



CHALLENGES OF INTERNET BANKING ADOPTION AND MARKETING AMONG BANKS' CLIENTS IN LATVIA

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Abstract

Research purpose is to identify challenges of internet banking adoption and marketing among banks' clients in Latvia. Authors as main problem identifies lack of knowledge regarding challenges influencing adoption of internet banking among banks clients in Latvia and challenges of marketing within internet bank. Relevance of research is supported by development of information and communication technologies that provides new opportunities for banking and marketing. There have been paid a lot of attention to different subject in the context of internet banking adoption and marketing. Since quality of internet banking system determines its success authors recognized this subject as area that needs additional investigation especially in Latvia. Authors also recognized marketing possibilities provided by internet banking environment. Since success of marketing management depends on available information then every possibility to acquire information in the efficient way (fast, low costs, etc.) should be considered as important. Since internet banking environment can be used for marketing research and particularly for customers' surveys then authors have decided to identify customers' willingness to fill survey questionnaire in the internet bank. Research results revealed that internet banking users are satisfied with the content, accuracy, format, ease of use and timeliness of internet bank then authors do not identify system's quality as challenge of internet banking adoption. Research results also revealed lack of willingness to fill survey questionnaire by customers within internet bank. It could be eliminated by informing respondents about importance of survey as well as stimulate them with possibility to win a prize. Violation of customers' privacy cannot be seen as factor that hinders customer to participate in a survey. Research methods used: literature review, survey methods, descriptive statistics, factor analysis.

KEYWORDS: Internet banking, marketing research, innovation, technology, Latvia.

Introduction

Spread of information and communication technologies has created environment for internet banking. Popularity of internet banking is rapidly growing. According Latvian Internet association 1 272 000 resident of Latvia use internet banking (LIA 2009). It could be explained with convenience that it provides for banks' customers. Banks' customers now can acquire bank's services almost anytime and anywhere. Growing popularity and number of internet banking users also provides new opportunities for banks. Banks can improve service quality as well as efficiency of marketing activities by using solutions provided by information and communications technologies. Internet banking provides excellent environment for conducting marketing activities – marketing communication, pricing, personalized service, marketing research, etc.

Researchers have paid a lot of attention to different aspect of internet banking adoption – factors that hinder adoption of internet banking and why (Vrechopoulos et al. 2009; Johns et al.2008; Hughes et al. 2007; Kardaras et al. 2001; Ricard et al. 2001). Since internet banking is used last two decades then there is time to broaden the focus of researches and to pay more attention to factors influencing customers' satisfaction with internet banking that can hinder full adoption of internet banking as well as possibilities provided by internet banking to conduct marketing activities.

User satisfaction is usually used as measure to evaluate information systems success. If information system does not provide user or customer with necessary information user will be dissatisfied and the system will be abandoned.

There have been already done researches regarding users' satisfaction with internet banking (Pikkarainen et al. 2006), but there is still lack of knowledge especially in Latvia.

As it was mentioned before there are also great opportunities for marketing within internet banking but there is still lack of knowledge regarding these opportunities. Research authors have recognized marketing research within internet banking as neglected area that requires additional investigation regarding a possibility to conduct customers' surveys within internet bank and customers willingness to participate.

Research purpose: This paper seeks to identify challenges of Internet banking adoption and marketing among banks' clients in Latvia.

Problem: Lack of knowledge regarding challenges influencing adoption of internet banking among banks clients in Latvia and challenges of marketing within internet bank.

Relevance of topic: The new opportunities provided by information and communication technologies and rapid spread of Internet among population gave banks' possibility to create new bank product – Internet bank that provides new environment for banking and marketing. Aldas-Manzano (2009) noticed that “despite the growing importance of online banking, there are still not enough studies that provide a holistic view of factors driving the extent of use of the internet as a distribution channel for financial services”.

The subject of investigation: Challenges of internet banking adaptation and marketing.

Research methods: Literature review, survey methods, descriptive statistics, factor analysis.

