

Factors Influencing Customers' Bank Selection Decision in Azerbaijan

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Abstract

Background: This research investigates the determinants of bank selection criteria and their linkage to the common satisfaction level of the banks in Azerbaijan.

Aim: The study is motivated to investigate the current situation, find critical points and main related factors, inform bank executives and appropriate staff about real tendencies during the crisis and pandemic period.

Methods: It is based on 2 surveys of 162 and 352 respondents respectively of different private and state-owned commercial banks. 13 main different factors for bank selection and 16 factors for credit cards usage were selected for better and proper analysis.

Results: The findings of the study reveal that speed and quality of service, proven and strong shareholders, innovativeness and variety of services (credit cards), ATM network and accessibility, respect and friendliness staff, brand name at the market, and low interest rate on loans are the most important influencing factors for customers during the bank selection decision, while the other factors received the less rating, however, this does not mean that they are not important at all. The research found some similarities with the other research in different countries. The study could be used by banks and as the starting point for the next similar studies in the country. The findings of the second survey reveal that Risk and Security group has significant impact to the usage of credit cards while the other parameters don't have such evidence.

Keywords

Azerbaijan, banks, selection, usage, importance, customer's decision, credit cards

JEL Codes

G10, G21, E40

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1 Introduction

There are a lot of theses, research and works of the foreign authors regarding to the main influencing factors which are described in the literature review section and were used during this research paper. The set of determinant factors in one region and country could somehow or totally be different or insignificant than in another region or country (Almossawi, 2001).

This research analyses the key factors and parameters of customers' behavior, their impact to the customer's attitude to the banks' selection, understands and describes some barriers, forecasts and trends of the development, and shows the direction of this activity in context of common development in Azerbaijan. As credit card is one of the key products provided by banks to the clients, after the selection factors the research also covers the behavior and preferences of credit cardholders in the market in different directions.

As banking and economic environment is changing very fast and the clients are becoming more demanding, it has become important for financial and non-financial organizations, including banks and non-bank companies, to determine the factors which influence the client's selection (Boyd et al. 1994). This research determines the basis of the factors and circumstances in Azerbaijan under which customers depending on age group, gender, type of account and etc. make their decision regarding to their financial matters.

1.1 Research Questions

Research paper is composed in such manner where the major and minor research questions are dedicated and could be analyzed in accordance with the importance of the research and levels of structured hierarchy (Zikmund et al. 2013). Major and minor research questions were determined appropriately.

1.2 Major Research Question

In accordance with the problem statement and objectives this research paper attempts to answer to the following major research question:

Which key customers' preferences, including demographic and socio-economic factors influence banks' selection process in Azerbaijan?

1.3 Minor Research Questions

By answering the major research question the following minor research questions were determined:

- a) As revealed from the literature review, do any of demographic factors have significant impact to the bank selection and credit cards usage in local environment?
- b) Do any of the parameters of customers' preferences have significant negative impact to the importance and credit cards usage of credit cardholders?
- c) Do the socio-economic factors which revealed from the literature review have significant influence on the credit cards usage?

2 Literature review

Unfortunately, there are no any global and fundamental research of the customers' preferences during the bank selection process in Azerbaijan. Thus, the foreign literature, investigations, research and analyses of the country economies that are similar or close to Azerbaijan Republic were studied in this research paper.

Many foreign authors, economists and research dedicated their works to analyzing the preferences and customer behavior during the bank selection process and card transactions.

Rehman and Ahmed (2008) provided the analysis of customers' major determinants of a bank selection in the city of Lahore (Pakistan). The research paper was based on survey of 358 customers of private, privatized and nationalized banks which was conducted during the period. The authors found that the main determinants for the customers in bank selection process are customer services, convenience, online banking facilities and overall bank environment. The similar survey was done by Chen (1999) which involved the analysis 336 domestic-owned and 39 foreign owned banks in Taiwan in 1997 to identify the key factors and parameters adopting the different business strategies in the banking sector. Four main factors were found by using of the factor analyzing technique: managing the operations, marketing, bank trademarks, and financial management.

Ahmed continued his work with the colleagues (Ahmed et al. 2009) and found that there is a positive relationship between income level of consumer and his attitude towards credit card usage. Moreover, the study reveals that convenience and security matters are critically important especially for female credit card users.

Zineldin (1996) analyzed the bank selection process in Sweden and found that the main influencing factors are recommendations, reputation, advertisements, and locations of the bank's branches, opening hours and technology. The most important factors of the customers' bank selection process: friendliness and helpfulness of personnel, accuracy in transaction management, availability of loans, and provision of services. Katircioglu et al. (2011) investigated the bank selection criteria among the undergraduate students in North Cyprus and found that there was not a big difference between selection preferences of local and international students in State University. The most important factors were availability and accessibility of ATMs, and speed and quality of services at places.

Md. Nur-E-Alam Siddique (2012), conducted a big survey of 600 customers of private and nationalized banks in Bangladesh for analyzing of factors influencing the bank selection process in Rajshahi City. The key influencing factors were the customer service; speed and quality of service; image of the bank; online banking; and well management. In case of nationalized banks, the key selection factors were the low interest rate on loan; branch location; safe investment; wide list of services; and the low fees for e-service. Tehulu and Wondmagegn (2014) used the multinomial regression approach and found the different key significant factors like friendly and pleasing manner of staff; ATM service; bank speed; service quality; external view and internal sitting arrangements; long operating hours; and etc., while number of counter windows; safety of funds; good reception at the bank; and low service charge evaluated as insignificant factors.

