige that coincides with the purchase of a technology for home use, In the context of this research, an individual who regards an Internet access technology as providing some kind of public recognition is more likely to be influenced to choose that technology. This leads to the following proposition:

A6: The status gained from a home Internet access technology influences consumer choice.

Normative Beliefs

The MATH model presents three normative beliefs, namely influence of friends and family, influence of secondary sources and influence of workplace referents (Brown and Venkatesh, 2005).

Friends and Family Influences refer to the degree to which an individual's behaviour is influenced by members of his/her social network (Brown and Venkatesh, 2005). It has been found that "*households with broadband connections are likely to influence their friends and relatives by informing them about the benefits and conveniences offered by broadband*" (Jyoti and Kumar, 2004, p. 5). Hence, in the context of this research, it can be assumed:

N1: Friends and family influence consumer choice of a home Internet access technology.

Secondary Sources Influences can be defined as the extent to which an individual's behaviour is influenced by newspapers and information portrayed on television and other secondary sources (Brown and Venkatesh, 2005). It has been found that secondary sources play an important role throughout the adoption process for home technology applications (Brown and Venkatesh, 2005). This leads to the following proposition:

N2: Secondary sources influence consumer choice of a home Internet access technology.

Workplace Referents' Influence is explained by Brown and Venkatesh (2005) as the extent to which co-workers can influence people's behaviours. People are likely to consider an Internet access technology if their co-workers have recommended it. Thus the following proposition:

N3: Workplace referents influence consumer choice of a home Internet access technology.

Control Beliefs

The control beliefs identified as potential influences on consumer choice were self-efficacy, perceived costs, support and service, and knowledge. Each will be discussed in turn.

Self-Efficacy refers to an individual's confidence in his/her ability to use a specific technology (Tan and Teo, 2000). It is expected that an individual who is confident in the skills required for using that technology will be more likely to choose and use it. Thus the proposition is as follows:

C1: Self-efficacy influences consumer choice of a home Internet access technology.

Costs. High costs associated with Internet access are retarding growth in South Africa (Brown et al., 2007). A South African consumer is hence more likely to choose an Internet access technology if it is affordable. Thus the following proposition:

C2: The costs associated with a home Internet access technology influence consumer choice.

Support and Service. The support and service provided to users of a technology (facilitating conditions) has an impact on their perceptions of it (Tan and Teo, 2000). Hence the following proposition is suggested:

C3: The support and service provided for a home Internet access technology influences consumer choice.

Knowledge has been described by Brown and Venkatesh (2005) as an individual's belief that he/she has the knowledge necessary to use a technology. Product knowledge has been linked to consumer choice too (Ramaseshan and Patton, 1994). Hence the proposition suggested is:

C4: Knowledge about home Internet access technology influences consumer choice.

RESEARCH METHODOLOGY

A qualitative interview-based research approach was chosen, since the research was aimed at getting a better understanding of factors influencing consumer choice of home Internet access technology. An interview schedule was developed based on

the propositions identified in the previous section. The target population for this research was Internet users in South Africa with home access. Convenience sampling was employed in selecting these individuals, as the researchers were located in Cape Town. Quota sampling was also used to ensure that data would be gathered from participants with a variety of Internet access options, as shown in Table 1. Table 3 below shows the profile of those interviewed.

As observed in Table 3, some participants had chosen more than one Internet access technology at home. This was useful as it allowed the researchers to gain greater insight into the phenomenon of technology choice. A semi-structured interview strategy was used to collect data. Each interview lasted for about 30 to 45 minutes. The data was gathered over the period of June to August 2007. Thematic analysis was chosen as the means to analyse the data (Braun and Clarke, 2006).

