

# Analyzing the Factors that Influence the Adoption of Internet Banking in Mauritius

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## Abstract

This paper analyses the factors that influence the adoption of internet banking for the case of the emerging African economy of Mauritius. Results based on the analysis of data relating to 200 respondents indicate that the mostly used services are inter account transfer, payment to other personal account, transfer to credit card account, recharge mobile phones among others. Comparing demographic variables of the internet banking users to the non-internet banking users, the analysis also reveals that there is no significant difference between the two groups of users with respect to age group and the education level of the respondents. This is however not the case for the mean monthly income. Using factor analysis to identify the factors affecting the adoption of internet banking in Mauritius, it was found that the most significant factor is ease of use and that other important elements featured reluctance to change, trust and relationship in banker, cost of computers, internet accessibility, convenience of use, and security concerns. Further analysis using cross tabulations suggest important statistical relationship between awareness, access to Internet facility, length of banking relationship, people working in the Internet banking/finance sector, education level in the category 'post graduate' and also income group with the usage of internet banking.

**Keywords:** Internet-banking; Internet; Mauritius, banking, telecommunication.

## Introduction

A feature of the banking industry across the globe has been that it is increasingly becoming turbulent and competitive, characterized by an increasing trend towards internationalization, mergers, takeovers and consolidation of the banking industry. Moreover a number of non-banking companies are entering the banking industry by offering financial products and services (e.g., Toyota's credit card, GM's auto financing, Merrill Lynch investments). This has given a myriad of options to customers in choosing banking services. As a response and aided by technological develop-

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ments, banks have attempted to build customer satisfaction through providing better products and services and at the same time to reduce operating costs. Thus the banking industry has been constantly innovating and with the advent of technological developments, particularly in the area of telecommunications and information technology, one of the latest innovation that took birth, and quite inevitably, has been the internet

banking. This phenomenon has attracted a number of empirical studies (Bielski, 2000; Booz, Allen & Hamilton, 1997; DeSourdy, 2001) that analyzed the development of electronic banking and its operations. A general consensus exist that e-banking enables banks to provide an inexpensive and direct way of doing banking business, exchanging information and to sell or buy products and services.

A number of studies have been carried out relating to issues in the wider context of e-banking (Balachandher, Santha, Norhazlin, & Prasad, 2000; Suganthi, Balachandher, & Balachandran, 2001), particularly in relation to the rationales and benefits of internet banking, customer loyalty and service quality. However, comprehensive research investigating the relative importance of factors influencing the adoption of internet banking and other customer preferences, particularly for the case of an African country namely Mauritius, has never been carried out to our knowledge.

This study thus aims to fill the gap in the literature by focusing on the factors that influence the adoption of internet banking for the case of the emerging African economy of Mauritius. Mauritius provides a good case study as the country is actually one of the best performers of the continent and has a relatively well-developed financial system. Today the financial services, particularly banking, sector play a critical role in the economy both in the provision of employment and also in foreign currency inflow to the economy. Moreover the country also possesses a relatively good quality infrastructure, particularly with respect to communication and has among the highest education attainment level as well. Indeed it is estimated that around 15% of major bank customers have an internet banking account and make use of it.

Specifically this paper aims at i) identifying the most widely used internet banking services in the first place and ii) investigating if elements such as accessibility and cost of computers and internet, customers reluctance, awareness of the service, security of internet banking transactions, convenience and ease of use influence the usage of e-banking. The results will have important implications and is believed to be very helpful for the Mauritian banking sector and also for the government since both will be aware of the relatively important elements that should be taken into account to foster this service and thus reaping out its benefits.

The structure of the paper is as follows: in the next section, we review the relevant literature in the area. Background information on Mauritian banking sector is then presented. The following section describes the research methodology, which is then followed by the data analysis and results from the survey. The paper concludes with a summary, outlining the implications of the findings and the limitations of this study.