Marketing strategy and the correct selection of the distribution channel by any particular bank in the country could affect the consumer's selection of the payment mechanism. This was observed in another survey which was undertaken by Thornton and White (2001). If the banks mainly focus on service-oriented customers, they should pay the attention more to the extending of branches and sections and increase face to face transactions. If the banks focus on technological customers they should use electronic distribution channels more often. This could stimulate or, otherwise, reduce (depending on undesirable info) the consumer's willing to choose the modern tools of payments without human participation.

Msweli and Naude (2015) and Chigamba (2011) investigated the key bank selection criteria and the best recommendations to the customers and commercial banks in South Africa as well as Kumar and Singh (2006) found that the four components of bank competitiveness on the example of the nationalized banks are: quality efficiency and governance, economic efficiency, social responsibility, and performance stability.

Zuroni and Lim (2010) via the survey analysis showed the direct relationship between the demographic parameters like age, gender, financial knowledge and card transactions in Malaysia. The education level is the most significant factor among respondents. Based on that the education level (secondary school and university degree) and some other demographic parameters (age, gender, marital status) were included to the Survey 1 of this thesis.

Suhana et al. (2016) analyzed the factors which are influencing the credit cards users in Malaysia, specific factors that create the level of impact to consumers' behavior and stimulate them to use credit cards more widely. The study used convenience sampling and therefore the appropriate survey was conducted among 120 credit cardholders in KLM private hospital staff. Authors made breakdown of influencing factors in five groups: a) easy access to credit; b) aggressive promotion by credit card provider; c) low minimum payment requirement; d) attitude towards credit usage; e) credit card related knowledge. Within this specific analysis it was found that only credit card related knowledge is significant and at the same time has positive influence on the usage of the credit cards and covering the credit cards debts.

Age, income level, education level, occupation, even gender and marital status as well as the other demographic factors which are also used in this research paper have a vital role in making choice of credit cards usage. The mentioned different studies revealed that there is a positive correlation between demographic factors and credit cards usage. More than 40 years ago Jean Kinsey (1981) concluded that the probability of credit cards usage is highly correlated to the age and place of work. However, the study reveals that the attitude to credit cards has the strong relationship with place of residence and saving accounts.

Ming-Yen Theo Wendy et al. (2013) selected variables like demographic factors, banks' policies, and attitudes of the credit cardholders by conducting of structured survey between 150 respondents based on the area sampling. The authors found that age, income and marital status have significant correlation with credit cardholders spending behavior. The bonuses and benefits provided by banks also have positive effect to the attitude, while the occupation, management of profit and loss (income and expenses)

are not such significant to the credit cardholders' behavior. Ismail (2014) found that perception, family influence, and knowledge are the key factors with the tangible impact to the credit cards usage.

China is one of the biggest credit cards conglomerate in Asia and the researchers have always been interested in understanding of credit cards consumers' needs and preferences, which factors influence the customer behavior in different situations (Wang, 2016). Credit cards are widely spread all around the world, but in China they face with some problems, such as per capita spending is low, people do not use the cards, thus there are a lot of cards without any activity.

Rustu and Suleyman (2011) revealed that gender, education level, age, marital status, employment and payment the debts on time have positive and significant effect to the decision-making process. Mallika Sriyalatha (2016) found that the main factors which influence the attitude towards credit card usage are: availability of information, perceived usefulness, characteristics of card issuers and general satisfaction. Taking into consideration this fact obtaining of necessary information about card usage and bank services, including banking commissions, credit lines and additional bonuses were included to the survey #2 of this thesis investigated within the local circumstances.

3 Conceptual framework

Taking into account the literature review and the research questions this research was structured to analyze the following:

- a) main factors and preferences of the customers influence the banks' selection in Azerbaijan;
- b) behavior and preferences of banks' customers and their impact to the usage of credit cards as the key tool of the bank products.

For better representation of the results appropriate two surveys were conducted during this research:

Survey #1: In accordance with the conducted survey with 162 respondents (bank customers) the investigation of significant factors of bank selection process and correlation to the common satisfaction level among demographic and socio-economic parameters.

The level of government digitization is measured through the E-Government Development Index (EGDI). The e-Government Development Index (EGDI) looks at the level of e-Government in the countries of the United Nations. It is an indicator that consists

Table 1: Definition of the variables (Survey 1)

#	Definition
<i>Dependent variable (y)</i>	
var1	Satisfaction level
<i>Independent variables (x) – demographic and other parameters</i>	
var2	Gender (male/female)
var3	Age groups
var4	Type of account (current)
var5	Type of account (deposit)
var6	Type of account (credit)
var7	Type of account (card)
var8	Type of account (other)
var9	Official monthly income
var10	Current employment (governmental work)
var11	Current employment (company)
var12	Current employment (own or family business)
var13	Current employment (I don't work)
var14	Affiliation with the current bank
<i>Independent variables (x) – factors influencing the bank selection</i>	
var15	Closeness to the office/home
var16	Higher interest rate on savings (deposits)
var17	Proven and strong shareholders
var18	Mass media and street advertisement (TV, radio, billboard and etc.)
var19	Low interest rate on loans
var20	Brand name at the market
var21	Innovativeness, variety of services, plastic cards, e-services
var22	Connection with bank via friends/relatives
var23	Receiving salary from the employer via the bank
var24	Respect and friendliness of the staff in the bank
var25	Speed and quality of service
var26	Parking opportunity
var27	ATM network and accessibility

Source: own research

Survey #2: In accordance with the conducted survey with 352 respondents (credit cardholders) the significant factors were found among demographic and socio-economic parameters which influence the customer behavior and usage of credit cards.

