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## **SERVICE QUALITY AND INTERNET BANKING: PERCEPTIONS OF MALTESE RETAIL BANK CUSTOMERS**

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# SERVICE QUALITY AND INTERNET BANKING: PERCEPTIONS OF MALTESE RETAIL BANK CUSTOMERS

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## Abstract.

This paper focuses on customers' perceptions regarding two key aspects in Maltese retail finance: service quality and internet banking. The importance of these topics is likely to keep on growing in the near future, as clients become more demanding and financially-literate. We use various service quality dimensions, in order to garner bank customers' opinions as to the factors which seem more important in determining overall satisfaction. We obtain indications that clients lay particular emphasis on reliability and access. We also focus on different aspects which may encourage or inhibit the adoption of internet banking services, and these include cost, security, convenience and having the service recommended by acquaintances.

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## Introduction

In the current competitive business world, firms analyse consumers' attitudes and opinions since these have an impact on long term demand and profitability. This is also applicable in the banking industry, especially as customers become more demanding and financially literate. This paper seeks to analyse the public's perceptions *vis-à-vis* two key aspects in Maltese retail banking: overall service quality and internet banking (IB)services. Although Malta's retail finance sector is comprehensively developed, academic studies have so far devoted little attention to these topics.

The importance of service quality rests on the fact that this is a pre-condition for ensuring loyalty and for attracting prospective customers. Prior literature has identified various dimensions which impact on service quality and the latter tends to be more challenging to measure in service industries such as banking.

Banks' operating systems and delivery systems have become increasingly reliant on technology. E-services such as IB constitute an important aspect of the overall bank 'offering', and therefore these impact on service quality as well. Technology also plays a prominent role in the banking industry, due to its cost effectiveness in terms of expediting required tasks such as retrieval of information, handling elaborate mathematical modelling, and due to its potential in providing clients with more cost effective access to banking services. Internet has altered the way in which banks operate and deliver financial services. In general, IB services may be accessed from the comfort of one's home or through mobile phones. These advantages have to be considered in the context of possible drawbacks such as reduced face to face interactions and security risks. Despite the fact that IB can expedite transactions and access to information, a significant proportion of bank customers have not yet opted to use such services.

The main aim of this paper is to assess Maltese customers' perceptions relating to bank service quality and IB. This study therefore contributes towards the ongoing discussion and assessment of these issues, since customers in different countries may exhibit different attitudes towards a particular offer (Ladhari *et al.*, 2011). We thus use various service quality dimensions as outlined in prior literature and garner bank customers' opinions regarding these factors. We also inquire which of the dimensions seem more important in determining overall customer satisfaction. The second part of the paper is related to customers' perceptions about IB, and in particular we are interested in gauging the feedback of both users and non-users of this facility. Thus, the main contributions of this paper are twofold: we identify the features which seem to impact mostly on the overall level of satisfaction in case of Maltese retail bank clients, and we also investigate factors which impact on the adoption and use of IB in Malta.

The rest of the paper is structured as follows. Section 2 offers a review of related literature and Section 3 presents background information regarding the Maltese banking sector, with a particular reference to IB services. Section 4 outlines the methodology. In Sections 5 and 6 we present the insights obtained through analysing overall customer satisfaction and the responses relating to IB services. Section 7 concludes the study.

## Literature Review

### *Service Quality in Banking*

Lewis and Booms (1983) defined service quality as “a measure of how well a delivered service matches the customers’ expectations” whilst according to Grönroos (1983) service quality refers to the customer’s perception of the difference between the expected and the actual service. Johnston (1995) specified various dimensions of service quality in banking whilst Johnston (1997) empirically found that customers considered reliability and security as the most important ones, followed by responsiveness, communication and competence. Conversely, cleanliness, comfort and aesthetics proved least important.

In view of the increased tendencies to use internet as a delivery channel, research has also focused on quality in such context; traditional service quality dimensions such as cleanliness might not be applicable to e-services in a straightforward way. Zeithaml *et al.*, (2000) proposed the following dimensions of generic e-service quality: responsiveness, trust, reliability, efficiency, security, access, flexibility, ease of use, site aesthetics, personalisation and price. Yang *et al.*, (2004) proposed six key online service quality dimensions: reliability, responsiveness, competence, ease of use, security and product range.