Research authors have conducted survey of internet banking users in order to identify challenges of internet banking adoption and marketing among bank customers in Latvia.

Theoretical background

In the last decade internet banking has received a lot of attention in scientific literature around the world. Researchers have paid attention to the adoption of internet banking and its different aspects (Chong et al. 2010; Zhao et al. 2010; Laukkanen et al. 2009; Lee 2009; Rod et al. 2009; Maenpaa et al. 2008; Cheng et al. 2006; Ibrahim et al. 2006; Lassar et al. 2005; Lai et al. 2004). According to Rogers (2003) adoption is a decision to make full use of an innovation as the best course of action available.

Many researchers have paid a lot of attention to service quality of internet banking (Ho et al. 2010; Herington et al. 2009; Bauer et al. 2005; Jun et al. 2001). There have been identified that customer satisfaction has significant relationship among online information system quality, banking service product quality, overall internet banking service quality and online customer service quality (Rod et al. 2009). Research done with a purpose to identify the impact of online service quality on the level of customer delight and on the development of customer relationships revealed that that "online service quality has no impact on customer delight, e-trust or the development of stronger relationships with customers" (Herington et al. 2007). There have been also done researches with purpose to measure the quality of service from customers' perspective (Sohail et al. 2008). Anyway there is suggested to have clear distinction between service quality and system quality (Pikkarainen et al. 2006) and it is obvious that there is lack regarding researches dedicated to internet banking system's quality.

Internet banking has been available to the bank customers for a while and it is adopted for some extents already. There should be paid more attention from researchers regarding issues related to the use of internet banking by adopters. Their satisfaction of internet banking is important subject of research. There is very important for any company if customer is satisfied with information system. If the use of information system is not voluntary and information system is not good for a customer there is very high probability that customer will not use it and will find other way to solve a problem. Good information system increase customer's satisfaction that has different outcomes as well as complete adoption of system. Outcomes of satisfaction with information system are loyalty and positive word-of-mouth (Casalo et al. 2008).

Customers' satisfaction with internet banking can be evaluated by End-User Computing Satisfaction model. End-User Computing Satisfaction model has following dimensions: content, accuracy, format, ease of use and timeliness (Doll et al. 1988). Information system should satisfy their users' needs. End-User Computing Satisfaction model is most appropriate to evaluate internet banking because it has been used in other studies that makes it already tested and verified (Pikkarainen et al. 2006).

There have been identified by applying end-user computing satisfaction model that there is possibility for a

bank to improve end-user computing satisfaction with internet banking by concentrating on 'content', 'ease of use' and 'accuracy' and also by "personalizing the service, allowing easier and more convenient use experience" (Pikkarainen et al. 2006).

Pikkarainen (et. al. 2006) identified that overall satisfaction with internet banking is high, but the same time users were less satisfied with the information and reports available from internet banking. There have been identified following: women are more satisfied with internet banking than men are; income level have impact on satisfaction (the higher the income the less satisfied users are); older users have more positive views about internet banking than younger ones (Pikkarainen et al. 2006). Website usability also has been recognized having positive effect on customers' satisfaction (Casalo et al. 2008).

It is obvious that if customer will be satisfied with information and reports provided by system, as well as accuracy of system, format, ease of use and timeliness, then customer will be satisfied with entire system. Customers' satisfaction with a system facilitates its adoption and provides opportunities for banks to conduct marketing activities.

There have been done also many researches regarding different marketing issues in the context of internet banking (Malhotra et al. 2010; Chau et al. 2010; Casalo et al. 2008; Sohail et al. 2008; Albasa 2007; Herington et al. 2007; Sayar et al. 2007).

Successful implementation of bank marketing strategy very often depends on information available to marketing experts. Marketing experts performing marketing management should rely on data and information provided by in-house researchers or outsourced companies. There are many factors that influence information availability. Usually the main factor is available budget for marketing research. If there is even available necessary budget marketing expert should count on time necessary for performing research, human factor, etc. Already mentioned difficulties motivate to consider new possibilities for marketing research by employing available resources. Usually it is application of technology.