Table 2: Definition of the variables (Survey 2)

#	Definition
<i>Dependent variable (y)</i>	
var1	Credit card as effective and important payment tool
<i>Demographic parameters</i>	
var2	Gender (male/female)
var3	Age groups
var4	Marital status
var5	Official monthly income
var6	Education (Secondary school)
var7	Education (University and upper)
<i>Independent variables (x) – factors influencing the credit card non-cash payment</i>	
var8	Credit card allows to pay even if I don't have enough money
var9	Card allows me to make shopping online via the internet
var10	It is much safer to have credit card than the cash in my pocket
var11	While using the credit card my income (salary) does not cover my expenses
var12	I have the problem with my credit card when I need urgent cash
var13	I use/don't use the credit card, because all around use/don't use credit cards as well
var14	The usage of credit card increases desire about new living standards
var15	Credit card is the modern payment tool which is in trend all around the world
var16	Knowledge about new card products and services in my bank
var17	The price for credit card support (bank's commission fee, including loan %)
var18	Information availability about card usage
var19	I can make the purchase which I cannot postpone
var20	Bonuses to the credit card
var21	The trust to the bank
var22	I think about how I will pay for my shopping
var23	Usage of 3D Secure service via online shopping

Source: own research

Variables of research analysis were collected accordingly, and appropriate regression models were used. Taking into account the findings indicated in Literature review all the variables were organized in the following manner:

- a) All independent variables were divided to two parts: Socio-economic and Demographic.
- b) There is 1 dependent variable in survey #1 which linked to the satisfaction (usage) level from the bank services and products.
- c) Socio-economic variables in survey #2 were divided to four groups: Convenience, Finance, Information, Risk and Security.
- d) Four variables in survey #2 were included to each of the socio-demographic group, so the total number of socio-economic variables is equal to 16.
- e) Demographic variables in survey #2 include 6 components.
- f) There is 1 dependent variable in survey #2 which linked to the effectiveness (usage) of the payment tool among credit cardholders.

The factors for survey #2 based on literature review and objectives of this research looks like the following:

- Demographic factors: Gender; Age; Marital Status; Official income; Education (Secondary); Education (University).
- Socio-economic factors (Convenience): Shopping online; Do not postpone the purchase; Increasing of living standarts; Attractive world trend.
- Socio-economic factors (Finance): Payment by using credit line; Bank's commissions; Bonuses to credit cards; Income doesn't cover expenses.
- Socio-economic factors (Information): Knowledge about the cards; Info about card usage; Choice of the payment; Card usage by familiar people.
- Socio-economic factors (Risk and Secutiry): Problems when need urgent cash; Card is safer than cash; Trust to the bank; Usage of 3D Secure (online).

The research was structured and composed in accordance with the deductive and quantitative methods to find the mathematical dependence of factors between each other according to the best practice methodology (Clough and Nutbrown, 2012).

3.1 Hypothesis of survey #1

Hypothesis 1: There is no any significant impact of the factors to the customers' bank selection process and common satisfaction level.

3.2 Hypotheses of survey #2

Hypothesis 2: Parameters and factors related to risk and security do not have significant impact to the customer behavior of credit cardholders.

Hypothesis 3: Parameters and factors related to finance do not have significant impact to the customer behavior of credit cardholders.

Hypothesis 4: Parameters and factors related to convenience do not have significant impact to the customer behavior of credit cardholders.

Hypothesis 5: Ranking importance of the credit card usage factors and parameters is different according to the demographic factors and parameters of cardholders.

Hypothesis 6: Cardholder's availability of information does not have significant impact to the customer behavior of credit cardholders.

4 Data and methodology

Survey #1 (questionnaire) was created and distributed among the current customers of different major commercial banks in Azerbaijan. Survey #2 also was done in the form of questionnaire among credit cardholders randomly selected during research. People conducted the survey in front of the biggest and most popular shopping centers in Baku City. In both surveys the randomly selected customers answered the questions in specially designed questionnaire based on the findings indicated in Literature review. All questions in all survey papers were totally answered, because they were indicated as mandatory fields, so there were 100% of the answered questionnaires. Any unanswered question automatically cancelled the questionnaire and this customer was not counted at the sample base. The technique of non-probability was used while the customers were not selected by any criteria.

For the measuring of key factors the Likert Scale and arithmetic mean (Joshi et al. 2015) type were used (1 = Not important and 10 = Very important). The "STATA" software was used for finding the correlation and impact of the factors between each other (Ordered Logit Test).

All surveys were conducted anonymously without keeping of the names, addresses, telephone numbers or other private information in accordance with the ethical obligations.

The Survey consists of data received from respondents in accordance with the Likert Scale from "1" to "5". There are multi-categorized independent variables "x" and one dependent variable "y" which should be taken into consideration. Ordered Logit Regression model is usually estimating the probability of dependent variable to be equal to 1 ($y=1$). This is the probability that any of the event happens (Stock and Watson, 2007).

