Adoption and Evaluation of Mobile Commerce in Chile

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Abstract: Chile is recognized as the most wired or the most e-Ready country in South America and in the top quartile globally. Chile has the highest penetration of cell phones in South America, yet it has been slow in adopting mobile commerce. In this exploratory research, both electronic and mobile commerce adoption in Chile are studied. The survey questions are developed based on the previous studies on mobile commerce adoption. The results show that the group studied uses electronic commerce extensively but is not comfortable using mobile commerce, and complain than mobile access speed, service quality and price needs improvement.

Keywords: mobile commerce, mcommerce adoption, mobile commerce in Chile, electronic commerce in Chile

1. Introduction

Chile is recognized as the most *wired* or the most e-Ready country in South America, according to the 2006 Economist Intelligence Unit Rankings. The country is reportedly progressing steadily in its broadband penetration and mobile penetration (of over 75 percent). It is ranked higher than many European Countries in its Network Readiness in 2008 according to World Economic Forum Report. (Dutta 2004) (Dutta 2008)

Chile is commended by many global economic watch groups for their action in advancing the country towards IT (Information Technology) readiness. Chileans through public and private partnership are determined to make significant progress in becoming a leader in ICT (Information & Communication Technology) use in Latin America. In establishing its robust digital agenda, Chile has established many initiatives focusing on Access, Digital Literacy, eGovernment, e-transactions (eBusiness), and Legal framework. Digital literacy or human resource development is what the government coordinator for ICT considers as the biggest challenge. Chile has recognized ICT as an important instrument to gain economic growth and maturity. In establishing these goals, Chile has recognized that it needs to get itself ready in the transformation process from being a resource-based economy to a knowledge-based economy. (Alvarez 2005)

In planning its initiatives for this transformation Chile recognizes that digital literacy and self-efficacy in the use of technology are critical yet the biggest challenge. For instance, many reports show less than 15 percent of businesses and consumers indicated using eCommerce. Furthermore, although there is reported 75 percent mobile penetration, 80 percent of that uses it only for voice communication. Thus, both eCommerce (electronic commerce) and mCommerce (mobile commerce) have been very slow in the adoption. Both, the global and local technology-based companies have been constantly evaluating the acceptance and market maturity in the use of ICT among Chileans. The need for understanding the reasons for this slow adoption is important, yet there have been a few localized and comparative studies regarding mobile and electronic commerce adoption and use among Chileans. There have been many studies conducted regarding the factors affecting the successful adoption of mCommerce, especially in developing countries. In this study, authors have attempted to capture and analyze the perception and adoption of mCommerce relative to eCommerce among Chileans.

2. Background

2.1 Mobile commerce

While eCommerce is still growing, a rapidly changing technology promises to deliver even more value than the eCommerce. (Clarke 2001) This is made possible through mobile devices. Although mobile devices (as cell phones) have been useful for some time for voice applications, entertainment and gaming, the change to digital devices and the availability of variety of handheld devices with digital and information-based applications has been promising new growth in commerce through mobile devices or mCommerce. (Kini 2004) (Kini 2006)

Mobile commerce is defined in a variety of ways. The definition that is used in this research is that commerce done using a wireless handheld device using cellular or Wi-Fi or any other type of wireless network. The digital handheld devices have been converging allowing ever-expanding application base for consumers.

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(Stafford 2003) Scholars have been debating whether mCommerce is an extension of eCommerce using a handheld device or a channel that has far more value addition potential. Clarke states that a mobile device through ubiquity, convenience, localization and personalization delivers significantly higher value than the eCommerce channel. Furthermore, researchers have been projecting that with converging technology and expanding application base mCommerce will be a powerful channel. (Clarke 2001) (Lee 2003) (Kini 2004) (Jih 2007)

The value propositions theorized by Clarke (Clarke 2001) ubiquity, convenience, localization and personalization define the relationship between possible supplier offerings and consumer purchases, by identifying how the supplier fulfills the customer's needs across different consumer roles. The mCommerce value propositions explained above are opportunities available for mCommerce suppliers. Whether eCommerce users perceive these values is not known. In mCommerce research, it is important to validate these value propositions and the existence of such value space along the identified dimensions. (Leung 2001) (Kini 2004)