Personal computers have gained wide spread among households in developed countries. Spread of technology provides possibility to connect and to use internet banking on daily basis for any bank customer who has access to computer with internet connection or mobile device with internet connection. Customers now have possibility for banking almost in anyplace and in anytime. Such possibility is available not only due to development and spread of information and communication technologies, but also due to intangible nature of bank's products. Internet banking also creates excellent environment for marketing due to intangible nature of marketing communications and pricing, i.e., marketing communications usually consist of text, pictures and video that are available in digital format.

Environment of internet banking can also be used for marketing research. There could be performed at least two kinds of marketing research – direct and indirect. Direct marketing research involves coming into contact with bank's customer by offering to fill survey questionnaire. Indirect marketing research supposes analysis of

customer's behavior within internet banking. Employing internet banking environment for customer's surveys is efficient way to acquire necessary information for marketing management. Even respondent can be identifies if there is such necessity. Internet banking environment provides possibility to reach the exact bank's customer or group of customers and acquire necessary information in very short time with very low expenses. Only disadvantage – there is possible to reach only existing bank's customers. Fully and in the right way applying possibilities provided by information and communication technologies puts marketing research in the whole another level.

Research already done by Rullis and Sloka (2010) indicates that just few banks in Latvia use internet banking to survey customers. Yet internet banking is neglect as environment for marketing authors of paper believe that there should be done research in order to identify banks' customers' willingness to participate in customers' survey within internet bank. Such research will identify available possibilities for marketing experts to conduct customers' survey by using internet banking environment.

This paper tries to measure customers' satisfaction with internet banking services as well as customers' willingness to participate in marketing research activities within internet bank like customers' surveys.

Research authors have done banks' customers' survey in Latvia in order to identify challenges of internet banking adoption and marketing among banks' clients in Latvia.

Research results

Research authors conducted internet bank users' survey in Latvia in 2010. Survey was sent to 1,145 private persons and there were received valid 799 responses. Following questions were asked:

Please evaluate content and accuracy of internet bank
Internet bank provides information I need (Information)

Information content provided by internet bank meets my needs (Content)

Reports provided by internet bank meets my needs (Reports)

Internet bank provides sufficient information (Sufficient information)

Internet bank is accurate (Accuracy)

I am satisfied with the accuracy of internet bank (Satisfaction with accuracy)

Please evaluate ease of use of internet bank and timeliness of provided information

The output is presented in a useful format (Useful format)

Information in internet bank is clear (Information is clear)

Internet bank is user friendly (User friendly)

Internet bank is easy to use (Easy to use)

Information I need in internet bank I get in time (Timeliness)

Internet bank provides up-to-date information (Up-to-date information)

First 12 questions are adopted from End-User Computing Satisfaction model (Doll et al. 1988).

Please evaluate possibility to participate at the bank customers' survey within internet bank

I would fill in a survey questionnaire in the internet bank (To fill in a questionnaire)

I would always find time to fill in a survey questionnaire if I would be sure about importance of survey (Importance of survey)

I would always find time to fill in a survey questionnaire if there would be possibility to win a prize (Win a prize)

Since bank takes care of my data safety surveys within internet bank don't violate my privacy (Violation of privacy)

Respondents were asked to evaluate mentioned above factors in the scale 1 – 10 where 1 is no importance and 10 is very important.

Survey results on opinions of the content and accuracy of internet bank are presented in the Table 1.