The significance of the parameters during the Ordered Logit Regression analysis is calculated by analysis of 'p-value' from the regression table. P-value or probability value is used for statistical hypothesis testing and shows the probability for a given statistical model under the null Hypothesis (H) of obtaining result which is extremely more or equal to just what was actually observed (Clough and Cathy, 2012). The p-value definition can be shown in the following equation:

$$\Pr(\text{Reject } H|H) = \Pr(p \leq \alpha|H) = \alpha \quad (1)$$

Where α is a level of error (Type 1 error). The error α was taken as equal to 5%. Thus if p-value is lower than 5% or 0.05 then the null hypothesis is rejected. Ordered Logit Regression test helps (Zkmund et al. 2013) to:

- Analyze the correlation between the parameters.
- Determine and interpret the coefficients.
- Find positive or negative relationship.
- Find the significance of parameters' impact to the dependent variable.

4.1 Ethical issues

By this research paper the author totally understands the ethical responsibility which researcher should take on his side and show during the representation of the survey details. Ethical responsibility during of any activity not depending on if this activity is the working place or just the conversation between the colleagues. In the daily life you might feel the greatest level of ethical obligations to your family members, friends, relatives or just to your neighbors, but other parts of the real life, including business, corporate entities, customers and service companies with whom you have business activity also need ethical responsibilities (Sims, 2003).

Ethical issues are also very important in all types of research methods. Ethical issues are critical while determining the standards and norms between right and wrong. Ethical issues help to understand the difference between acceptable and wrong behavior of researcher. Why it is so important? One of the main purposes to follow ethical obligations during research is that the readers, respondents and all other participants of the research should clearly understand and believe that the researcher followed all ethical obligations, human rights, compliance with law, health standards and even safety (Kelly et al. 2003).

There is the number of literature dedicated to the importance of ethical obligations and these are some key elements which should be taken into consideration (Sims, 2003):

- Respect the persons and personality;
- Minimize the risk and maximize the benefit for respondents;
- Keep the justice on a high level;
- Avoid unethical behavior during the interview or surveys;
- Be clear and honest in front of potential respondents and give necessary information about the project;
- Accept cultural differences of respondents and show respect to all of them.

The author declares that he and his assistants who participated in surveys showed the respect and ethical behavior towards all respondents, participants and all other people who participated in this conducting of this research paper. All respondents were asked about their consents to answer the questions and participate in long time experiments.

Ethical standard should also protect anonymity of respondents which is one of the primary tasks in ethical obligation issues (Kelly et al. 2003). All surveys in this research were done on anonymous basis without collecting of any names, addresses, telephone numbers or other related private information. Only me and my supervisor had access to the data base with the answers.

The author confirms that during experiments and conducted survey there were not any inconvenience from the respondents' side and all agreements were accepted from all sides. The respondents were not asked about the survey in case of negative answer in advance.

All people who took part in research and assisted the author in conducting of surveys were trained and informed accordingly about ethical issues before the survey started.

5 Findings

In survey #1 the respondents (162 people) answered the questions in the questionnaire about the key factors affecting the bank selection and demographic parameters. Out of the sample size of 162 respondents, 120 (74.1%) are males and 42 (25.9%) are females. The age of 5 (3.1%) respondents is below 25 years, 80 respondents (49.4%) are from 26 till 35 years, 71 respondents (43.8%) are from 36 till 50 years and 6 (3.7%) respondents are more than 50 years old. The ages of the major part of respondents (96.9%) are more than 26 years old, their opinions could be considered as the significant index for determining of the common picture of the influencing factors and satisfaction level.

91 (56.2%) respondents have current account, 54 (33.3%) respondents have deposit account, 57 (35.2%) respondents have credit account, 131 (80.1%) respondents have card account and 9 (5.6%) respondents have also other account in commercial bank. On the average level each respondent has 2.1 accounts. 30 (18.5%) respondents receive monthly salary from AZN 0 to 1000, 47 (29.0%) respondents receive from AZN 1001 to 2000, 65 (40.1%) respondents receive from AZN 2001 to 5000 and 20 (12.3%) respondents receive more than AZN 5000.

A major part of respondents (114, 70.4%) work in private companies and only 3.1% (5 people) are unemployed. 97 (59.9%) respondents are the stable customers of their banks, they have not changed the bank during last 5 years (and more) and this figure is also could be related to the common satisfaction level.

Table 3: Demographic breakdown of respondents (Survey #1)

Parameter	Frequency	%
<i>Gender</i>		
Male	120	74,1%
Female	42	25,9%
Total	162	100,0%
<i>Age</i>		
Up to 25	5	3,1%
26-35	80	49,4%
36-50	71	43,8%
more than 50	6	3,7%
Total	162	100,0%
<i>Accounts</i>		
1 account	62	38,3%
2 accounts	40	24,7%
3 accounts	42	25,9%
4 accounts	16	9,9%
5 accounts	2	1,2%
Total	162	100,0%
<i>Salary</i>		
0-1000 AZN	30	18,5%
1001-2000 AZN	47	29,0%
2001-5000 AZN	65	40,1%
more than 5000 AZN	20	12,3%
Total	162	100,0%
<i>Employment</i>		
Governmental work	22	13,6%
Company	114	70,4%
Own (family) business	17	10,5%
I don't work	4	2,5%
2 jobs	5	3,1%
Total	162	100,0%
<i>Affiliation to the bank</i>		
1 year	11	6,8%
2 years	20	12,3%
3 years	19	11,7%
4 years	15	9,3%
5 years and more	97	59,9%
Total	162	100,0%

Source: own research

The mean score of the common satisfaction level among all 162 respondents is 7.3951 (Table 2), which shows the significant high figure despite the deep crisis in Azerbaijan after the year 2014 according to Moody's Annual Report (https://www.moody.com/research/Moodys-maintains-negative-outlook-on-Azerbaijans-banking-system-amid-low-PR_349939). It also shows that despite the fact that a lot of people lost their money during devaluation process of the national currency starting in 2014 the trust and confidence in local banks from the customers side are still on a quite high level which could be recognized as a good sign for the future. Moreover, 16% of respondents evaluated the satisfaction at the highest level 10.