Participant	Internet Access Technology Used	Age	Gender
RP1	HSDPA data card	23	Male
RP2	3G	21	Female
RP3	Wireless Modem	45	Male
RP4	Dial-up	38	Male
RP5	ADSL	59	Female
RP6	Dial-up	45	Female
RP7	Dial-up	52	Male
RP8	ADSL and HSDPA data card	27	Female
RP9	ADSL	21	Male
RP10	Dial-up, ADSL and 3G	46	Female
RP11	Dial-up and GPRS (Cellphone as modem)	21	Male
RP12	Dial-up	50	Female

Table 3: Study Participants

DATA ANALYSIS AND FINDINGS

The findings of the study will be discussed with regards to each factor identified in Table 2.

Attitudinal Factors

Relative Advantage

Relative Advantage was considered from the perspective of convenience of access option and speed of access. Each of these dimensions will be discussed in turn.

Convenience. For 3G/HSDPA users, the convenience of mobility was cited as a reason for its choice. It was noted by a respondent that a 3G data card was: "*very convenient for my husband who has a laptop and uses wireless*". ADSL users highlighted the convenience of their option in terms of having an always-on connection. As stated: "*It is better to be connected at all times*". Another convenience, in comparison to dial-up, was having "*…the telephone free at all times*". Amongst dial-up users, some perceived it as convenient. There were some perceptions of inconvenience too. For example, it was stated: "*I can't use my landline when I use dial-up*". Due to high telephone charges during peak hours, dial-up-users are most often compelled to use their service during off-peak times to save on telephone call costs. As was noted: "*I can only go onto the Internet from 7 PM to 7 AM [which is] most inconvenient*". Another stated that it was "*not convenient for my children for their school projects*". A broadband wireless user stated that their option was "*not convenient because of its unreliability, as a quarter of the time it's down*" Hence the respondent was planning on moving to ADSL. The findings support the proposition A1, that convenience has an influence on the choice of Internet access option.

Speed. All subscribers, save for dial-up users, indicated that their option was of sufficiently high speed. Some participants explained that they had recently switched to broadband. A 3G/HSDPA user stated: "*Speed is faster than most other options*". A participant who had dial-up at home mentioned having used it for a long time and explained that for faster Internet access, the workplace Internet could be used. As noted: "*… if I need high speed I can always come and use the Internet at work*". Speed of access is therefore a consideration for most Internet users, with broadband options being chosen by those who want higher speeds at home. Most of these broadband users have migrated from dial-up, partly because of the slower speed of that option. Speed therefore has an influence on Internet access option chosen, supporting the proposition A1.

Compatibility

The general view as suggested by almost all interviewees was that the Internet access technology they use in their homes was compatible with their lifestyle. This was highlighted by a 3G user who mentioned the following: "*it's compatible with my lifestyle as I spend almost 95% of my time online at home*". Another mentioned the mobility offered by the 3G data card option was compatible with a mobile lifestyle. A respondent with a fixed line ADSL connection indicated that it was compatible due to the heavy use made of the Internet, while another indicated the always-on capability of ADSL allowed for work-from-home. A dial-up user mentioned too that "*it is very compatible with my lifestyle - everything I do at work, I can do at home*". Another dial-up user indicated no need for a high-speed connection, thus their choice was compatible with their lifestyle. One respondent used a combination of 3G and ADSL in the home. The 3G option was used with a laptop, and the other option with a PC. When asked about compatibility, the respondent noted, "*yes it [ADSL] is compatible with my lifestyle. It in fact suits the whole family – kids go onto the Internet in the evening, but not everyday…*". One respondent qualified their choice by adding that it was compatible except for when "*downloading large files*". The access option being used in this instance was a standard dial-up line. Another respondent declared their access option to be incompatible. This respondent made use of a wireless broadband connection. The respondent was intending to switch over to fixed line ADSL. The reason for this perceived incompatibility related more to the perceived quality of service being provided rather than the Internet access option itself. Overall then the proposition A2 that compatibility influences choice of Internet access option is supported.