## Literature Review

Pikkarainen, Pikkarainen, Karjaluoto, and Pahlila, (2004, p. 224) defines internet banking as an 'internet portal, through which customers can use different kinds of banking services ranging from bill payment to making investments'. With the exception of cash withdrawals, internet banking gives customers access to almost any type of banking transaction at the click of a mouse (De Young, 2001). Indeed the use of the internet as a new alternative channel for the distribution of financial services has become a competitive necessity instead of just a way to achieve competitive advantage with the advent of globalization and fiercer competition (Flavián, Torres, & Guinalú, 2004; Gan, Clemes, Limsombunchai, & Weng, 2006). All banks using the internet as an additional channel or a bank using only the internet as delivery channel are now on equal footing to offer their banking services on the internet and to compete for customers around the world. As Karjaluoto, Mattila, and Pento (2002, p.261) put it 'this could be the reason why the internet is widely seen as the most important delivery channel in the era'

Internet Banking is beneficial for both the provider and the customer. The rationales of banks' usage of the internet banking technology from the bank's perspective are mainly related to cost savings (Robinson, 2000; Sathye, 1999). Banks use online banking as it is one of the cheapest delivery channels for banking products (Pikkarainen et al., 2004). Such service also saves the time and money of the bank with an added benefit of minimizing the likelihood of committing errors by bank tellers (Jayawardhena & Foley, 2000). Internet banking offer services regardless of geography and time and banks thus provide its services to the customers for them to use at their convenience. As Karjaluoto et al. (2002, p. 261) argued '*banking is no longer bound to time and geography. Customers over the world have relatively easy access to their accounts, 24 hours per day, and seven days a week*'. The author further argued that, with internet banking services, the customers who felt that branch banking took too much time and effort are now able to make transactions at the click of their fingers.

Competition is yet another important rationale as with increasing competitive pressures from existing firms and new entrants in the market, internet banking strategy has been an interesting way to retain existing customers and attract new ones. The use of internet banking as an alternative channel has also been allowing banks to target different demographic segments more effectively. Robinson (2000) believes that the supply of internet banking services enables banks to establish and extend their relationship with the customers. There are other numerous advantages to banks offered by online banking such as mass customization to suit the likes of each user, innovation of new products and services, more effective marketing and communication at lower costs (Tuchilla, 2000), development of non-core products such as insurance and stock brokerage as an expansion strategy, improved market image and better and quicker response to market evolution (Jayawardhena & Foley, 2000). Benefits for the end users are numerous as well and includes convenience of the service (time saved and globally accessible service), lower cost of transaction and more frequent monitoring of accounts among others.

The benefits of internet banking are known and unanimous, though there are some reserves mainly in terms of security of the system. However, this study is not aimed at analysing the rationales or benefits of internet banking but, as spelled out previously, rather to investigate the possible factors that determine the adoption of internet banking for the case of Mauritius. Below we discuss the theoretical underpinnings and provide some empirical evidences on these possible factors. It should be noted that empirical evidences has been indeed scant in the literature until now.

### ***Factors Determining the Demand for Internet Banking***

One factor that determines the level of demand for e-banking services is that of the number of people having access to Internet. Moreover the cost and speed of internet connections have also been argued to be important elements (see Li & Worthington, 2004; Sohail & Shanmugham, 2003). Li and Worthington also argued that customer confidence on e-banking transactions is yet another factor. This depends on how the banks would deal with any erroneous transactional and security concerns that may occur during online banking. It is good to point out that Stewart (1999) claimed that the failure of the Internet in retail banking is largely attributable due to the lack of trust consumers have in the electronic channels.

Provision of infrastructural facilities is another factor that could lead to quicker diffusion of innovation. Study from Jayawardhena and Foley (2000) reveals that there is a significant correlation between the website downloaded speed and web-users satisfaction. Moreover other features such as content and design, interactivity, navigation and security are relevant according to the author. Broderick and Vachirapornpuk (2002) found through observations and narrative analysis of internet banking customers, that problems such as slowness, poor navigational possibilities, poor in-

teractivity and critical incidents such as lack of help and empathy by internet banking service providers, triggered considerable switching and negative word-of-mouth.

The type of relationship customers wish to maintain, and this differs, with banks is another aspect to consider. Indeed there are evidences in communications that suggest that the choice of communication channel will affect on the development of relationships. Hiltz, Johnson, & Turoff (1986), for instance, found that computer mediated communication is less personal and socio-emotional than face to face exchanges. Another research on the Information Richness theory points out face to face communication is a better medium to transmit complex messages which is essential to establish a personal contacts (Daft & Lengel, 1986). Clark and Mills (1993) concluded that *'while some individuals may desire to establish relationships that are more personal and friendship-like, there may be others who value efficiency of services and prefer more impersonal association'*. Thus, as the authors argued, this implies that customers desiring social and psychological benefits by establishing personal relationships with banks will prefer face to face interactions, at the detriment of e-banking. Tomiuk and Pinsoneault (2001) concurred with the above view and stated that the lesser degree of 'richness' and 'sound presence' of e-banking environment will affect banks' ability to create a trusting relationship between their customers and employees. On the other hand, for those customers whose relationship is primarily based in efficiency of services, e banking will be an attractive alternative.