Table 4: Satisfaction level (Survey #1)

#	Parameter	Score
1	Number of respondents	162
2	Common satisfaction level (mean score)	7.3951
3	The highest grade	10 (16.0%)
4	The lowest grade	1 (1.2%)
5	The most frequent grade	8 (26.5%)

Source: own research

Table 5: Importance of the bank selection factors (Survey #1)

#	Factors for bank selection	Mean score
1	Speed and quality of service	8.5802
2	Proven and strong shareholders	8.3889
3	Innovativeness, variety of services, plastic cards, e-services	7.9753
4	ATM network and accessibility	7.3086
5	Respect and friendliness of the staff in the bank	6.7963
6	Brand name at the market	6.7346
7	Low interest rate on loans	6.4198
8	Connection with bank via friends/relatives	5.5617
9	Higher interest rate on savings (deposits)	5.2469
10	Receiving salary from the employer via the bank	5.2284
11	Closeness to the office/home	5.2222
12	Parking opportunity	5.0247
13	Mass media and street advertisement	3.7778

Source: own research

Figure 1: Importance of the bank selection factors (Survey #1)



Source: United Nation (2023)

There are the findings (Table 3) which are matching the key findings of different foreign authors in the similar studies mentioned in the literature review. The key factors which influence the bank selection process of the customers are:

- Speed and quality of service;
- Proven and strong shareholders;
- Innovativeness, variety of services, plastic cards (credit cards), e-services.

From the opposite side, the less important factor for the clients are:

- Closeness to the office/home;
- Parking opportunity;
- Mass media and street advertisements.

Innovativeness, different products and services provided by the bank, including credit cards as one of the main tools for manipulation – these are the reasons which were explained and confirmed by different research in different foreign countries.

For checking the error probability from the ‘null’ hypothesis (‘p-value’) and find the significance of each factor and demographic parameter the Ordered Logit Test (‘ologit’) of all variables was executed via ‘Stata’ software and the significant variables with p-value less than 0.05 were found appropriately (Table 4).

Table 6: Significant variables of Survey #1

Variable	Parameter	P-value
Var8	Type of account (other)	0.002
Var15	Closeness to the office/home	0.001
Var17	Proven and strong shareholders	0.005

Source: own research

Table 7: Ordered Logit Test (Survey #1)

Iteration 0: log pseudolikelihood = -311.65004
 Iteration 1: log pseudolikelihood = -282.05162
 Iteration 2: log pseudolikelihood = -279.06894
 Iteration 3: log pseudolikelihood = -279.05262
 Iteration 4: log pseudolikelihood = -279.05262

Ordered logistic regression Number of obs = 162
 Wald chi2(26) = 63.81
 Prob > chi2 = 0.0001
 Log pseudolikelihood = -279.05262 Pseudo R2 = 0.1046

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 Prob > chi2 = 0.0001
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var1	Coef.	Robust Std. Err.	z	P> z	[95% Conf. Interval]	
var2	-.4540815	.3932289	-1.15	0.248	-1.224796	.3166329
var3	.1984531	.2541188	0.78	0.435	-.2996105	.6965167
var4	.1239805	.3941491	0.31	0.753	-.6485375	.8964986
var5	-.037569	.3663077	-0.10	0.918	-.7555189	.6803808
var6	-.105114	.3661058	-0.29	0.774	-.8226682	.6124403
var7	-.3784474	.4599356	-0.82	0.411	-1.279905	.5230098
var8	1.951229	.6385533	3.06	0.002	.6996874	3.20277
var9	-.3215798	.1959736	-1.64	0.101	-.705681	.0625213
var10	.044737	.961922	0.05	0.963	-1.840596	1.930069
var11	-.5089433	.8903687	-0.57	0.568	-2.254034	1.236147
var12	-1.118548	.5847189	-1.91	0.056	-2.264576	.0274802
var13	-1.284994	.9642203	-1.33	0.183	-3.174831	.6048431
var14	.1067463	.123972	0.86	0.389	-.1362343	.3497269
var15	.2080739	.0646715	3.22	0.001	.0813201	.3348277
var16	-.0433671	.0793953	-0.55	0.585	-.1989792	.1122449
var17	.2392676	.0845689	2.83	0.005	.0735156	.4050196
var18	.0387942	.0847607	0.46	0.647	-.1273336	.2049221
var19	.1479122	.0779749	1.90	0.058	-.0049158	.3007402
var20	.101315	.0664476	1.52	0.127	-.0289199	.2315499
var21	.1618528	.0914488	1.77	0.077	-.0173835	.3410892
var22	-.0120817	.0786356	-0.15	0.878	-.1662047	.1420412
var23	.0397658	.0722726	0.55	0.582	-.1018859	.1814174
var24	-.0779789	.0733974	-1.06	0.288	-.2218351	.0658773
var25	.043231	.1409169	0.31	0.759	-.232961	.3194231
var26	-.1193786	.0761413	-1.57	0.117	-.2686128	.0298555
var27	-.1317856	.0904108	-1.46	0.145	-.3089875	.0454163
/cut1	-2.028573	1.682102			-5.325432	1.268286
/cut2	-1.494022	1.679172			-4.785139	1.797095
/cut3	-.380333	1.762297			-3.834371	3.073705
/cut4	.2780761	1.790652			-3.231537	3.787689
/cut5	1.12615	1.758655			-2.32075	4.57305
/cut6	2.077173	1.730797			-1.315127	5.469474
/cut7	3.353485	1.728987			-.0352677	6.742238
/cut8	4.813011	1.766573			1.350592	8.275431
/cut9	5.553093	1.794326			2.036279	9.069907