Perceived Ease of Use

Almost all options were perceived as easy to install and use through a simple "*click-and-connect*" process. This was highlighted by a 3G user who stated, "*It is very easy to use and therefore did not require a lot of mental effort from me*". A wireless broadband user noted, "*I looked for no limitation on our access; it's easy to use*". There were some who had initially consulted with their Internet Service Providers (ISPs) about complexity issues. The following was stated by a HSDPA user: "*I consulted with one of the [ISP] branches in terms of how complex it is*". There were also other participants who had initial experience with their Internet access choice from their friends, school or workplace. Therefore when it came to choosing their Internet access technology, they perceived the process of using it as easy. This was noted by a 3G user who noted: "*it was not complex as I used someone else's before choosing my own*".

Some indicated that it was complex to understand how the technology worked, but this did not affect its ease of use. Others expressed frustration concerning frequent downtime with their Internet access option. Dial-up and ADSL options were mentioned in this regard. As stated by a dial-up user: "*It is very complex, the telephone lines are down most of the time and it bombs out often – very frustrating*" This issue relates more to quality of service and support provided, which, however, does affect ease of use. In one instance there was a perception of complexity related to the use of the cell phone as modem. It was indicated that "*the only thing that is complex about it is that you need software to use, you can't just plug it into your cell phone*". The respondent who perceived this option to be complex to set up used a dial-up line as the primary mode of access. The cell phone as modem option was used as a second choice. Where there are difficulties associated with, for example, set up processes consumers tend to look to alternatives Ease of use, then, was demonstrated as a factor influencing choice, supporting proposition A3.

Prior Experience

All respondents had several years of prior experience using the Internet. This was highlighted by a participant who stated that: "*I had prior knowledge of dial-up - I used to go to a friend's…to dial up*". Most respondents were exposed to Internet access either at work or at school. This was elaborated by a participant who stated the following: "*I have been using the Internet for about 10 years (since varsity days), I therefore had prior knowledge of dial-up from varsity exposure as it was the only option at the time*". As a result of this experience some respondents had decided to remain with their original option, typically dial-up, despite the recent availability of broadband options. Others, on the other hand, decided to migrate to broadband, on the basis of this same prior experience. They were in most cases looking for faster and more convenient

Internet access. Prior experience, therefore, is demonstrated as an influence on choice of Internet access option in support of proposition A4, although not always in the same way for all consumers.

Perceived Risk

There was general satisfaction with security across all options. A common opinion expressed was that "*I am satisfied with the security. I never had any problems with it*". Another respondent indicated that "*…I am satisfied with the level of security. I do internet banking now*". Some highlighted the fact they did not conduct Internet banking, and so were not concerned about security. So, for various reasons security was not viewed as problematic. As succinctly stated by a respondent: "*…generally I'm not worried. Dial-up security should not be different from any other*". Security in general was perceived in the same way for all options, and was not a factor differentiating choice. As such, it was not conclusive that security was a factor influencing choice of Internet access option. There was evidence that security was perceived as a factor that related to the Internet as a whole, or specific uses of the Internet (e.g., Internet banking), rather than the Internet access option per se. There was no strong support for proposition A5.

Status Gains

When asked if the Internet access technology they used portrayed some sort of status, a majority of the participants did not seem to agree. A participant who was using dial-up at the time the interview was conducted, mentioned that, "*maybe back in the day it did portray some sort of status, but because these days most people are now going for ADSL and so on, I don't' think so*". Another participant stated that, "*it's not about status- its more about accessibility, fast speed and ease of use*". There were a few participants who felt that having Internet access, regardless of option, portrayed some sort of status. A participant highlighted the following: "*the fact that I have computers and Internet at home and a telephone makes me far better off that most people, so yes, it does portray some sort of status*". Another participant stated, "*…it definitely enhances your lifestyle. I always think of people who do not have it*". Thus, having Internet access was seen as a reflection of socio-economic status. For most respondents it was not seen as a factor influencing a specific choice of access option. No strong support was therefore shown for proposition A6.