There are also several other theories relating to consumer behavior what may explain the rate of adoption and degree of acceptance of the use of the likes of internet banking. Rogers and Shoemaker (1971) argued that consumer go through several stages in knowledge conviction and decision confirmation before they finally adopt a product of service. Guiltinand and Donnelly (1983) emphasized on the importance of awareness before adoption of any innovative products. Interestingly as Doll, Raghunathan, Lim and Gupta (1995) also claimed that product information content on the web design and layout are also important factors that affect customer satisfaction. Sohail and Shanmugham (2003) further argued *'that proper navigational attributes and search facilities, leading to higher level of interactivity will have an impact on the customer perception on user friendliness of the e-banking site'*. Mattila and Mattila (2005) also claimed that security has been widely recognized as one of the main barriers to the adoption of internet innovation following empirical work on Finnish banking customers' survey responses including both internet users and non-user.

Based on the above discussion we conclude that consumers' preference to adopt internet-banking is dependent upon the availability of Internet service and interestingly on a number of several other social and psychological factors as well.

## **Mauritian Banking Sector and Internet Banking**

### ***The Internet Banking Sector***

Mauritius has realized rapid economic growth due to its diversification policies from agriculture to information technology and financial services. Today the financial services, the particularly banking sector plays a critical role in the economy both in the provision of employment and also in foreign currency inflow to the economy. The country has a relatively well-developed domestic financial system and a growing offshore sector. There are 11 domestic commercial banks and 12 offshore banks in the country. Among the domestic banks, the two largest foreign banks are the Hong Kong Shanghai Bank (HSBC) and Barclays International. These two banks control around 25 % of the market. As regards the local banks, they are dominated by the Mauritius Commercial Bank Ltd and the State Bank of Mauritius Ltd. They have more than two-thirds of the market. These two banks are also listed on the Stock Exchange.

The domestic banking sector, which constitutes over two-thirds of the domestic financial system, has grown at an average 13 percent p.a. over the past five years. In 2005, the net foreign assets of the banking system went up by 7.3 per cent compared with a rise of 7.9 per cent in 2004. Domestic credit grew by 14.9 per cent in 2005, down from 19.1 per cent in 2004. Net credit to Government expanded by 8.0 per cent lower than the growth of 45.9 per cent registered in the preceding year. Credit extended by banks to the private sector, inclusive of non-financial public corporations, increased by 18,0 per cent in 2005, up from 11,2 per cent in 2004. The Bank of Mauritius, (the central bank), carries out the supervision and regulation of banking business as well as non-bank financial institutions authorized to accept deposits.

### **Communication and Internet**

Communication infrastructure and provision in Mauritius is one of the best of the Continent. Access to the Internet on the island is accessible to residential and business users and the number of Internet users has grown rapidly over the years. Currently, the number of dial up Internet subscribers is around 60,000 (40% business and 60% residential) and the estimated number of users is around 146,000. Table 1 provides some basic information and key facts on the status of communication and internet on the island. It shows that in general, there has been a constant progression in the communication and internet access since 1998.

**Table 1: Key Facts: Communication and Internet**

	<b>1998</b>	<b>2000</b>	<b>2002</b>	<b>2004</b>	<b>2005</b>
<b>Population</b>	1.14	1.15	1.18	1.2	1.2
<b>Main Telephone lines per 1000 inhabitants</b>	200	237	327	353	357
<b>Telephone faults per 100 lines per year.</b>		56	48	41.77	
<b>Internet host per 10000 inhabitants.</b>		20	22	27.62	
<b>Personal Computers per 1000 inhabitants.</b>	90	100	140	176	
<b>Av Mon. cost for unlimited Internet pack.</b>		US\$20	US\$ 18	US\$ 15	
<b>Internet Host Sites.</b>		577	3275	4000	
<b>Internet Subscribers (including ADSL)</b>	12000	30000	50600	63500	65300
<b>Internet Users per 1000 inhabitants.</b>	49	73	100	146	

Source: ITU (International Telecommunication Union), NW (Network Wizards) Internet Host Surveys and partially adapted from Mike Jensen's Overview of Africa Internet Status [<http://www3.sn.apc.org/africa/afstat.htm>].