Giaglis (Giaglis 2002) in developing their framework for mBusiness research reported that the understanding of mCommerce market adoption and value network are very important in shaping the future of mobile business. In addition, the framework also included technology development, information privacy and security, business models, channel integration, and business alliances are other important factors that determine and shape the future of mobile business. (Kini 2004)

In one of the earlier studies comparing Finland, Germany and Greece, Vrechopoulos et al. found through an online exploratory research that Finland was marginally matured in their adoption of mobile devices; it was followed by Germany and Greece. They found significant difference in the adoption rates and consumer behavior toward mCommerce among these three countries. The critical success factors they found in gaining higher adoption and diffusion in Europe included better quality mobile devices, user-friendly shopping interfaces, applications that are more useful, and services, lower prices, better security, better coverage and higher speed. The authors warn, however, that these factors may need to be validated in other developing and developed countries. (Vrechopoulos 2002)

Jarvenappa et al, in their cross-cultural research study of mCommerce adoption in Finland, Japan, Hong Kong and the US elaborate that mCommerce is at crossroads. They conclude that while mobility has given users more freedoms psychologically, socially and physically, it has allowed creating disorder in freedom to deflect the true value of technology through tensions caused by connexity – connectedness and freedom simultaneously. The authors indicate that the connexity may have been dealt with in different ways depending on the cultural attributes where the demand on the technology is to gain freedom or connectedness. The authors suggest that the mobile industry should focus on “must have” technology rather than “nice to have” technology. They forecast that the success of mCommerce “… services is likely to depend on how flexible and malleable the technology is to allow users to shape it to their personal and group needs in various social and business contexts.” (Jarvenappa 2003)

There have been many other anecdotal studies reported on the value of mCommerce and its adoption. Recently, researchers have been presenting empirical studies on mCommerce adoption. Kini through the empirical study in the developing country of Thailand found that "good pricing" and "quality of service" are crucial in gaining the usage and traffic for mobile commerce. In addition, they also found evidence that ubiquity of mobile device is an important reason for people using it. These results were apparent from the study despite the weakness in the data relating to the quality of respondents (undergraduate students) and small sample size of mobile device users. (Kini 2006)

Jih, using a convenient student sample from Taiwan documents the significant influence of perceived convenience characteristic of mCommerce on the shopping intention. Jih points out that the practical implications of such studies are useful in understanding the consumer behavior and adoption of mCommerce. Jih recommends that such results need to be validated by replicating similar studies internationally in other countries. (Jih 2007)

In the following sections, an attempt at gaining the (comparative) perception and adoption between mCommerce and eCommerce in Chile, a developing country is presented. The importance of such a study may be warranted in Chile because, first, Chile has the highest network readiness score and may become the leader in Latin America in accelerating the mCommerce adoption, and second, Chile already has 75% penetration of mobile phones yet very little diffusion in the mCommerce except in ringtone downloads.

3. Methodology

3.1 Mobile technology in Chile

The 500,000 Chilean companies have been categorized as 99% small and medium and 1% large companies. Only 11% of the companies use eCommerce to buy and 6% use it to sell. More than half of companies using eCommerce are large companies, and, 80% companies of all companies are considered small or micro companies and account for 1% of total eCommerce. Furthermore, it is reported that less than 60% to a PC, and even less than 40% of the small companies have access to Internet, and, and almost no small company has tools like ERP or CRM. The reports also indicate that among medium companies, the situation is only a slightly better. These statistics reported in 2005 indicates sluggish technology acceptance in the leading Latin American network ready country. (Chamber 2004)

In 2005, Chile had 8.7 million cell phone users. This is a 55% penetration (55% of population and 75% of potential users) of the market and is the highest in the Latin American market. While Chileans used TDMA (36%), GSM (48%) and CDMA (16%), all three leading technologies; GSM usage grew by 400 percent. The 80% of Chilean cell phone users indicate they primarily use it for voice services. Although Entel, the leading cell phone company in Chile, allowed payment using cell phones for tickets to events and cinema, services to pay bills, stock trading, and vending machines, Chileans consumers remained concerned and did not accept readily. The general view is the mCommerce is for consumers with higher income. Despite the fact that Chile is the only country in Latin America where the rent per capita is comparable to European countries, anecdotal reports indicate mCommerce adoption is at crawling speed. (Chamber 2004).