Some service quality dimensions are applicable to both traditional and online delivery, and these include reliability and responsiveness. Lee and Lin (2005) concluded that trust is the most important dimension of e-service quality, followed by reliability, responsiveness, website design and personalisation.

Literature also focused more specifically on banking services being offered in an electronic context. Joseph *et al.*, (1999) identified the following dimensions in this respect: convenience/accuracy, feedback/complaint management, efficiency, queue management, accessibility and customisation. Jun and Cai (2001) empirically found that the dimensions which proved most important overall were: responsiveness, reliability, access, ease of use, accuracy and product variety.

In this paper, we focus on the following five service quality dimensions on the grounds that they recur frequently in prior studies: (1) reliability, (2) responsiveness, (3) communication, (4) access and (5) security. These concepts are described hereunder:

*Reliability:* This refers to the promptness of delivering the requested service in an accurate way and in line with advertised attributes (Parasuraman *et al.*, 1985; Jun and Cai, 2001; Yang *et al.*, 2004).

*Responsiveness:* Responsiveness refers to delivering services and dealing with problems in a timely and convenient way (Jun and Cai, 2001).

*Communication:* Both online and traditional communication methods entail that customers receive clear messages in terminology which they can understand (Johnston:

1997). Communication should also be reliable, empathetic and confidentially transmitted (Abdullah *et al.*, 2011).

**Access:** Access refers to the means through which customers can avail themselves of services provided by the bank. Providing access entails restraining waiting time and making services available in convenient locations, possibly on a twenty four—seven basis. Jun and Cai (2001) extended the concept to comprise availability for help, and access to one's bank account even when abroad.

**Security:** Parasuraman *et al.*, (1985) defined security as the autonomy from danger, risk or doubt. Johnston (1997) extended the concept to include confidentiality obligations. Considering the security aspect in the context of IB, it may also be associated with safe processing of online transactions and preventing unauthorised access to bank accounts and personal information (Yang *et al.*, 2004).

### *Technology, IB Services and Related Customer Attitudes*

Technology is a fundamental source of competitiveness in the banking industry since it reduces labour intensive activities and processing costs, whilst fostering innovation and more convenient delivery systems. In this study we emphasise the use of technology as a delivery channel through IB services. IB transactions involve less processing costs and banks may pass on part of these savings to customers (Lee, Kwon and Schumann, 2005). In a study amongst customers of a large European retail bank, Boehm (2008) found that IB has a more significant connection with customer retention as compared to traditional means of delivery. Innovating IB services is likely to foster banks' ability to retain profitable customers (Nielsen; 2002). Acharya *et. al.*, (2008) reported that US community banks with more intense online presence registered better profit efficiency.

Whilst several studies examined customer acceptance of IB, less attention was devoted to the factors which might preclude clients from using such financial innovations (Bradley and Stewart, 2002). Szmigin and Foxall (1998) suggested three types of resistance to innovation: postponement, opposition and rejection. Postponers are potential users who intend to adopt the innovation within a year; opponents intend to adopt the innovation but are still undecided when to do so; whilst rejecters do not intend to adopt the innovation. Laukkanen *et al.*, (2008) applied this classification to the prospective adoption of IB services by Finnish customers. Parasuraman (2000) cited discomfort and insecurity as the main inhibitors of adopting technological innovations.

In an empirical investigation amongst Australian bank customers, Sathye (1999) showed that the main inhibitors of IB adoption were scepticism about security and unclear prospective benefits. The author considered the following possible inhibitors:

***Insufficient awareness of the service:*** Consumers may only procure services if they are informed about available products, and how the latter might offer better value for money. Bankers may address this inhibitor by explaining how their offer differs from that of competitors.

*Difficulty to use the facility:* Technological innovations should be simple to use in order to attract sufficient demand from customers who might be IT-averse.