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## ***he Internet Banking Revolution in Mauritius***

Internet banking in the country is a relatively recent phenomenon and one can actually ascertain that it has really become in operation since the year 1997. Actually out of the 11 banks only 4 of them, namely the Mauritius Commercial Bank, The State Commercial Bank, Banque des Mascareignes and Barclays offer internet banking services while the National Postal and Cooperative Bank (NPCB) and HSCB have already planned to launch this service by next year. It is further estimated that the total number of internet banking users is around 50000<sup>1</sup> as at date (an increase of around 20% since last year), with the bulk of users being individual (around 75%) as compared to corporates.

The type of service offered encompasses the following main ones among others: inter account funds transfer, payment to other account, transfer of funds to credit card account, foreign transfer, draft or SWIFT payment orders (MUR & F/C), recharge mobile phones, credit cards and cheques transactions, request the issue of a current account statement, standing order transactions, application for various accounts, loan and credit cards.

## **Research Objectives & Methodology**

The study has three aims. The first is to determine the internet banking services most demanded; the second is to examine the factors that affect the adoption of e-banking and the third to investigate if there are any differences between the Internet and non-Internet users relating to the various factors. The broad research question is:

*What are the factors affecting the adoption of internet banking in the Mauritian context?*

### **Methodology**

To assess the factors influencing the use of internet banking in Mauritius, a survey was conducted during the first quarter of year 2007. Questionnaires were designed and distributed to retail users of banking services of different age group and of different educational level attained across the island. The questionnaire we prepared and used had been pre-tested initially with few people working in different sectors to ensure consistency and relevance to the Mauritian case. Minor changes were requested by those people, which we implemented before carrying out the final interview. A total of 188 useable responses were obtained.

The questionnaire we prepared for this exercise was divided into 3 sections. The first section concentrates on the general profile of the respondent including his/her age group, education level and profession and income group. In the second section issues such as internet facility was addressed to know how far the availability of the internet can influence the use of internet banking transactions. Also, the respondent was asked to provide details about the number of years he/she has been dealing with his/her main bank and to rate the services provided by the internet banking. In section 3, we were interested in finding the factors affecting the adoption of internet banking in Mauritius. The respondents were provided with a list of factors and were required to rate each one, using a 5 point likert scale.

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<sup>1</sup>It is estimated, from unofficial discussion with various large banks, that around 15-20% of their clients have an internet account with them.

## Data Analysis and Results

### ***Most Widely Used Services***

Descriptive statistics and bar charts (see Appendix) were constructed as a preliminary analysis to determine which of the services the Internet banking users make use of more often. It could be interpreted that the mostly used services are inter account transfer, payment to other personal account, transfer to credit card account, recharge mobile phones, sending order transactions, savings, current and fixed deposit account application and debit/ credit card. To better assess this statement, t-tests were also performed and the results displayed in Table 2.

**Table 2: t test for services offered by Internet banking**

<b>Payments</b>	<b>Percentage of respondents claiming use of these services often/ very often</b>	<b>T-test significance</b>
Inter account funds transfer	13	0.227
Payment to other personal account	12	0.200
Payment to other local bank account	10	0.006
Payment by office cheque	5	0.044
Transfer of funds to credit card account	14	0.092
Foreign transfer: Draft or SWIFT	8	0.014
Recharge mobile phones	15	0.075
<b>Requests/Applications</b>		
Order cheque books	6	0.093
Stop lost/stolen Cheques	6	0.000
Remove 'Stop Cheque' request	2	0.000
Apply for a credit card limit change	3	0.000
Request the issue of a Current account statement	12	0.001
Standing order transactions	16	0.023
Savings/current/Fixed Deposit account	15	0.333
Foreign currency accounts	8	0.014
Debit/ Credit card	14	0.149
Loan	7	0.015
TelephonInternet banking	8	0.044

Table 2 confirms the preliminary analysis to quite a large extent. As depicted by the preliminary analysis, inter account transfer, payment to other personal account, transfer to credit card account,

recharge mobile phones, current and fixed deposit account application and debit/ credit card remain the services mostly practiced by Internet banking users. However, the t test also illustrates that order cheque book is a mostly common service among Internet banking users.