Chile is on a path for mCommerce adoption unlike other developing countries. Electronic commerce adoption from companies has been slow. In the consumer market, cell phone penetration is high yet anecdotal reports indicate reluctance in adoption of new applications on the mobile devices.

The authors' interest in this study is to identify the level of adoption among Chilean graduate university students, the most comfortable early adopters of mCommerce, and to identify the currently perceived gap in the value provided by the mobile services. The identification of such a gap is extremely helpful in understanding factors that affect the adoption, and the focusing on the services that are sought by the mobile users in making the new technology useful. Thus, in this study, authors primary motivation make an attempt to understand and analyze the current usage, reasons for not using mCommerce, and improvements that are being sought by the current consumers and possibly measure the perceived value gap between eCommerce and mCommerce. (Kini 2004)

The questionnaire used was translated in to Spanish language and was distributed to MBA students in Santiago, Chile. The choice of university students as subjects, (rather than the general public or business professionals,) is mainly because of convenience and not deliberate. All of these students are full time working students. The data were collected between January and May 2005. This is a captive crowd and there is a little bias to be expected. Although this is not a good representative sample of Chilean population, this however is a sample of educated population with a tendency to have highest number in levels of income and highest level of adoption rate according to Hitt. (Hitt 1999) Thus, the authors expected to find more upper economic-class and early adopters of mCommerce in the university environment thus lending a high degree of efficacy to responses and results. (Kini 2004)

The questions were designed to capture the differences in the usage between desktops (on Internet) and mobile Internet capable devices. Questions were also used to capture the reasons for using mobile devices, the problems faced by users in using mobile devices, and improvements necessary in the mobile devices and services for increased usage. These questions were formulated to capture the strength of the respondent's perception and views using a 5-point Likert scale. The individual items were designed to capture the perception of the users in the relative value provided by mobile devices regarding speed, cost, ubiquity, convenience, localization, and personalization in comparison to desktop computers. The questionnaire was tested and validated using students in a public university in the US. (Kini 2004)This study includes 12 demographic questions, 36 eCommerce and mCommerce adoption-influencing questions that pertain to the perception of respondents why people use eCommerce and/or mCommerce. (Kini 2004) The analysis is based on about 180 responses from the eCommerce and/or mCommerce users.

4. Findings

Typical respondent is a male, 31-40 years old, studying part-time, working full time, a graduate student. He has an income of 1,500,000 CHP per year, and spends 200,000 CHP for internet access for each year. The respondent uses Internet primarily from work and spends approximately 16 hours per week on the Internet. (Table 1) All respondents have cell phones and about 40% of them have an extra handheld device. Currently, over 90% of the respondents use Desktop for Banking and Financial services, Information and news, and email and communication; while only 26 percent of Mobile device users use it for email and communication and all other applications are adopted by less than 15% of the mobile device users. The data showed that respondents are very conversant with desktop eCommerce, and over 60% use applications using desktop. For whatever reasons mobile device users have stayed away from using mCommerce in large numbers. (Table 2)

When asked about the reason they are using eCommerce, over 50 percent indicated that they are using it because access speed, comfort, always available, its usefulness in business is very important to them. Mobile commerce users showed their preference to be always available by 17 percent of them indicating it is very important to them. In addition, mCommerce users also revealed that *everywhere available* and *comfort* are other two factors which are very important to them in adopting mCommerce. (Table 3)

When inquired about the problems faced while using eCommerce, nearly half of the respondents surprisingly showed their displeasure with access speed, along with about a quarter of respondents who showed concerns about the security and quality of service. The mCommerce user however did not indicate the problems they faced. Only 13 percent of the mCommerce respondents indicated that they faced problems with access speed and service quality. It is unclear why such a small percentage is indicating problems with mCommerce since large number have indicated they are not using mCommerce. A possible explanation is that they do not have the capability in their mobile devices to even use it for mCommerce applications, or that they did not venture into using its capabilities. This question would have given good insights in the mindset of mCommerce users but unfortunately did not deliver useful information. Mobile commerce users did indicate that high price 14% of mCommerce is a problem and may have deterred them from using mCommerce. (Table 4)