*Security concerns:* As the social context gets less tangible through reduced face-to-face communication, customers become more prone to mistrust a system (Milne and Boza, 1999). Therefore banks should implement appropriate security features such as encryption, firewalls and virus protection to persuade customers that IB is reasonably safe. Lack of familiarity with the service might also be a related factor, since this tends to intensify perceived risk.

*Unreasonable prices:* Another deterrent which affects IB adoption is cost, which comprises bank charges and internet connection fees. Technological innovations should therefore be reasonably priced as compared to other alternatives.

*Resistance to change:* When customers are satisfied with the prevailing offer, it might be difficult for bankers to entice them into adopting alternatives, and this is particularly true in case of more conservative clients. Despite this, one should note that Flavián *et. al.* (2006) presented findings which potentially run counter to the former hypothesis, in the sense that trust in the traditional delivery channel may inspire confidence in IB services provided by the particular operator, and therefore this may make clients more prone to change.

*Lack of access to internet and personal computers:* Internet connectivity might be a problem, not only in terms of the related costs but also on the grounds that such prerequisite excludes a section of customers, particularly IT-illiterate persons.

## **Maltese Retail Banking: Service Quality and IB**

The banking industry in Malta comprises more than twenty banks, yet only seven of these are relevant to this study since the other institutions are not actively involved in the retail market. Imeson (2010:6) reports that the retail banks account for around 30% of the total assets of the banking system. Bank of Valletta and HSBC Bank Malta are the largest commercial banks and these account for a considerable share in retail markets. The active retail banks in Malta, tend to adopt prudent banking policies and are financially sound institutions (Camilleri, 2005). This may account for the fact that the global financial crisis which started in 2007 did not cause immediate material impacts on the Maltese financial system (Briguglio *et al.*, 2009).

To our knowledge, the present study is the first academic research concerning bank service quality and internet banking in Malta. We thus obtained the required background information by considering the viewpoint of various bank representatives. We interviewed one representative from each of the two major banks in respect of service quality; these participants demonstrated awareness of the five dimensions which we are focussing on, as outlined below:

*Reliability:* Respondents confirmed that their banks invest in continuous technological improvements to enhance reliability and to meet customer expectations. Improvements are usually tested in a virtual environment before being launched to the public. Yet, it was also argued that institutions remain partly dependent on human effort, which may cause occasional errors for instance in data input.

*Responsiveness:* Banks strive to shorten response time both through upgrading IT systems and through business process re-engineering. The latter efforts were particularly targeted so that staff deployed in branches could focus on customer interaction, as back-office functions became centralised.

*Communication:* Both banks are aware of the potential offered by technology to achieve more efficient means of communication; internet and mobile banking being recent examples. It was also pointed out that face-to-face communication cannot be exclusively replaced through technological interfaces; for instance when offering investment advice, discussing loan proposals or cross-selling products. Bank branches were physically redesigned over the years to ensure privacy during interactions with customers.

*Access:* Banks aim to facilitate access to face-to-face and IT-based services which permit convenient delivery on a continuous basis. They also design user interfaces which are simple to use.

*Security:* Respondents stated that this is the most important service-quality dimension. Banks continuously upgrade their systems to protect databases and other operational features, and this is particularly important when considering that international cyber crime has become more prevalent. Participants suggested that there is a trade-off between quick service and enhanced security; the banks' challenge is to increase security without compromising convenience. Respondents admitted that this is not always easy, and they usually prioritise in favour of improved security.

IB services were offered by five of the licensed credit institutions in Malta at the time of writing: Bank of Valletta, HSBC Bank Malta, APS Bank, Banif Bank and Lombard Bank. As per the European Commission (2010), the number of IB users in Malta compares well with the European average; both stood at 32% in 2009. The Malta Communications Authority (2010) reported that the proportion of Maltese IB users rose from 28% in September 2008 to 33% in September 2010. Estimates for Bank of Valletta plc, as reported in Imeson (2010: 12) suggest that the proportion of transactions processed through branches (as opposed to IB, ATMs and system-generated transactions) went down to around 15%. One may deduce that other Maltese banks exhibit similar tendencies, although no other data were available in this respect.