Source: own research

Despite the fact that the closeness to the bank from office/home is not so important for the clients from the mean score analysis, this variable has significant impact from the calculations ($p=0.001$). At the same time the factor from top 3 of customer's bank selection, proven and strong shareholders' is also significant ($p=0.005$). The low correlation coefficients (statistical index of two random variables) of the correlation test between all parameters and factors used during research showed that the parameters and factors have low dependence on each other and could be used for the analysis.

The 352 respondents participated in survey #2. Out of the sample size of 352 respondents, 209 (59.4%) are males and 143 (40.6%) are females. 97 (27.6%) respondents are under 24 years old; while 127 (36.1%) respondents by completing the majority are between 25 and 35 years old; 74 (21.0%) respondents are between 36 and 50 years old; and 54 (15.3%) respondents are elder than 50 years. Majority of cardholders randomly included to the survey are elder than 25 years (72.4%), their opinions could be considered as the significant index for the determining of the common picture of the influencing key factors and satisfaction level.

116 (33.0%) respondents are single, while the rest 236 (67.0%) are married. 132 (37.5%) people receive salary (income) below AZN 1,000; 135 (38.4%) respondents get the monthly income between AZN 1,001 and 3,000; 55 (15.6%) get the salary more than AZN 3,001, but less than AZN 5,000; and finally 30 (8.5%) respondents get the salary more than AZN 5,001 per month. Only 41 (11.6%) persons out of 352 do not have any current job while the others (88.4%) have the full-time job, including the majority of 209 (59.4%) people who work in private companies. 39 (11.1%) cardholders have the secondary school education, while 303 (86.1%) respondents have bachelor of master's degrees. Only 10 (2.8%) persons have doctorate (PhD) degree.

First of all, respondents were asked to describe the importance of usage of their credit cards and their intention to the proceeding of the non-cash transactions. The mean score of the common satisfaction level which describes the importance and effectiveness of the credit card as the payment tool in online and retail merchants is 4.09 (maximum score is 5.00, Table 6), which is pretty high, taking into account the development process of payment industry in Azerbaijan and quite low index of the ratio between Purchasing Volume and Total Volume with plastic cards in the country (CBAR report, 2021, <https://cbar.az/page-40/statistical-bulletin>). The interesting fact that the mean score of the main parameter indicated by males (4.28) is sensitively higher than the mean score mentioned by females (3.82).

Table 8: Mean score of the main parameter (Survey #2)

#	Parameter	Score
1	Number of respondents	352
2	Importance level of usage the credit card as non-cash payment tool (mean score)	4,09
3	The highest grade	5 (40.3%)
4	The lowest grade	1 (1.4%)
5	The most frequent grade	5 (40.3%)

Source: own research

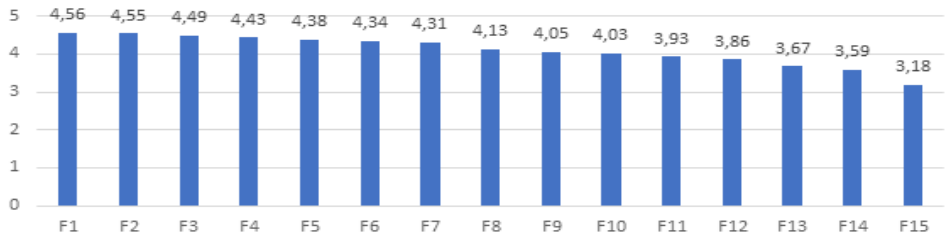
By comparing of all 16 factors and parameters which directly related to the common satisfaction level of the credit card as a non-cash payment tool, the initial ranking of the mean scores was determined as the following (Table 7).

Table 9: Factors influencing credit card usage (total by mean scores)

#	Factors influencing credit card usage	Mean score
1	Bonuses to my credit card	4.56
2	The trust to the bank	4.55
3	The price for credit card support (bank's commission fee, including loan %)	4.49
4	My credit card allows me to pay even if I don't have enough money	4.43
5	I can make the purchase which I cannot postpone	4.38
6	Usage of 3D Secure service via online shopping	4.34
7	I think about how I will pay for my shopping	4.31
8	The card allows me to make shopping online via the internet	4.13
9	While using the credit card my income (salary) does not cover my expenses	4.05
10	I have the problem with my credit card when I need urgent cash	4.03
11	It is much more safe to have credit card than the cash in my pocket	3.93
12	I need knowledge about new card products and services in my bank	3.86
13	The usage of credit card increases desire about new living standards	3.67
14	Credit card is the modern payment tool which is in trend all around the world	3.59
15	I use (do not use) the credit card, because people around me use (do not use) credit cards as well	3.18
16	Information availability about card usage	2.98

Source: own research

Figure 2: Factors influencing credit card usage (total by mean scores)



Source: own processing

The overwhelming majority of cardholders evaluated the parameter “bonuses to my credit card” with the highest score 4.56 (Table 7). Cardholders are looking for the bonus and loyalty programs provided by the banks. They are able to change the bank easily if the competitor will offer better terms and conditions.