Table 1. Content and accuracy of internet bank

		Information	Content	Reports	Sufficient information	Accuracy	Satisfaction with accuracy
N	Valid	799	797	798	799	797	795
	Missing	0	2	1	0	2	4
Mean		8,02	8,01	8,32	8,15	8,70	8,64
Std. Error of Mean		,058	,058	,058	,059	,053	,055
Median		8,00	8,00	9,00	8,00	9,00	9,00
Mode		8	8	10	8	10	10
Std. Deviation		1,627	1,632	1,628	1,655	1,483	1,555
Variance		2,646	2,664	2,652	2,739	2,200	2,418
Skewness		-,928	-,944	-1,226	-1,206	-1,664	-1,842
Std. Error of Skewness		,086	,087	,087	,086	,087	,087
Kurtosis		1,072	1,052	1,796	1,798	3,586	4,574
Std. Error of Kurtosis		,173	,173	,173	,173	,173	,173
Range		9	9	9	9	9	9
Minimum		1	1	1	1	1	1
Maximum		10	10	10	10	10	10

Survey results in the Table 1 indicate following:

Value of the mode (Mode 8) in the column 'Information' indicates that most of respondents agree that internet bank provides information they need. The same time mean (Mean 8,02) and median (Median 8,00) also indicate that internet bank provides information they need. Standard deviation (Std. Deviation 1,627) is high and it indicates that there is high spread of the responses and respondents vary in their answers.

Value of the mode (Mode 8) in the column 'Content' indicates that most of respondents agree that information content provided by internet bank meets their needs. The same time mean (Mean 8,01) and median (Median 8,00) also indicate that information content provided by internet bank meets their needs. Standard deviation (Std. Deviation 1,632) is high and it indicates that there is high spread of the responses and respondents vary in their answers.

Value of the mode (Mode 10) in the column 'Reports' indicates that most of respondents agree that reports provided by internet bank meets their needs. The same time mean (Mean 8,32) and median (Median 9,00) also indicate that reports provided by internet bank meets their needs. Standard deviation (Std. Deviation 1,628) is high and it indicates that there is high spread of the responses and respondents vary in their answers.

Value of the mode (Mode 8) in the column 'Sufficient information' indicates that most of respondents agree that

internet bank provides sufficient information. The same time mean (Mean 8,15) and median (Median 8,00) also indicate that internet bank provides sufficient information. Standard deviation (Std. Deviation 1,655) is high and it indicates that there is high spread of the responses and respondents vary in their answers.

Value of the mode (Mode 10) in the column 'Accuracy' indicates that most of respondents agree that internet bank is accurate. The same time mean (Mean 8,70) and median (Median 9,00) also indicate that internet bank is accurate. Standard deviation (Std. Deviation 1,483) is high and it indicates that there is high spread of the responses and respondents vary in their answers.

Value of the mode (Mode 10) in the column 'Satisfaction with accuracy' indicates that most of respondents agree that they are satisfied with the accuracy of internet bank. The same time mean (Mean 8,64) and median (Median 9,00) also indicate that respondents are satisfied with the accuracy of internet bank. Standard deviation (Std. Deviation 1,555) is high and it indicates that there is high spread of the responses and respondents vary in their answers.

Survey results on opinions about the format, ease of use of internet bank and timeliness of provided information are presented in the Table 2.

Table 2. Format, ease of use of internet bank and timeliness of provided information

		Useful format	Information is clear	User friendly	Easy to use	Timeliness	Up-to-date information
N	Valid	797	796	794	797	795	794
	Missing	2	3	5	2	4	5
Mean		8,18	8,30	8,43	8,61	8,36	8,23
Std. Error of Mean		,055	,053	,052	,052	,059	,061
Median		8,00	8,00	9,00	9,00	9,00	9,00
Mode		8	8	10	10	10	9
Std. Deviation		1,543	1,493	1,463	1,462	1,674	1,722
Variance		2,382	2,230	2,142	2,136	2,802	2,964
Skewness		-1,085	-1,156	-1,206	-1,521	-1,532	-1,349
Std. Error of Skewness		,087	,087	,087	,087	,087	,087
Kurtosis		1,588	2,029	2,262	3,601	3,026	2,239
Std. Error of Kurtosis		,173	,173	,173	,173	,173	,173
Range		9	9	9	9	9	9
Minimum		1	1	1	1	1	1
Maximum		10	10	10	10	10	10

Survey results in the Table 2 indicate following:

Value of the mode (Mode 8) in the column 'Useful format' indicates that most of respondents agree that the output within internet bank is presented in a useful format. The same time mean (Mean 8,18) and median (Median 8,00) also indicate that the output is presented in a useful format. Standard deviation (Std. Deviation 1,543) is high and it indicates that there is high spread of the responses and respondents vary in their answers.