Normative Beliefs

Friends and Family Influence

Friends and family were frequently mentioned by respondents as having an influence on their choice of Internet access option. A respondent with a dial-up line indicated that "*If I go for ADSL, I will consult a friend of mine. My daughter is also telling me to get it because her friend has it*". A 3G user stated that "*A friend had it first, therefore they influenced me in deciding which option to go for*". This was a common mantra for a wide variety of options, lending support to the proposition N1 that friends and family have an influence on choice of Internet access option.

Secondary Sources Influence

Secondary sources were cited often as influences for 3G, ADSL and dial-up subscribers. Respondents indicated that they had heard of their option through magazines, leaflets, TV and newspaper advertisements, and the Internet itself. As a respondent stated: "*[My service provider] advertised and they gave lots of information on TV, magazines, in journals...*". Proposition N2 was supported.

Workplace Referents' Influence

Workplace referents were not often cited as an influence on choice, except for a few dial-up users one of whom stated that they heard about the option through "*Word of mouth from work*". There is therefore some support for the proposition N3, although it was not as frequently-cited an influence as friends and family, and secondary sources.

Control Beliefs

Self-efficacy

All respondents indicated that they had the self-confidence to use computers and the Internet. For some this was a factor that influenced their decision on which Internet access option to choose. As stated, "*Yes I am comfortable with using the Internet and it did affect the decision to choose ADSL*". For others, on the other hand, it was not seen as an influence. As stated: "*I am comfortable with using the computer. But no, it did not affect my decision. I learnt the process of using dial-up easily*". There

was therefore no clear agreement as to the effect of self-efficacy on the choice of Internet access option. Several studies have shown that self-efficacy impacts usage behaviour indirectly through perceived ease of use. The overall high levels of self-efficacy correspondents with the overall perceptions of ease of use, which lends credence to this possible indirect impact through perceived ease of use. There is no strong support for proposition C1.

Cost

Diverse opinions were expressed around cost. Many respondents justified their choice of option based on its cost in comparison to other alternatives. 3G users believed the price to be comparable if not cheaper than ADSL. ADSL subscribers perceived their option to be cheaper than 3G, and even dial-up. An ADSL subscriber indicated that for heavy Internet users the cost of dial-up is exhorbitant, due to the per second billing method employed. Such users would like to stay online for frequent, long periods. Some dial-up users perceived their access as expensive. On the other hand, several viewed it as even cheaper than ADSL. These users tend to use the Internet less frequently, and for applications that do not require download of large files. The diversity and apparent contradictions highlight the importance of cost as an influence on Internet access choice. Perceived costs are dependent on a number of factors, such as the income of the user, the ISP being used, the Internet access package chosen, and the extent to which the Internet is used. In the case of dial-up the length of time online determines cost, whereas for the other options it is the amount of data downloaded. The responses highlight the need for consumers to be well-informed of the different options and prices, depending on their intended use of the Internet. Overall there is support for the proposition C2 that perceived costs influence the choice of Internet access option.

Support and Service

Three themes emerged concerning support and service. The most frequent was declared satisfaction with the service and support provided by ISPs. The second theme related to respondents who indicated that the level of support had not yet been fully tested, as they had not yet had any major problems. The third related to non-existent and poor support and service. In the case of the cell phone as modem, it was stated by a respondent that they were not aware of any support being available. The user in this case used also dial-up access, perhaps to compensate for this. In one instance of wireless use there was dissatisfaction with service and support. The respondent had clear intentions of switching to another option because of this. The evidence points to quality of support and service as an influence on choice of Internet access option, although this may have more to do with the ISP, rather than the Internet access option. Where there is only one option being offered by an ISP, then the level of support and service tends to be associated with the access option. Proposition C3 is supported.