### **Factors influencing Internet Banking in Mauritius**

To examine whether the demographic variables of the respondent affect the adoption of internet banking, the demographic variables of the internet banking users are also compared to the non-internet banking users. The rationale for such a belief is that:

The younger the generation the more they are used to the new technological advancements as compared to the older generation, thereby they are more likely to adopt Internet banking;

The higher the education level achieved, the greater the probability of the customer adopting Internet banking; The higher the income ladder, that is the more affluent people are more likely to possess a personal computer, thus the more the tendency to use Internet banking.

Descriptive analysis of these demographic variables is presented in the Appendix. Based on the above-mentioned demographic variables, the 2 groups of users were further compared (internet banking users and non-internet banking users) using the z-test (due to sample data being not a normal distribution). Table 3 shows the results computed.

**Table 3: Demographic characteristic and preference for Internet banking**

<b>Demographic variables</b>	<b>Internet banking users</b>	<b>Non-Internet banking users</b>	<b>Significance</b>
Mean age	45	47	0.100
Mean monthly income	Rs 20 230	Rs 17 571	0.035
% of undergraduates & postgraduates	2.19*	2.06*	0.401

\* Mean score

As far as age group is concerned, there is no significant difference between the two groups of users. Moreover, there is no significant difference between the education level of the respondents and their preference for either conventional (non-Internet banking users) and Internet banking users. However, the mean monthly income is seen to be significant. The results are consistent to that of Sohail and Shanmugham (2003) who found similar results.

To identify the factors affecting the adoption of internet banking in Mauritius factor analysis has been performed to determine whether the data can be condensed or summarised into smaller sets of factors. We have used seven factors as identified from the literature and are of equal relevance to the study. Table 4 illustrates the condensed factors named in line with their factor loadings.

Table 4 concludes that the most significant factor is ease of use. The other factors that are of influence are namely: reluctance to change, trust and relationship in banker, cost of computers, Internet accessibility (consistent with works from Li & Worthington, 2004; Sohail & Shanmugham, 2003) convenience of use, and security concerns (Matilla and Matilla, 2005, found similar results for the Finish customers). Overall the seven factors account for 83% of the total variance.

**Table 4: Factors affecting adoption of Internet banking**

<b>Factors</b>	<b>Rotated factor loading</b>	<b>% of variance explained</b>
<b><i>Ease of use</i></b>		
User friendly web site	0.692	45.90
Ease of performing E-Transaction	0.519	
<b><i>Reluctance to change</i></b>		
Willingness to adopt technology	0.91	9.31
Level of awareness of the service	0.881	
<b><i>Trust and relationship</i></b>		
Reliability of your banker	0.832	8.13
Bank response rate to queries	0.806	
Ethical and professional conduct	0.805	
Bank's policy to compensate for losses	0.543	
<b><i>Cost</i></b>		
Cost of acquiring a computer	0.916	6.60
Cost of internet connection	0.837	
<b><i>Accessibility</i></b>		
Convenience to access the service	0.935	5.41
Connection speed	0.782	
<b><i>Convenience</i></b>		
Range of services offered	0.429	3.78
Convenient way of doing bank transactions	0.852	
Time saving	0.465	
<b><i>Security</i></b>		
Clear and understandable instructions	0.427	3.68
Security of internet transaction	0.802	
Length of internet experience	0.541	

### ***Cross Tabulations***

To provide greater insight than single statistics, further analysis was conducted by the use of cross tabulations relating selected factors and usage of internet banking facilities. Cross tabulations allow us to display the joint distribution of two or more variables and thus describe the distribution of two or more variables simultaneously. Each cell shows the number of respondents that gave a specific combination of responses, that is, each cell contains a single cross tabulation. The results from cross tabulation analysis are presented in Table 5 and briefly discussed below.