In order to obtain a clearer picture of IB trends in Malta, we interviewed three representatives from the two larger banks. The interviewees confirmed the internet's potential as a marketing tool and the inherent advantages of IB i.e. increased user convenience and reduced transaction processing costs. In monitoring IB usage, respondents confirmed that the respective banks conduct periodic research. One of the

banks conducts online customer surveys twice a year where amongst other questions, customers are specifically asked whether they intend recommending IB facilities to acquaintances. The studies conducted by the other bank are more of an “internal nature” where particular tendencies about usage are observed.

In marketing IB services, cross-selling and recommendations from current users play an important role. The respondents also pointed out some particular tendencies; for instance a considerable proportion of users adopted IB facilities once they changed from schooling to a full-time job. In case of students, IB tends to be more popular amongst those following business-related courses. Respondents mentioned two main inhibitors which deter customers from using IB.

The first one is the fact that most customers feel suitably served through ATMs. The second factor is technology aversion, especially on part of elderly persons. In addressing this issue, banks have included help facilities on their websites; one bank offers online video demonstrations of the facility whilst the other offers the possibility of online two-way instant interaction. Free IB seminars were also conducted by one of the banks at different local council premises. These were well attended initially, although as potential-users became more technology-conversant it was felt that such sessions were no longer required.

## **Methodology**

For the purposes of this study, we conducted two separate questionnaires amongst Maltese bank customers. These were conducted in March and April 2012. The first questionnaire was aimed at achieving better understanding of customers’ perceived service quality. Given that some of the service quality dimensions which we analyse are partially related to e-services, we thought it essential to distribute this questionnaire to computer-literate persons and thus opted for an email based survey. The questionnaire was distributed to a “convenience” sample of contacts; respondents could forward the mail-shot to others (snowball sampling). We received 71 filled-in responses which were suitable for analytical purposes. Details of the questionnaire and an analysis of the responses are found in Section 5. The fact that participants were not randomly selected may be considered as a limitation of the study. However, one should note that an element of non-randomness actually applies to most web-based questionnaires, for example due to inactive email accounts (Van Selm and Jankowski, 2006). In addition, it may be contended that random samples may not necessarily representative of the whole population (Churchill, 1999: 545).

The second questionnaire investigated the attitudes of bank customers towards IB; this was intended to glean the insights of both IB users and non-users. The differences between the users and non-users were analysed in order to identify possible reasons why these groups respond differently towards a common service. We opted *not* to distribute this questionnaire through email since this would have automatically excluded IT-illiterate people, omitting an important cross-section of non-adopters. We thus circulated

the questionnaire amongst bank customers on four different Saturday mornings, near two main bank branches located in Hal Qormi.

Respondents were offered assistance in answering the questions when this was requested. Of the 120 forms which were completed, 70 responses were suitable for including in the final sample; given that the others were inappropriately or partially filled. The main insights of this survey are summarised in Section 6. Again, we should draw attention to a possible shortcoming that our results are not necessarily generalizable to the whole country.

A further limitation is that our samples are likely to mainly comprise personal customers rather than corporate ones.

### *Responses about Overall Service Quality*

The service quality questionnaire comprised three sections. The first part was intended to gauge respondent characteristics such as age group, gender and lifestyle. Respondents were also asked whether they were overall satisfied or dissatisfied with the service quality offered by their bank, so that they could subsequently be divided into two sub-groups. In the second part of the questionnaire, respondents were asked to indicate the degree to which they were in agreement with four different statements relating to each of the five selected service quality dimensions. The last part of the questionnaire asked the respondents to rank the five dimensions in order of importance. Respondents were also given the option to elaborate on their replies if they so wished.

Analysing the first section of the questionnaire, it was ascertained that there was a cross section of different respondent categories. 43% of the respondents were under 23 years, 44% were in the 24-30 age bracket, whilst 13% were over thirty. A predominance of the younger age brackets may be expected when sending email questionnaires. 86% of the respondents were in employment and 14% were students. The majority of the respondents (84%) answered that they were satisfied with the service quality of their preferred bank whilst 16% felt dissatisfied.