Knowledge

All respondents were aware of at least two options available to them. A respondent who subscribed to a dial-up service indicated that at the time he had chosen dial-up there were no other alternatives. There are now a variety of options available, but the user is still persisting with dial-up for various other reasons. Another respondent who had chosen a wireless connection indicated that at the time of making the choice, the other alternative was ADSL. As stated: "*[The ADSL provider] had not woken up to the presence of their pending competition as they took long to set up so we went for [the wireless option] as they could do it right away*". By having knowledge of a variety of options, consumers are able to make more informed decisions. Overall the proposition C4 is supported that consumer knowledge influences choice of Internet access option.

DISCUSSION AND IMPLICATIONS

Overall, the findings indicate that customers choose an Internet access option by considering a number of factors simultaneously. So, for example, even if an Internet access option has deficiencies in one area, its positive characteristics in other areas may lead consumers to continue using it. Dial-up access, for instance, is acknowledged as being slower than other options. Many customers still use it despite being aware of alternatives due to its perceived lower cost, especially where high-speed access or frequent, intense Internet use is not required. Nevertheless, the findings reveal a pattern whereby dial-up access has the most shortcomings. Those mentioned included inconvenience vis-à-vis blocking the telephone line for voice calls; higher costs of access during peak telephone traffic hours; slower speed than other options; lack of reliability at times; and incompatibility with requirements of heavy Internet users. This explains why there are so many consumers switching over to other options, and why there has been a decline in the number of dial-up users in South Africa.

The high cost of access is the reason why the growth in number of Internet users has stagnated in South Africa. The costs, perceived as expensive even by many middle income earners, are way out of reach of the poor majority. Many of the poor do

not have home access to fixed telephone lines and PCs to begin with. Cell phones are widely pervasive, but the use of cell phone-as-modem is also considered costly.

There was evidence that some households employ multiple options. For example, one respondent indicated use of both dial-up and cell phone-as-modem. The latter option was seen as a back-up, in case of emergencies, for example, when the dial-up access is unavailable. Another household used both a 3G data card option and ADSL. The 3G option was used by the husband on his laptop, to suit his mobile Internet usage habits. The ADSL option ensured there was still access in the home, even when the 3G data card and laptop were not available. The latter observation points to factors such as marital status, number of children, and age of children as additional factors to consider.

LIMITATIONS AND FUTURE RESEARCH

There has been limited IS research on technology choice amongst individuals. This study has drawn primarily from technology adoption theory in identifying factors influencing consumer choice of home Internet access technology. Further insight into the phenomenon of choice can be gained by drawing from literature in other related domains, such as marketing and economics.

Some of the findings alluded to the influence of spouse and children in Internet access choice decisions. Brown and Venkatesh (2005) drew from the household lifecycle model when examining PC adoption in the home. This perspective was not fully integrated into this study, and is an area for future research. The household lifecycle model would enable systematic investigation into the moderating impact of these types of influences.

Given the socio-economic and socio-technical divides that exist in South Africa future research might also examine the effects of these divides on consumer choice of Internet access option. Interview data in the form of user narratives could be gathered from a larger, more diverse sample, based on characteristics such as educational level (less educated versus highly educated), family income (high income versus low income), and geographic location (rural versus urban). An analysis of the collective narratives within and between groups will yield insight into how the aforementioned characteristics impact on Internet access and choice in the home.

CONCLUSION

South Africa is one of the most technologically advanced countries in Africa with the highest number of Internet users (Robson, 2007). There has recently been rapid growth in the variety of Internet access options available to South African home users (Robson, 2007). In this study, it was found that attitudinal beliefs such as relative advantage, perceived ease, compatibility, and prior experience have a major influence on consumer choice. The influence of friends and family as well as secondary sources such as newspapers and television were also found to play a major role, as did the cost of the Internet access technology. The importance of cost reflected the overall concern with high telecommunications costs in South Africa. These costs present as a major impediment to more equitable Internet access across socio-economic groups. Support and service for an Internet access option also had a major influence on consumer choice. By focusing on the above key factors, Internet service providers in South Africa will be better able to understand what influences consumer choice of Internet access technology in the home. These findings may be generalisable to developing countries with similar socio-economic structures.

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