“The trust to the bank” ranked at second place with the score 4.55 which is also easy to explain. In 2015 Azerbaijan faced with the biggest crisis period since the signing of the “Contract of the Century” (State Oil Fund, 2016). Two sensitive stages of the devaluation of the national currency AZN led to such consequences that the national currency has fallen in price to more than 115% and the banking system faced with the liquidity and funding problems. More than 16 banks out of 46 were closed and people’s trust to the banking system itself decreased. Thus “the trust to the bank” remains one of the important parameters for bank and credit card selection. “The price for credit card support” including internal commission fee and percentage for lending is at third place with the mean score 4.49. The next most important factors are “opportunity to pay by credit card even in case of unavailability of cash” (4.43) and “making the purchases which cannot be postponed” (4.38).

According to findings, credit cardholders do not pay attention to such factors as “brand name of the card”; “purchasing the international currency and securities”; “usage of credit card by purchasing via mobile phone”; “information availability” and etc. It does not mean that these factors are unimportant, but within this particular research they will not be taken in consideration.

In case of separate considering of males’ behavior and their reactions to the different circumstances the picture is quite different, while the weight and the ranking of the factors were changed significantly. It is clearly observed that instead of bonuses systems, credit limits males much more care about the price of bank services, commission fee, risk actions and matters. It could be the reason because of males are mainly the basis of the family earnings in Azerbaijan and they care about expenses and their optimization.

The preferences of females and the key factors related to non-cash payments are different. By comparing the mean scores it is clear that the females’ scores had huge impact to the total final ranking. The first six out of seven key factors of their payment behavior for females are related to speed, comfort, bonuses, earnings and smooth passing of the non-cash transactions. Convenience of credit cardholders as one of the key parameters influencing the cards usage was mentioned by many researchers (Rehman and Ahmed, 2008; Hoang, 2013; Nguyen and Quan, 2013). Females follow the trends, fashion and convenience during the shopping and credit cards are considered to be just as the convenient payment tool for their daily needs and consumption. It does not mean that the other factors are unimportant

and females do not care about risks, trust or the bank fees. They are also important, but positioned differently in the chain of factors.

If the company, bank or service organization by this kind of research is able to analyze and understand the key factors which related to the common satisfaction level, it could create and design the product or service which will be maximally suited to the requirements of the customers at the certain market (Ahmed et al. 2009).

There are several parameters which have significant impact to the credit card usage importance (Table 10). The appropriate calculation and p-value test determine the followings: Gender with the p-value 0.012, Age (0.000) and Education (0.022) from demographic parameters have significantly impact to the credit card usage and non-cash payments transactions. The Gender parameter has positive impact with coefficient (0.77) while Age (-0.70) and Education (-0.58) have negative impact. These findings are coincided with the similar research that also partially shown in Literature review. For example, Zuroni and Lim (2010) and Devlin et al. (2007) found that probability of usage of credit cards in non-cash payments is highly correlated with the demographic parameters like age, education or income level.

Table 10: Ordered Logit Test (Survey #2)

var1	Coef.	Robust Std. Err.	z	P> z	[95% Conf. Interval]	
var2	-.4540815	.3932289	-1.15	0.248	-1.224796	.3166329
var3	.1984531	.2541188	0.78	0.435	-.2996105	.6965167
var4	.1239805	.3941491	0.31	0.753	-.6485375	.8964986
var5	-.037569	.3663077	-0.10	0.918	-.7555189	.6803808
var6	-.105114	.3661058	-0.29	0.774	-.8226682	.6124403
var7	-.3784474	.4599356	-0.82	0.411	-1.279905	.5230098
var8	1.951229	.6385533	3.06	0.002	.6996874	3.20277
var9	-.3215798	.1959736	-1.64	0.101	-.705681	.0625213
var10	.044737	.961922	0.05	0.963	-1.840596	1.930069
var11	-.5089433	.8903687	-0.57	0.568	-2.254034	1.236147
var12	-1.118548	.5847189	-1.91	0.056	-2.264576	.0274802
var13	-1.284994	.9642203	-1.33	0.183	-3.174831	.6048431
var14	.1067463	.123972	0.86	0.389	-.1362343	.3497269
var15	.2080739	.0646715	3.22	0.001	.0813201	.3348277
var16	-.0433671	.0793953	-0.55	0.585	-.1989792	.1122449
var17	.2392676	.0845689	2.83	0.005	.0735156	.4050196
var18	.0387942	.0847607	0.46	0.647	-.1273336	.2049221
var19	.1479122	.0779749	1.90	0.058	-.0049158	.3007402
var20	.101315	.0664476	1.52	0.127	-.0289199	.2315499
var21	.1618528	.0914488	1.77	0.077	-.0173835	.3410892
var22	-.0120817	.0786356	-0.15	0.878	-.1662047	.1420412
var23	.0397658	.0722726	0.55	0.582	-.1018859	.1814174
var24	-.0779789	.0733974	-1.06	0.288	-.2218351	.0658773
var25	.043231	.1409169	0.31	0.759	-.232961	.3194231
var26	-.1193786	.0761413	-1.57	0.117	-.2686128	.0298555
var27	-.1317856	.0904108	-1.46	0.145	-.3089875	.0454163
/cut1	-2.028573	1.682102			-5.325432	1.268286
/cut2	-1.494022	1.679172			-4.785139	1.797095
/cut3	-.380333	1.762297			-3.834371	3.073705
/cut4	.2780761	1.790652			-3.231537	3.787689
/cut5	1.12615	1.758655			-2.32075	4.57305
/cut6	2.077173	1.730797			-1.315127	5.469474
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/cut8	4.813011	1.766573			1.350592	8.275431
/cut9	5.553093	1.794326			2.036279	9.069907