**Table 5: Internet Facility and Adoption of Internet Banking**

			Make use of this service		Total
			yes	no	
internet facility	yes	% within internet facility	36.7%	63.3%	100.0%
		% within make use of this service	94.3%	90.5%	91.8%
		% of Total	33.7%	58.2%	91.8%
	no	% within internet facility	25.0%	75.0%	100.0%
		% within make use of this service	5.7%	9.5%	8.2%
		% of Total	2.0%	6.1%	8.2%
Total		% within internet facility	35.7%	64.3%	100.0%
		% within make use of this service	100.0%	100.0%	100.0%
		% of Total	35.7%	64.3%	100.0%

From Table 5 it can be noted that 36.7% respondents who have Internet facility actually use internet banking facilities, thus confirming that access to internet is an important element.

Results from Table 6 suggest that 36% of respondents who are aware of Internet banking do make use of same, suggesting that level of awareness of the service is a potential factor as well.

**Table 6: Heard of internet banking (awareness) and usage of Internet banking**

			Make use of this service		Total
			yes	no	
heard of e-banking facilities	yes	% within heard of e-banking facilities	36.0%	64.0%	100.0%
		% within make use of this service	91.4%	90.5%	90.8%
		% of Total	32.7%	58.2%	90.8%
	no	% within heard of e-banking facilities	33.3%	66.7%	100.0%
		% within make use of this service	8.6%	9.5%	9.2%
		% of Total	3.1%	6.1%	9.2%
Total		% within heard of e-banking facilities	35.7%	64.3%	100.0%
		% within make use of this service	100.0%	100.0%	100.0%
		% of Total	35.7%	64.3%	100.0%

Table 7 also shows that 35.7% of the respondents who are new to the bank (having done business with the bank for 1 –5 years) make use of Internet banking, the majority users, 44.4%, being with the range of 6-10 years, 40% within the range of 11-15 years and 32.6% having been loyal to the bank for more than 16 years.

**Table 7: Length of time doing business with same bank and use of Internet banking**

			Make use of this service		Total
			yes	no	
long doing business with same bank	1 - 5 yrs	% within long doing business with same bank	35.7%	64.3%	100.0%
		% within make use of this service	15.2%	15.8%	15.6%
		% of Total	5.6%	10.0%	15.6%
	6 - 10 yrs	% within long doing business with same bank	44.4%	55.6%	100.0%
		% within make use of this service	24.2%	17.5%	20.0%
		% of Total	8.9%	11.1%	20.0%
	11 - 15 yrs	% within long doing business with same bank	40.0%	60.0%	100.0%
		% within make use of this service	18.2%	15.8%	16.7%
		% of Total	6.7%	10.0%	16.7%
	> 16 yrs	% within long doing business with same bank	32.6%	67.4%	100.0%
		% within make use of this service	42.4%	50.9%	47.8%
		% of Total	15.6%	32.2%	47.8%
Total	% within long doing business with same bank	36.7%	63.3%	100.0%	
	% within make use of this service	100.0%	100.0%	100.0%	
	% of Total	36.7%	63.3%	100.0%	

Other cross tabulations analysis was also carried out, but the statistical results are not reported here. Interestingly, 74% of the respondents who have an internet package are internet banking users as well. As such it has been observed that people working in the Internet banking/finance sector are more prone to use the service (68%), followed by those in the communication industry (56%). Thus being in the sector itself make bank customers more aware, less reluctant and more accustomed to the service, thus favoring its use. Another important element is the fact that 57% of respondent having an education level in the category 'post graduate' uses the service, as compared to 33% in the category of 'undergraduate'. Lastly people in the income group of Rs 30 000 to 49 000 are the one making mostly usage of internet banking (48%) while 34% of those in the income range Rs 20 000-29 000 and 33% in the range of 10 000- 19000 use the service. It would thus appear that higher income earners are more sensible in using of internet banking as income may also be a sign of high profile jobs thus time constraint.

## Conclusions

This study investigated the factors that influence the adoption of internet banking for the case of the emerging African economy of Mauritius. Mauritius provides a good case study as the country is actually one of the best performers of the continent and moreover has a relatively well-developed financial system and communication technology as well. Specifically this work analysed in the first instance the most widely use internet banking services and subsequently investigated the relative importance of elements such as accessibility and cost of computers and internet, customers reluctance, awareness of the service, security of internet banking transactions, convenience and ease of use influence the usage of Internet banking.