The predominance of satisfied customers is in line with the overall service quality ratings which were assigned in the last section of the questionnaire. In particular 47% of the respondents rated the overall service quality as “High”, 35% rated it as “High-Medium” while 18% chose the “Medium” rating. No respondent opted for the “Medium-Low” or “Low” ratings.

The responses which were obtained in respect of each service quality dimension are shown in Tables 1 to 5 below. The possible responses were presented along a 5-point mapping scale, ranging from “Strongly Agree” to “Strongly Disagree” where a “Strongly Agree” response indicates high service quality and vice-versa.

Most responses were in the “Strongly Agree”/“Agree” category, indicating that customers perceive an overall high service quality. This seems particularly the case with

regard to the Communication and Security dimensions, where over 85% of the responses were in these categories.

**Table 1**  
**Reliability Responses**

	<b>1 Strongly Agree</b>	<b>2 Agree</b>	<b>3 Neutral</b>	<b>4 Disagree</b>	<b>5 Strongly Disagree</b>
The bank keeps its promises to deliver a service on a specified date.	12.68%	63.38%	19.72%	2.82%	1.41%
Services are accurately delivered by the bank at the first attempt.	18.31%	63.38%	14.08%	1.41%	2.82%
When handling customer problems, the bank looks forward to find a solution.	24.29%	51.43%	17.14%	5.71%	1.43%
Transaction processing and customer details are handled without errors.	12.68%	59.15%	21.13%	4.23%	2.82%
Average:	16.99%	59.34%	18.02%	3.54%	2.12%

**Table 2**  
**Responsiveness Responses**

	<b>1</b> Strongly Agree	<b>2</b> Agree	<b>3</b> Neutral	<b>4</b> Disagree	<b>5</b> Strongly Disagree
The bank's customer service is prompt and staff is ready to lend a hand.	17.39%	60.87%	14.49%	5.80%	1.45%
The bank's customer service is excellent.	20.00%	51.43%	21.43%	5.71%	1.43%
Bank employees understand the customer very well and are experienced in their field.	22.54%	56.34%	15.49%	4.23%	1.41%
When a service is inefficient, the bank offers other alternatives to minimise inconveniences.	8.57%	51.43%	30.00%	5.71%	4.29%
Average:	17.13%	55.02%	20.35%	5.36%	2.15%

**Table 3**  
**Communication Responses**

	<b>1</b> <b>Strongly Agree</b>	<b>2</b> <b>Agree</b>	<b>3</b> <b>Neutral</b>	<b>4</b> <b>Disagree</b>	<b>5</b> <b>Strongly Disagree</b>
The bank offers individual attention to customers.	24.29%	58.57%	14.29%	2.86%	0%
The bank's services are offered in a language which is easily understood.	38.57%	58.57%	2.86%	0%	0%
Bank employees understand specific customer needs.	11.27%	67.61%	18.31%	2.82%	0%
The bank's website is easily accessed and required information can be easily found.	32.86%	54.29%	7.14%	5.71%	0%
Average:	26.75%	59.76%	10.65%	2.85%	0.00%

**Table 4**  
**Accessibility Responses**

	<b>1 Strongly Agree</b>	<b>2 Agree</b>	<b>3 Neutral</b>	<b>4 Disagree</b>	<b>5 Strongly Disagree</b>
The bank can be reached at any time during the week.	11.27%	40.85%	28.17%	15.49%	4.23%
The bank offers user-friendly technological products for better customer access.	21.43%	60.00%	15.71%	2.86%	0%
Personal accounts can be easily accessed through internet and ATMs.	42.25%	53.52%	1.41%	2.82%	0%
The bank's website offers open access to financial records.	22.86%	47.14%	20.00%	10.00%	0%
Average:	24.45%	50.38%	16.32%	7.79%	1.06%

**Table 5**  
**Security Responses**

	<b>1</b> <b>Strongly Agree</b>	<b>2</b> <b>Agree</b>	<b>3</b> <b>Neutral</b>	<b>4</b> <b>Disagree</b>	<b>5</b> <b>Strongly Disagree</b>
One may feel safe with the way in which transactions are handled.	20.29%	63.77%	11.59%	4.35%	0%
Bank employees inspire trust and confidence.	21.43%	64.29%	11.43%	2.86%	0%
The bank handles information in the strictest confidentiality.	30.99%	60.56%	8.45%	0%	0%
The bank implements adequate policies against data misuse or fraud.	26.76%	52.11%	19.72%	1.41%	0%
Average:	24.87%	60.18%	12.80%	2.16%	0.00%