Source: own research

According to findings the following socio-economic parameters are significant and should be taken into consideration:

Table 11: Significant socio-economic variables of Survey #2

Variable	Parameter	Group	P-value
Var23	Usage of 3D Secure (online)	Risk and Security	0.014

Source: own research

Only one parameter (Table 8) from Risk & Security group has the significant impact to the cardholders' behavior within the study. This doesn't confirm some findings of such previous researchers as Devlin et al. (2007), who found the impact of financial parameters to the cardholder's behavior and significant dependence on debt issues, however, confirms some other research like Ahmed et al. (2009) who found that the risk parameters are important, especially during the on-line payments. Moreover, 'payment by using of credit line' (coefficient 0.18), 'card is more safe than cash' (0.16), 'the trust to the bank' (0.25) and the 'usage of 3D Secure' (1.27) parameters have positive impact, while 'income does not cover expenses' (-0.16) parameter has negative impact with the appropriate coefficients.

6 Conclusion

No bank can exist without its customers. Peppers and Rogers (2005) summed up the importance of customers: "The only value your company will ever create is the value that comes from customers – the ones you have now and the ones you will have in the future".

The purpose of the survey #1 study was the analysis of the factors which influence and more important during the bank selection process in Azerbaijan. The findings of study reveal that speed and quality of service; proven and strong shareholders; innovativeness and variety of services (including credit cards); ATM network and accessibility; respect and friendliness of the staff; brand name at the market; and low interest rate on loans are the most important factors for the bank selection decision of the customers.

The significant relationship between some dependent and independent variables was found. The key target group which was attracted to the survey is linked to the people with the medium or high salary, stable work and age group more than 25 years. Some significant differences were observed in mean scores of several demographic variables like high income, males/females and the different employers.

The hypotheses of the research could be summarized the following:

Table 12: Analysis of hypotheses of the study

#	Hypothesis	Final result
Hypothesis 1 (survey 1)	There is no any significant impact of the factors to the customers' bank selection process and common satisfaction level.	Rejected
Hypothesis 2 (survey 2)	Parameters and factors related to risk and security do not have significant impact to the customer behavior of credit cardholders.	Rejected (at least 1 of 4 Risk and Security group parameters have significant impact to the customer behavior)
Hypothesis 3 (survey 2)	Parameters and factors related to finance do not have significant impact to the customer behavior of credit cardholders.	Confirmed (there were not enough evidence to reject the hypothesis)
Hypothesis 4 (survey 2)	Parameters and factors related to convenience do not have significant impact to the customer behavior of credit cardholders.	Confirmed (there were not enough evidence to reject the hypothesis)
Hypothesis 5 (survey 2)	Ranking importance of the credit card usage factors and parameters is different according to the demographic factors and parameters of cardholders.	Confirmed
Hypothesis 6 (survey 2)	Cardholder's availability of information does not have significant impact to the customer behavior of credit cardholders.	Confirmed (there were not enough evidences to reject the hypothesis)

Source: own research

It is revealing that the common satisfaction level of the customers is quite high despite of the deep crisis in banking industry which has been observed in the country starting from 2014. It is recommended that the banks should take proper measures in designing of their strategies based on understanding the analysis and main conclusions of the research.

The purpose of survey #2 was the analysis of the cardholders' behavior, importance of non-cash payment transactions with credit cards and the critical factors which influence the attitude to credit cards usage for private and state-owned commercial banks in Azerbaijan. The findings of study revealed that security and risk, financial knowledge are the most significant group of factors for attitude of credit card usage. The study

also revealed that demographic factors significantly influence to the credit cardholders' behavior.

It is revealing that the attitude to non-cash payments among credit cardholders is quite high despite the crisis in banking industry which has been observed in the country starting from 2014. It is recommended for the banks to take proper measures in designing of their strategies of credit cards based on the analysis.

However, the set of determinant factors of the bank selection criteria in one region and country can be different or insignificant than in another region or country (Almossawi, 2001).

As for the major question of this research, according to findings the „speed and quality of service“, „proven and strong shareholders“, and „Innovativeness, variety of services, plastic cards, e-services“ are among the key customers' preferences influencing bank selection process in Azerbaijan.

As for the minor questions of this research, „gender“, „age“, and „education“ from demographic parameters have significantly impact to the credit card usage and non-cash payments transactions. In addition, according to findings „gender“ has positive impact with coefficient (0.77) while „age“ (-0.70) and „education“ (-0.58) have negative impact. Being the part of socio-economic factors, „usage of 3D secure“ has the significant influence on the credit cards usage.

The study can play significant role in determining the key factors in Azerbaijan and can be the starting point for the further analyzes and marketing decisions for the local banks.

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