Using survey analysis, results shows that the mostly used services are inter account transfer, payment to other personal account, transfer to credit card account, recharge mobile phones, standing order transactions, savings, current and fixed deposit account application and debit/ credit card. The results are confirmed by the use of t-tests. Comparing demographic variables of the internet banking users to the non-internet banking users, the analysis shows that there is no sig-

nificant difference between the two groups of users, for the variable age group and the education level of the respondents. This is however not the case for the mean monthly income.

Using factor analysis to identify the factors affecting the adoption of internet banking in Mauritius we found that the most significant factor is ease of use and that other important elements are reluctance to change, trust and relationship in banker, cost of computers, Internet accessibility, convenience of use and security concerns.

Further analysis using cross tabulations relating selected factors and usage of internet banking facilities detected the presence of important statistical relationship between awareness, access to Internet facility, length of banking relationship, people working in the Internet banking/finance sector, education level in the category 'post graduate' and also income group with the usage of internet banking.

The results will have important implications and is believed to be very helpful for the Mauritian banking sector and also for the government since both will be aware of the relatively important elements that should be taken into account to formulate appropriate strategies, foster this service and thus reaping out its benefits. While this exploratory research has revealed some interesting results, one should be careful on some of its limitations related essentially to its sample size.

Although we believe that this study is quite deep, we still believe that it can be further extended to include more respondents from different sectors and age groups to make it more realistic and more reliable from the perspective of policy analysis. Moreover, analysis can be made for different age groups and possible people working in different sectors to capture the micro details of Internet banking. There exist in the literature similar works on different countries. Perhaps it might be interesting to survey these studies and make a comparison to see whether there exist major differences in different countries. Finally a regression analysis can be performed to find out the main determinants affecting Internet banking in Mauritius.

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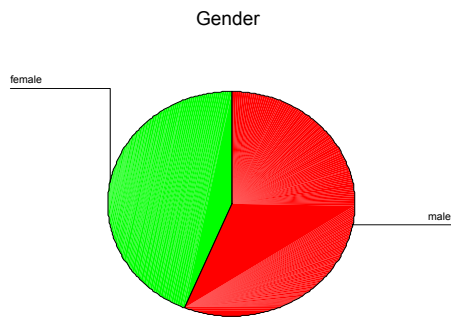
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## Appendix: Respondent Profile

Descriptive statistics and bar charts constructed as a preliminary analysis to determine which of the services the Internet banking users make use of more often.

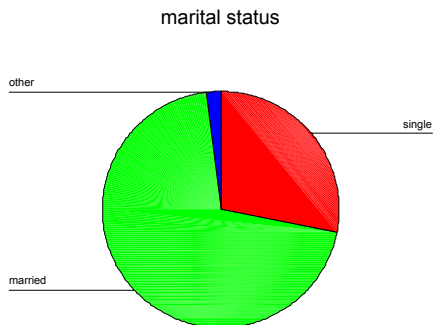
## Gender



*56% male and 44 % female*

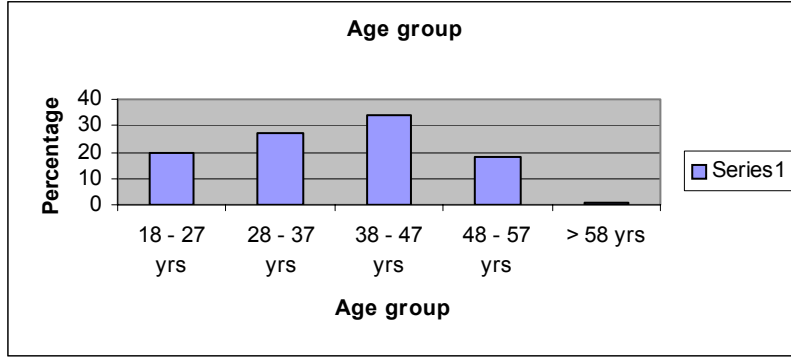
## Marital Status

	Percent	Valid Percent	Cumulative Percent
<b>Single</b>	56	28	28
<b>Married</b>	140	70	98
<b>Other</b>	4	2	100
<b>Total</b>	200	100	