We now investigate which of the former five service-quality dimensions are significant in explaining the respondents' perception as to whether they are satisfied or dissatisfied with the service quality of their bank. For each dimension, we worked out the weighted average of the rankings, where the "Strongly Agree", "Agree", "Neutral", "Disagree" and "Strongly Disagree" responses were assigned a value of 1, 2, 3, 4, and 5 respectively.

We sub-divided the samples between the satisfied and dissatisfied customers and conducted t-tests on the means of the sub-groups to inquire whether the differences are statistically significant. Results reported in Table 6 suggest that the differences between sub-groups are significant in the reliability, responsiveness and access dimensions, suggesting that these are more likely to impact on users' perceived satisfaction.

**Table 6**  
**T-tests on the Differences between Satisfied and Dissatisfied Respondents**

	Average (Satisfied Sub-Sample)	Ratings (Dissatisfied Sub-Sample)	t-ratio & significance
Reliability	2.03	2.90	4.60 ***
Responsiveness	2.09	2.92	4.15***
Communication	1.87	2.08	1.62
Access	2.05	2.48	2.22**
Security	1.91	1.98	0.47

**Note:** Statistical significance at the 99% and 95% level of confidence is denoted by \*\*\* and \*\* respectively.

The second and third columns of Table 6 refer to the weighted averages of the ratings on part of the satisfied and dissatisfied sub-groups in respect of each service quality dimension. The fourth column reports the results of five respective paired t-tests on means.

When the respondents were asked to rank the five dimensions in order of importance, the overall pattern which emerged was that reliability was most important, followed by access, security, communication and responsiveness. The latter was ranked as the least important of the five. Therefore both the t-tests and specific customer rankings suggest that clients lay particular emphasis on reliability and access; whereas the tests on responsiveness seem contradictory. This somewhat contrasts with the viewpoint of bank representatives who ranked security as the most important dimension.

### **Responses about Internet Banking (IB) Facilities**

The second questionnaire investigated customers' perceptions towards IB, with a particular reference to possible factors which may dissuade the use of this facility. After asking for general information such as age and occupation, the first section dealt with the respondents' opinions about various IB aspects, such as background knowledge, ease of use, perceived security, cost-effectiveness and satisfaction with traditional delivery systems. Respondents rated these factors on a Likert-type scale from one to five.

The second part of the questionnaire was aimed at IB users, and asked about frequency of use and whether they would recommend the service to others.

In the third part of the questionnaire, non-users were asked to rate the factors which inhibit them from adopting these facilities, and whether they intend to use IB in the future. We summarise the responses hereunder, commencing with Table 7 which shows the demographic characteristics of participants. Around 66% of the respondents are IB users, which seems high compared to the Maltese proportion which stood at 33% as at 2010.

One possible reason for this discrepancy may be the predominance of younger people in the sample. It emerges that females are less likely to use IB, in line with prior studies such as Meyer (2010). It is also apparent that people who lead busier lifestyles or who have work/school commitments during normal office hours (i.e. employed, self-employed and students) tend to be more prone to use IB facilities.

**Table 7**  
**Characteristics of Respondents**

		Adopters (46)	Non- Adopters (24)	Total (70)
Age:	18-29	30	2	32
	30-39	9	3	12
	40-49	4	6	10
	over 50	3	13	16
Gender:	Male	30	6	36
	Female	16	18	34
Occupation:	Employed	20	9	29
	Self-Employed	14	2	16
	Student	5	2	7
	Retired	4	7	11
	Other	3	4	7

We now analyse the ratings which the respondents assigned to the five factors which may serve as potential inhibitors when adopting IB (Sathye, 1999). Results are presented in Table 8a and 8b (Panels A and B). Looking at the mode ratings for each question, it is apparent that the responses of users and non-users tend to be diametrically opposite. A series of t-tests confirmed that the differences between the ratings assigned by the two groups are significant at the 99% level of confidence.