Table 1: Demographic data

Total Good Responses		183	%ge
Age	<20 Years	1	0.5%
	21-30 Years	61	33.3%
	31-40 Years	92	50.3%
	41-50 Years	26	14.2%
	51-60 Years	3	1.6%
	>60 Years	0	0.0%
Gender	Male	119	65.0%
	Female	64	35.0%
Student	Part-time	90	49.2%
	Full-time	18	9.8%
	Not Applicable	75	41.0%
Student Status	Undergraduate	18	9.8%
	Graduate	106	57.9%
	Not Applicable	59	32.2%
Working Student	Part-time	35	19.1%
	Full-time	117	63.9%
	Not Applicable	31	16.9%
Annual Income (CHP- Chilean Peso)	<CHP 400,000	19	10.4%
	CHP 400,001-900,000	19	10.4%
	CHP 900,001-1,500,000	43	23.5%

Total Good Responses		183	%ge
	CHP 1,500,001-2,000,000	37	20.2%
	CHP 2,000,001-2,700,000	31	16.9%
	CHP 2,700,001-3,600,000	18	9.8%
	CHP 3,600,001-4,500,000	9	4.9%
	>CHP 4,500,000	7	3.8%
Primary Location of Internet Access	Home	55	30.4%
	Work	124	68.5%
	School	2	1.1%
	Public Library	0	0.0%
	Friends/Neighbors	0	0.0%
	Mobile Device	1	0.6%
	Other	1	0.6%
Own a Mobile Device	Cell Phone	183	100.0%
	Palm (Cell + Palm)	61	33.3%
	Pocket PC (Cell + PPC)	12	6.6%
	All (Cell+Palm+PPC)	7	3.8%
	Not Applicable	0	0.0%
Average Internet Usage/Week		16 Hours	
Approximate Chilean Pesos Amount on Internet /Year		CHP 214,524	

Table 2: Current usage

	Internet (Desktop)	Mobile Device	
	Applicable	Applicable	Int. – Mob.
	% Responses	% Responses	Difference
Banking/Financial Services	94	11	+83
Shopping	70	5	+65
Entertainment	78	15	+63
Information and News	93	16	+77
Travel Booking	65	5	+60
Ticket reservation	64	5	+59
E-mail/communication	96	26	+70
Other	13	3	+10

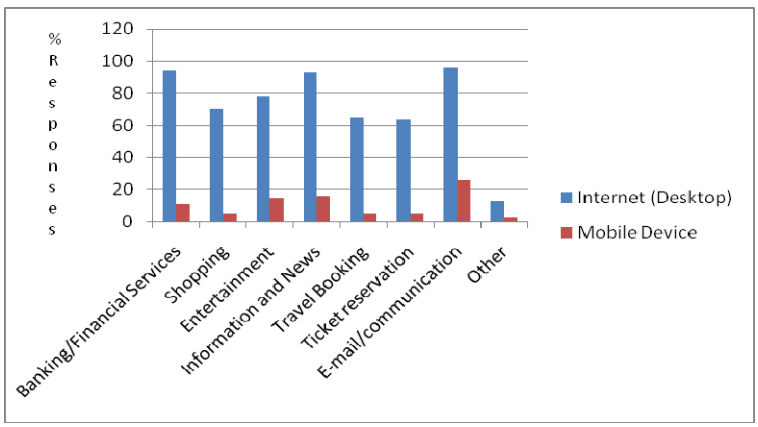


Table 3: Reasons for using

	Internet (Desktop)			Mobile Device			
	Very Important (1)	Aver-age	Least Important (5)	Very Important (1)	Aver-age	Least Important (5)	Aver-age Differenc e
	%ge		%ge	%ge	%ge	%ge	
Good Price	26	2.8	14	6	3.0	6	-0.2
Good Value for the money	26	2.5	10	5	2.9	4	-0.4
Access speed	72	1.6	8	14	1.9	3	-0.3
Comfort	70	1.6	8	16	1.9	4	-0.3
Always available	69	1.7	9	17	1.9	4	-0.2
Everywhere available	42	2.2	14	16	2.1	4	0.1
Curiosity	16	3.2	25	3	3.5	8	-0.3
Personalization	12	3.1	16	5	3.1	7	0.0
Better information	44	2.1	7	4	3.3	7	-1.2
It was fun	25	2.6	13	3	3.4	7	-0.8
It helped me in business	52	1.9	9	12	2.2	3	-0.3
Recognition among peers	9	4.1	48	5	3.5	10	0.6
Coding: 1 - Very Important, 5 - Least Important							