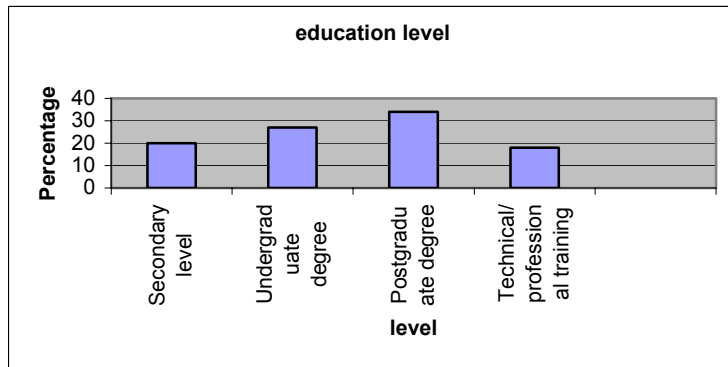
## Age Group

	Percent	Valid Percent	Cumulative Percent
<b>18 - 27 yrs</b>	40	20	20
<b>28 - 37 yrs</b>	54	27	47
<b>38 - 47 yrs</b>	68	34	81
<b>48 - 57 yrs</b>	36	18	99
<b>&gt; 58 yrs</b>	2	1	100
<b>Total</b>	200	100	



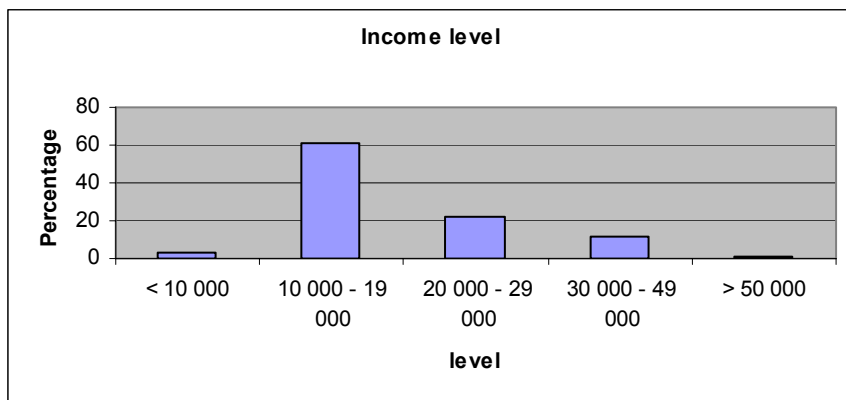
**Education Level**

	Percent	Valid Percent	Cumulative Percent
Secondary level	50	25	25
Undergraduate	90	45	70
Postgraduate	48	24	94
Technical/professional	12	6	100
<b>Total</b>	<b>200</b>	<b>100</b>	



**Income Level**

	Percent	Valid Percent	Cumulative Percent
< 10 000	6	3.2	3.2
10 000 - 19 000	114	61.3	64.5
20 000 - 29 000	42	22.6	87.1
30 000 - 49 000	22	11.8	98.9
> 50 000	2	1.1	100
<b>Total</b>	<b>186</b>	<b>100</b>	
<b>Missing</b>	<b>14</b>		
<b>Total</b>	<b>200</b>		



## Biographies

**Kesseven Padachi** is a Lecturer in the field of Financial Management at the University of Technology, Mauritius. He is also a fellow of the Chartered Association of Certified Accountants. He joined the University in June 2001 after spending some ten years in the private and public sector as a professional accountant. His main area of research is in SMEs and their development prospects and financial management practices. He also has research interests in Corporate Finance, particularly issues relating to capital structure.

**Sawkut Rojid** is a Free Lance Consultant in Economic and Business and has been engaged in a number of consultancy projects at local, regional and international level both for private sector and for the government. He also teaches international trade and international Business at the University of Mauritius. He is also the in-country researcher for the yearly SADC Trade Review project funded by the Australian government and managed by TIPS South Africa. He is also a trainer of IDS, University of Sussex for the Training course on Economic Partnership Agreement. Sawkut has published several academic papers in international journals.

**Boopen Seetanah** is a lecturer in Economics and Finance at the University of Technology, Mauritius (UTM), with research interest in finance, transport economics, development economics and also in the modeling of determinants of international tourism. He has a number of publications in international academics journals including Journal of Transport Economics and Policy, Annals of Tourism Research, Tourism Management, Tourism Economics, Applied Economics among others. He is also a member of the Chartered Institute of Logistics and Transport. He is currently acting as consultant for some local media on domestic economic and financial affairs. He is specializing on the econometric modeling of public capital with particular interest in transport infrastructure using static and dynamic models in time series and panel data analysis.