The first inhibitor which was surveyed was the level of knowledge about IB services. Around 16% of the total respondents answered that they have no information about IB, and all these fall in the non-adopters category. Despite this, 42% of the non-adopters answered that they have adequate information about the service, so this factor does not exclusively explain why particular people refrain from using IB.

**Table 8a (Panel A):**  
**Responses to IB Questionnaire**

Rating	Non-Adopters	Adopters	Total
<b>Level of knowledge:</b>			
<b>On a scale of 1 to 5, how much information have you got about IB?</b>			
1	11	0	11
2	0	0	0
Few information	3	3	6
4	0	2	2
<u>Adequate information</u>	<u>5</u>	<u>41</u>	<u>51</u>
	Total	24	46
	Av. Rating	2.92	4.83
<b>Difficulty of using:</b>			
<b>On a scale of 1 to 5, how much do you think IB is difficult to use?</b>			
Very difficult	1	15	0
	2	0	0
Slightly difficult	3	5	2
	4	0	0
<u>Not difficult</u>	<u>5</u>	<u>44</u>	<u>48</u>
	Total	24	46
	Av. Rating	2.08	4.92
<b>Trust:</b>			
<b>On a scale of 1 to 5, how much do you trust IB?</b>			
No trust at all	1	14	0
	2	2	0
Barely trust	3	8	4
	4	0	3
High trust	5	0	39
	Total	24	46
	Av. Rating	1.72	4.76

**Table 8b (Panel B)**  
**Responses to IB Questionnaire (continued)**

	Rating	Non-Adopters	Adopters	Total
<b>Cost effectiveness:</b>				
<b>On a scale of 1 to 5, how much do you think IB is cost-effective?</b>				
Low effectiveness	1	9	0	9
	2	8	0	8
Medium effectiveness	3	6	6	12
	4	1	6	7
High effectiveness	5	0	34	34
	Total	24	46	70
	Av. Rating	1.96	4.61	3.70
<b>Perception about traditional delivery systems:</b>				
<b>On a scale of 1 to 5, how satisfied are you with traditional bank branches?</b>				
Unsatisfied	1	0	1	1
	2	0	2	2
Satisfied	3	3	43	46
	4	9	0	9
Highly Satisfied	5	12	0	12
	Total	24	46	70
	Av. Rating	4.38	2.91	3.41

A second related question asked related to the ease or difficulty of using IB. Most adopters indicated that it is not difficult to use the service, whereas most non-adopters perceive that IB is difficult to use. This response might be partly due to the fact that some respondents may not be IT-literate, rather than due to inherent complexity in the IB user-interface. It also emerges that around 56% of the respondents highly trust IB services, whereas 20% have no trust whatsoever. The latter fall in the non-adopters category.

As shown in Table 8b, non-adopters perceive IB as only mildly cost-effective, whereas adopters think that it is highly cost-effective. Such difference may possibly be explained by the different lifestyles of adopters and non-adopters, whereby the latter might have easier access to bank branches and ATMs. It could also be the case that non-adopters do not fully realise the time-management potential offered by IB. Around 96% of the respondents feel satisfied with service delivery in traditional branches. In particular, this applies for *all* non-adopters and this could also account for their opting not to use IB.

The second section of the survey focused on IB users. These indicated that they were more influenced by family and friends to adopt IB, rather than by media. A very large proportion of users (89%) confirmed that they would recommend IB to acquaintances,

which suggests that there are prospects of attaining more adopters in the future. No respondent accessed IB everyday, but 48% answered that they access it on a weekly basis. 93% of the users indicated that they would not change anything in the IB system which they use, however most of them commented that they would like their bank to provide the service free of charge.

About a fourth (24%) of the users have accessed the service since up to three years, whereas the remaining 76% have used it since up to six years. This suggests that the majority of current IB users are satisfied with the service, since otherwise they would have stopped using it. Despite this, the responses obtained in the third part of the questionnaire which was answered by non-users, reveal that 12.5% of them formerly adopted IB; in most cases they discontinued the service because they were not actually using it.