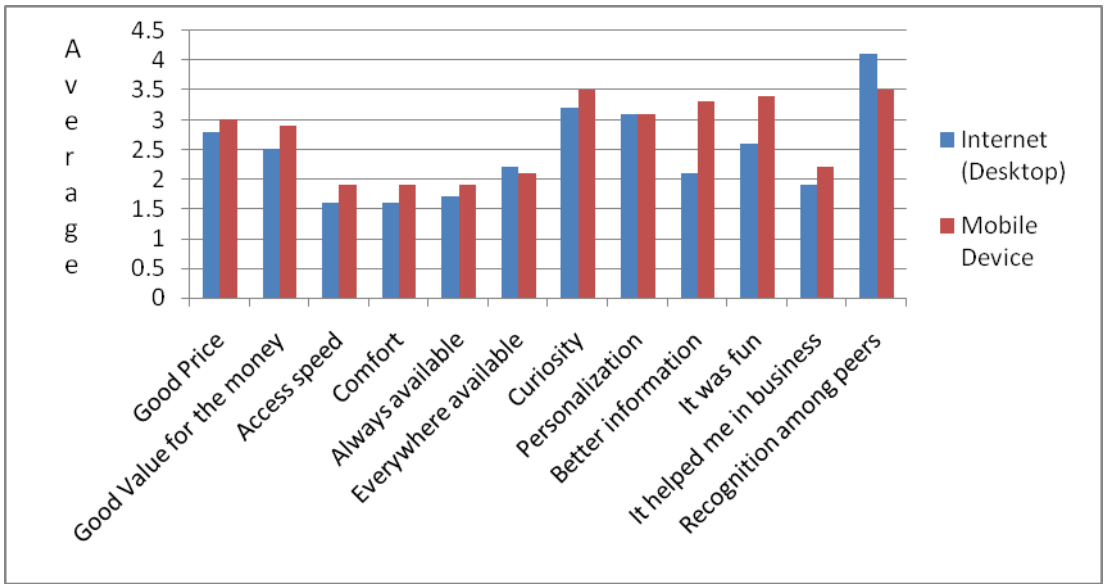
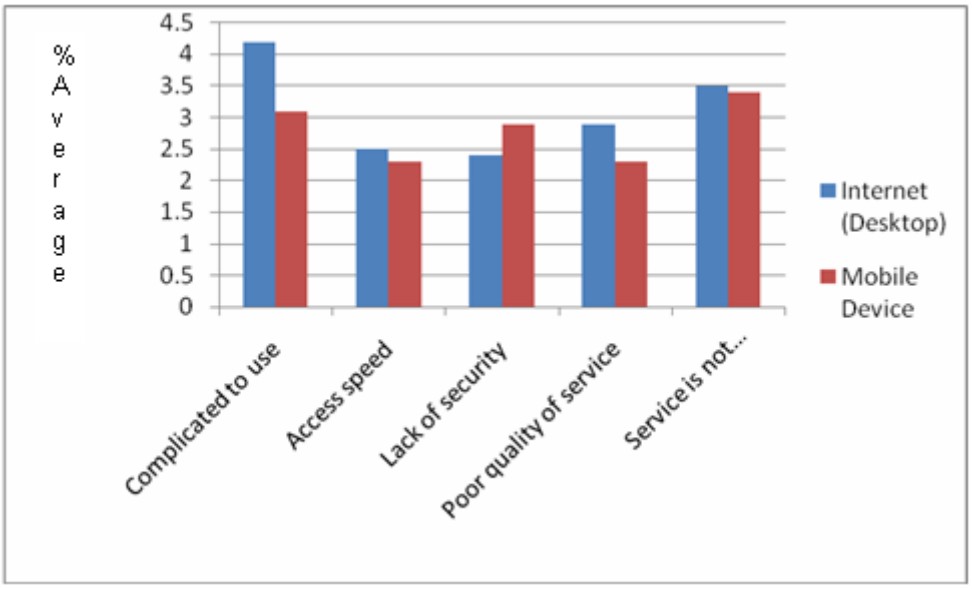