Value of the mode (Mode 8) in the column 'Information is clear' indicates that information in internet bank is clear. The same time mean (Mean 8,30) and median (Median 8,00) also indicate that information in internet bank is clear. Standard deviation (Std. Deviation 1,493) is high and it indicates that there is high spread of the responses and respondents vary in their answers.

Value of the mode (Mode 10) in the column 'User friendly' indicates that most of respondents agree that internet bank is user friendly. The same time mean (Mean 8,43) and median (Median 9,00) also indicate that internet bank is recognized as user friendly. Standard deviation (Std. Deviation 1,463) is high and it indicates that there is high spread of the responses and respondents vary in their answers.

Value of the mode (Mode 10) in the column 'Easy to use' indicates that most of respondents agree that internet bank is easy to use. The same time mean (Mean 8,61) and median (Median 9,00) also indicate that respondents recognize Internet bank as easy to use. Standard deviation (Std. Deviation 1,462) is high and it indicates that there is high spread of the responses and respondents vary in their answers.

Value of the mode (Mode 10) in the column 'Timeliness' indicates that most of respondents agree that they are satisfied with the accuracy of internet bank. The same time mean (Mean 8,36) and median (Median 9,00) also indicate that respondents are satisfied with the accuracy of internet bank. Standard deviation (Std. Deviation 1,674) is high and it indicates that there is high spread of the responses and respondents vary in their answers.

Value of the mode (Mode 9) in the column 'Up-to-date information' indicates that most of respondents agree that

internet bank provides up-to-date information. The same time mean (Mean 8,23) and median (Median 9,00) also indicates that respondents agree that internet bank provides up-to-date information. Standard deviation (Std. Deviation 1,722) is high and it indicates that there is high spread of the responses and respondents vary in their answers.

Survey results on opinions of the possibility to participate at the bank customers' survey within internet bank are presented in the Table 3.

Table 3. Survey results of possibility to participate at the bank customers' survey within internet bank

		To fill in a questionnaire	Importance of survey	Win a prize	Violation of privacy
N	Valid	794	794	792	794
	Missing	5	5	7	5
Mean		6,20	6,41	7,02	7,28
Std. Error of Mean		,111	,104	,104	,093
Median		7,00	7,00	8,00	8,00
Mode		10	10	10	10
Std. Deviation		3,126	2,922	2,922	2,628
Variance		9,772	8,540	8,539	6,904
Skewness		-,390	-,459	-,773	-,888
Std. Error of Skewness		,087	,087	,087	,087
Kurtosis		-1,133	-,909	-,562	-,106
Std. Error of Kurtosis		,173	,173	,174	,173
Range		9	9	9	9
Minimum		1	1	1	1
Maximum		10	10	10	10

Survey results in the Table 3 indicate following:

Value of the mode (Mode 10) in the column 'To fill in a questionnaire' indicates that most of respondents agree that they would fill in a survey questionnaire in the internet bank. The same time mean (Mean 6,20) and median (Median 7,00) indicates that there are many respondent that would not fill in a survey questionnaire in the internet bank. Standard deviation (Std. Deviation 3,126) also indicates that there is high spread of the responses and respondents vary in their answers.

Value of the mode (Mode 10) in the column 'Importance of survey' indicates that most of respondents agree that they would always find time to fill in a survey questionnaire if they would be sure about importance of survey. The same time mean (Mean 6,41) and median (Median 7,00) indicates that respondents would not always find time to fill in a survey questionnaire if even they would be sure about importance of survey. Standard deviation (Std. Deviation 2,922) also indicates that there is high spread of the responses and respondents vary in their answers.