There were other salient observations which emerge from the non-users' responses to the third section of the questionnaire. When these were asked to rank the factors which dissuade them from using IB, most non-users indicated that they perceive that the service is difficult to use, and internet- security scepticism ranked as the second factor. Other respondents indicated that they do not have access to a personal computer.

Non-users were also asked whether they are considering adopting IB in the near future. Classifying non-users as per Laukkanen *et al.*, (2008), we found that 54% of them are 'postponers' since they intend to adopt IB within one year. This suggests that banks may capture this potential segment relatively easily, partly by trying to convince them that using IB is reasonably easy and secure. Providing potential customers with a demonstration account may entice them towards the actual adoption of IB.

With regard to non-users, 14% may be classified as 'opponents', and this refers to those who may adopt IB in the future, but require more than a year to do so. When analysing opponents' responses, it emerged that they were unsure about the possible benefits of IB and seemed to believe that the service was more beneficial to banks rather than to customers. This emphasises the importance of having IB recommended by acquaintances, apart from advertising campaigns and cross-selling. Banks may thus consider offering incentives for IB users to introduce new clients.

Of the non-adopters 32% may be classified as rejecters, and this is the group which is most averse to IB. This is the most difficult group to persuade, and might possibly require one-to-one communication and educational campaigns (Durkin, 2007).

Comparing the responses from non-adopters with those reported by Gerrard *et al.* (2006) for the Singapore market, we note that security risks emerge as an important factor in both studies. Gerrard *et al.*, (2006) noted that lack of perceived need was another major factor; this does not seem to be the case with our sample since a comprehensive proportion of non-users intend to adopt IB services in the near future. This difference may possibly illustrate how IB is increasingly being considered as a worthy alternative to

traditional delivery channels, although one should keep in mind that the studies are not directly comparable in view of ancillary differences in the respective countries.

## Conclusion

Although Malta's retail banking sector is stable and well-developed, academic studies have so far devoted little attention to service quality. Similarly, the opinions of customers who have not yet adapted to IB were left on the verge of research. This study contributes towards filling these lacunae.

Our first survey tackled five dimensions of service quality. It transpired that around 84% of the sampled customers are overall satisfied with the service quality being offered. Whilst this is an encouraging yardstick, it also suggests that there is room for improvement, especially when considering that customers are likely to become more demanding over time. We also inquired as to which of the five service-quality dimensions are deemed most important from the customers' point of view. The differences in responses between satisfied and dissatisfied customers are significant in the reliability, responsiveness and access dimensions, suggesting that these are more likely to impact on users' perceived satisfaction. When respondents were asked to rank the five dimensions in order of importance, reliability emerged as the most important, followed by access, security, communication and responsiveness. Overall this suggests that clients lay particular emphasis on reliability and access. This would seem to contrast with the viewpoint of bank representatives who cited security as the most important dimension.

The second questionnaire focused on bank customers' perceptions towards IB, where a tendency for users to respond differently from non-users emerged. In particular non-adopters seem to be sceptic about the overall security of IB suggesting that banks should devote further efforts to convince such customers that online facilities are safe enough. A further concern of non-users is the perceived difficulties relating to using IB. The majority of respondents who raised such concerns tended to fall within the older age brackets and one might conjecture that these do not regularly use personal computers. However, one may expect this tendency to get less pronounced in the future, as people become more computer-literate. Non-users seem more satisfied with the traditional branch system as compared to IB users, and seem in doubt about the cost-effectiveness of IB. Cost factors also featured in the responses of IB users, some of whom mentioned that they would like to have the service offered for free. The importance of having IB facilities recommended by acquaintances also emerged, especially since users indicated that they were more influenced by personal contacts in their adoption decision, rather than by media.

We conclude by proposing some possible directions for future research. The connections between online service quality and overall service quality as well as their impacts on customer satisfaction are worthy of more detailed consideration (Rod *et al.*, 2009). In addition, a more elaborate segmentation of non-adopters of IB may also be worthy of

further investigation in order for banks to target this group more effectively (Patsiotis *et al.*, 2012).

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