Table 4: Problems faced

	Internet (Desktop)			Mobile Device			
	Very Important Problem (1)	Aver-age	Least Important Problem (5)	Very Important Problem (1)	Aver-age	Least Important Problem (5)	Average Differ-ence
	%ge		%ge	%ge	%ge	%ge	
Complicated to use	8	4.2	53	9	3.1	10	+1.1
Access speed	42	2.5	20	13	2.3	5	+0.2
Lack of security	36	2.4	13	8	2.9	7	-0.5
Poor quality of service	21	2.9	20	13	2.3	4	+0.6
Service is not personalized enough	7	3.5	28	5	3.4	10	+0.1
High Price for mobile access				14	1.9	2	
Inconvenience in using mobile device				7	3.0	8	
Bad (too high) price	10	3.1	16				
Bad (poor) value for the money	8	3.3	19				
Coding: 1 - Very Important Problem, 5 - Least Important Problem							



When asked what improvements are important to increase the adoption and use of eCommerce, over 50 % of eCommerce users indicated their ever-growing need to have higher access speed and improved security while the over 30% asked for lower price along with customer support. Nearly, a fifth of mCommerce users demanded lower price and comfort with the device, along with a demand for improvement in ease of use, security, customer support. Again, here too mCommerce respondents did not show significant interest in indicating improvements needed to make mCommerce a strongly viable channel for ubiquitous commerce. (Table 5)

If one observes the pair-wise mean t-test results from Tables 6, 7, and 8 it is clear that there is clearly difference in the responses regarding eCommerce and mCommerce use in their responses to access speed and fun. In Table 6 where responses from eCommerce and mCommerce users are highly correlated in reasons for using fun item responses differed and mCommerce indicated strongly indicated it was more fun. In Table 7, mCommerce users indicated that they faced more problems in getting good access speed.

Finally, in Table 8, mCommerce users again indicated that access speed improvements are necessary to gain higher-level usage. Except in these cases, for all other items the responses from eCommerce and mCommerce are highly correlated. These pair-wise mean and correlation scores validate that the respondents did think there was difference in status of eCommerce in mCommerce environment in Chile, yet most respondents indicated there are some unique values that can be gained from mCommerce.

In Table 9, where the pair-wise difference means are shown it is apparent there is some perceived value difference between eCommerce and mCommerce. For example, with negative mean differences for *curiosity, better information and it was fun items* respondents pointed out why the desktop was more important for these items than handhelds. However, with positive mean difference for item *everywhere available* same group indicated value difference between mCommerce and eCommerce. In addition, with significant positive mean differences for *complicated to use, access speed, poor quality of service*, *improved ease of use, and lower price* items respondents identified where improvements are necessary to have higher level of mCommerce adoption.

5. Conclusions

From the discussion mentioned in the above sections, it was observed that Chileans are highly network ready and are adept at downloading many ring tones per year into their cell phones. This would have usually indicated their propensity to use mobile devices to conduct mCommerce. However, the results have not supported such arguments. Some of the factors they indicated for not adopting at a higher rate are access speed, service quality, and high price for mobile access.

From the above results, one can conclude that there is high level of usage of eCommerce among this respondent group in Chile. Consequently, one can assume this group to be technology literate, and if not adventurers are at least early adopters of technology. These results also give researchers indications that mobile device usage in Chile has not evolved significantly from voice communication application. However, respondents have *not strongly* indicated the problems they have faced in utilizing the mobile device. This conclusion supports the comments made by Jarvenappa et al (2003) that, “it will be the innovativeness of users and uses, not the innovativeness of the technology that will drive m-commerce growth to a new level”. The fact is that the respondents in this study are familiar with the technology and applications, yet have not transformed themselves to be appreciative and innovative users of mobile technology to leverage the *everywhere* and *always available* feature of the mobile technology.

6. Limitations

This survey has the obvious weaknesses like any survey that is conducted in a university campus using students as subjects. The research does use students as subjects, usually early adopters of mobile devices. Despite the fact that these subjects have moderate levels of income, *high access price, lack of high speed and lack of mobile applications and low penetration web-enabled mobile devices* may have given weak adoption rate results in this research. This research also suffers from a low sample size (using web-enabled devices) which prevented authors from applying more rigorous statistical techniques.

The questionnaire developed and used in this research is based on the earlier research on mobile commerce acceptance and adoption. Since the authors have not been able to capture the high quality responses from a quality respondent group, in the future, for research on this subject it may be important to rethink the approach in designing the survey to elicit the responses relating to personal innovative use of technology from the respondents rather than innovativeness of the technology (as per Jarvenappa 2003).