Value of the mode (Mode 10) in the column 'Win a prize' indicates that most of respondents agree that they would always find time to fill in a survey questionnaire if there would be possibility to win a prize. The same time mean (Mean 7,02) and median (Median 8,00) indicates that respondents would not always find time to fill in a survey questionnaire if there would be possibility to win a prize. Standard deviation (Std. Deviation 2,922) is high and it indicates that there is high spread of the responses and respondents vary in their answers.

Value of the mode (Mode 10) in the column 'Violation of privacy' indicates that most of respondents believe that bank takes care of customers' data safety and surveys within internet bank don't violate their privacy. Mean (Mean 7,28) and median (Median 8,00) also indicates that respondents agree that bank cares about their data safety and respondents' privacy is not violated. The same time standard deviation (Std. Deviation 2,628) is high and it indicates that there is high spread of the responses and respondents vary in their answers. It means that all respondents are not so sure about privacy issues in the context of internet banking.

Table 4. Rotated Component Matrix^a

	Component	
	1	2
Internet bank provides information I need	,807	,091
Information content provided by internet bank meets my needs	,838	,036
Reports provided by internet bank meets my needs	,783	,031
Internet bank provides sufficient information	,844	,044
Internet bank is accurate	,795	,126
I am satisfied with the accuracy of internet bank	,798	,126
The output is presented in a useful format	,814	,093
Information in internet bank is clear	,842	,127
Internet bank is user friendly	,827	,156
Internet bank is easy to use	,793	,159
Information I need in internet bank I get in time	,719	,209
Internet bank provides up-to-date information	,726	,209
I would fill in a survey questionnaire in the internet bank	,077	,844
I would always find time to fill in a survey questionnaire if I would be sure about importance of survey	,111	,884
I would always find time to fill in a survey questionnaire if there would be possibility to win a prize	,048	,807
Since bank takes care of my data safety surveys within internet bank don't violate my privacy	,223	,703

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

Research authors identifies following complex factors (components): 1. component – internet bank user computing satisfaction; 2. component – marketing research possibility.

Challenges of internet banking adoption and marketing

Research authors have identified following challenges of internet banking adoption and marketing:

Since research results indicates that internet banking users in general are satisfied with the content, accuracy, format, ease of use and timeliness of internet bank then authors do not identify system's quality as challenge of internet banking adoption. Anyway banks always can strive for perfection and improve internet banking system.

Lack of willingness to fill survey questionnaire by customers within internet bank is identified as internet banking marketing challenge. It could be eliminated by informing respondents about importance of survey as well as stimulate them with possibility to win a prize. Violation of customers' privacy cannot be seen as factor that hinders customer to participate in a survey.

Conclusions

Authors of paper have conducted this research with purpose to identify challenges of internet banking adoption and marketing. There have been paid a lot of attention to different subject in the context of internet banking adoption and marketing. Since quality of internet banking system determines its success authors recognized this subject as area that needs additional investigation especially in Latvia. Authors also recognized marketing possibilities provided by internet banking environment. Since success of marketing management depends on available information then every possibility to acquire information in the efficient way (fast, low costs, etc.) should be considered as important. Since internet banking environment can be used for marketing research and particularly customers' surveys then authors have decided

to identify customers' willingness to fill survey questionnaire in the internet bank.

Research results revealed that internet banking users are satisfied with the content, accuracy, format, ease of use and timeliness of internet bank then authors do not identify system's quality as challenge of internet banking adoption. Anyway banks always can work towards better internet banking system.

Research results also revealed lack of willingness to fill survey questionnaire by customers within internet bank is identified as internet banking marketing challenge. It could be eliminated by informing respondents about importance of survey as well as stimulate them with possibility to win a prize. Violation of customers' privacy cannot be seen as factor that hinders customer to participate in a survey.

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