Table 5: Improvements necessary

	Internet (Desktop)			Mobile Device			
	Very Important Change (1)	Average	Least Important Change (5)	Very Important Change (1)	Average	Least Important Change (5)	Average Difference
	%ge		%ge	%ge	%ge	%ge	
Improves access speed	50	2.0	13	19	2.1	7	-0.1
Improved ease of use	20	2.9	20	18	2.4	8	0.5
Improved security	56	1.8	7	17	2.1	4	-0.3
Improved customer support	33	2.3	8	16	2.1	3	0.2
Lower price	38	2.2	8	23	1.7	2	0.5
Improved comfort device				21	1.9	4	
Innovative personalized applications				13	2.4	5	
Coding: 1 - Very Important Change, 5 - Least Important Change							

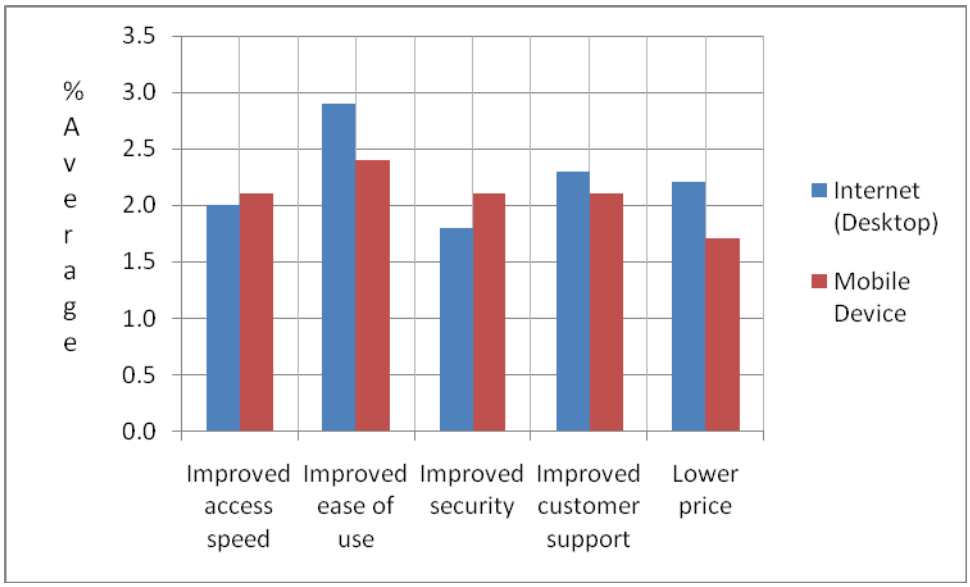


Table 6: Reasons for using

Paired Samples Statistics							
		Mean	N	Std. Deviation	Std. Error Mean	Correlation	Sig.
Pair 1	14A1	2.795	39	1.525	0.244	0.424	0.007
	14A2	3.000	39	1.504	0.241		
Pair 2	14B1	2.500	36	1.424	0.237	0.332	0.048
	14B2	2.917	36	1.422	0.237		
Pair 3	14C1	1.789	38	1.359	0.220	0.526	0.001
	14C2	1.868	38	1.398	0.227		
Pair 4	14D1	1.810	42	1.418	0.219	0.503	0.001
	14D2	1.905	42	1.445	0.223		
Pair 5	14E1	2.024	41	1.525	0.238	0.347	0.026
	14E2	1.780	41	1.475	0.230		
Pair 6	14F1	2.795	39	1.657	0.265	0.281	0.083
	14F2	1.846	39	1.514	0.242		
Pair 7	14G1	2.909	33	1.487	0.259	0.374	0.032
	14G2	3.667	33	1.291	0.225		
Pair 8	14H1	3.000	32	1.368	0.242	0.413	0.019
	14H2	3.156	32	1.483	0.262		
Pair 9	14I1	2.097	31	1.326	0.238	0.299	0.102
	14I2	3.387	31	1.585	0.285		
Pair 10	14J1	2.706	34	1.508	0.259	0.188	0.286
	14J2	3.588	34	1.373	0.236		
Pair 11	14K1	1.794	34	1.388	0.238	0.715	0.000
	14K2	2.118	34	1.552	0.266		
Pair 12	14L1	3.806	36	1.451	0.242	0.837	0.000
	14L2	3.639	36	1.588	0.265		

Table 7: Problems faced

Paired Samples Statistics							
		Mean	N	Std. Deviation	Std. Error Mean	Correlation	Sig.
Pair 1	15A1	4.05	40	1.648	0.261	0.572	0.000
	15A2	3.00	40	1.769	0.280		
Pair 2	15B1	3.00	40	1.797	0.284	0.225	0.162
	15B2	2.40	40	1.582	0.250		
Pair 3	15C1	2.62	39	1.532	0.245	0.345	0.031
	15C2	2.74	39	1.650	0.264		
Pair 4	15D1	2.90	42	1.650	0.255	0.465	0.002
	15D2	2.21	42	1.523	0.235		
Pair 5	15E1	3.24	37	1.535	0.252	0.862	0.000
	15E2	3.24	37	1.739	0.286		

Table 8: Improvement necessary

Paired Samples Statistics							
		Mean	N	Std. Deviation	Std. Error Mean	Correlation	Sig.
Pair 1	16A1	2.48	52	1.61	0.22	0.185	0.190
	16A2	2.21	52	1.63	0.23		
Pair 2	16B1	3.11	55	1.56	0.21	0.443	0.001
	16B2	2.51	55	1.69	0.23		
Pair 3	16C1	1.81	52	1.22	0.17	0.441	0.001
	16C2	2.13	52	1.47	0.20		
Pair 4	16D1	2.28	50	1.34	0.19	0.528	0.000
	16D2	2.16	50	1.40	0.20		
Pair 5	16E1	2.24	55	1.30	0.18	0.554	0.000
	16E2	1.76	55	1.15	0.16		

Table 9: Paired samples test - paired differences

	Mean	Std. Deviation	t	df	Sig. (2-tailed)
14F1 - 14F2	0.949	1.905	3.110	38	0.004
14G1 - 14G2	-0.758	1.562	-2.786	32	0.009
14I1 - 14I2	-1.290	1.736	-4.139	30	0.000
14J1 - 14J2	-0.882	1.838	-2.799	33	0.009
15A1 - 15A2	1.050	1.584	4.191	39	0.000
15B1 - 15B2	0.600	2.110	1.799	39	0.080
15D1 - 15D2	0.690	1.645	2.720	41	0.010
16B1 - 16B2	0.600	1.717	2.592	54	0.012
16E1 - 16E2	0.473	1.168	3.001	54	0.004

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Appendix 1

Partial Sample Questionnaire:

13. CURRENT USAGE:

Services Used: [Please put a check (✓) where applicable or put NA (Not Applicable)]		
	Internet (Desktop)	Mobile Device
A. Banking/Financial Services		
B. Shopping		
C. Entertainment		
D. Information and News		
E. Travel booking		
F. Ticket reservation		
G. E-mail/communication		
H. Other		
I. None		

14. REASONS FOR USING:

You use these Services because: (Please put a score from ***1- very important*** to ***5- least important*** to you, or NA-not applicable.)		
	1-Internet (Desktop)	2-Mobile Device
A. Good price		
B. Good value for the money		
C. Access speed		
D. Comfort		
E. Always available		
F. Everywhere available		
G. Curiosity		
H. Personalization		
I. Better information		
J. It was fun		
K. It helped me in business		
L. Recognition among peers		

15. PROBLEMS FACED:

The problems you faced when you used Internet (Desktop) or Mobile Device Services are: (Please put a score from ***1-very important problem*** to ***5-least important problem*** to you, or NA-not applicable)		
	1-Internet (Desktop)	2-Mobile Device
A. Complicated to use		
B. Access speed		
C. Lack of security		
D. Poor quality of service		

E. Service is not personalized enough		
F. MOBILE DEVICE ONLY		
G. High price for mobile access		
H. Inconvenience in using mobile device		
I. INTERNET ONLY		
J. Bad (too high) price		
K. Bad (poor) value for the money		

16. IMPROVEMENTS NECESSARY:

You will use Services on Internet or Mobile Device if there is/are: (Please put a score from ***1-very important change*** to ***5-least important change*** to you, or NA-not applicable)		
	1-Internet (Desktop)	2-Mobile Device
A. Improved access speed		
B. Improved ease of use		
C. Improved security		
D. Improved customer support		
E. Lower price		
F. MOBILE DEVICE ONLY		
G. Improved comfort device		
H. Innovative personalized applications		

