Abstract

The financial system plays an extraordinary role in developing and enriching the domestic economy. E-banking service as an innovative software product and service for customers was introduced few years ago in the country from variety of national and international banks: ProCredit Bank, Raiffeissen Bank, Teb Bank, NLB Bank etc., enabling consumers to have access to their bank accounts over the internet. Since internet usage grows rapidly in the country even adoption of e-banking is expected to flourish. Behavior of customers toward adoption is explained using different behavioral model. The objective of this study is to analyze the consumer-adoption process toward e-banking. The survey is used in this respect, to find out the way they learn, try, and adopt or reject e-banking service. Furthermore, the hypothesis those females are significantly different from males on adoption of e-banking services, it prevails the null hypothesis that gender doesn’t affect adoption of e-banking services. The study reveals the characteristics of the consumers toward e-banking adoption process, such as differences in individual readiness to try new product; the information searching; advertisement and direct marketing influence; and speed rates of adoption and non adoption among genders.
Key Words: Adoption, Advertisement, Direct Marketing, E-Banking, Services, Innovation,

1. Introduction

E-banking has been present in Kosovo market in recent years at the following banks that are operating within the country: BpB, NLB, TEB, Pro Credit, and Raiffeisen. E-banking provides enormous benefits to consumers in terms of the ease and cost of transaction (Liu, 2008). E-banking describes banking transactions that are performed via a secured internet application and enables customers without having a need to be physically at bank premises to access their bank information, conduct financial transactions, make all the possible payments worldwide through automated telephone systems or internet banking.

Daniel (1999) defines e-banking as the delivery of bank’s information and services by banks to customers via different delivery platforms that can be used with different terminal devices such as a personal computer and a mobile phone with browser or desktop software, telephone or digital television. “A technology cluster consists of one or more distinguishable elements of technology that are perceived as being closely interrelated” (Rogers, 2003, p.12). Internet penetration in our market is comparable with that of countries with medium level of incomes. More recently, it has been transformed by the internet – a new delivery channel that is fast, convenient, available round the clock, and from whatever the customer’s location (Saleh and Andrea, 2002). With combination of two most recent technological advancement-internet and mobile phone, a new service (mobile data service) is thus enabled and the first such wireless internet commercial transaction is performed by the banking industry (Barnes and Corbitt, 2003)

Following Rogers (2003), the innovation decision process consists of five steps: knowledge, persuasion, decision, implementation and confirmation, whereas “an innovation is something original, new, and important- in whatever field – that breaks in to (or obtains a foothold in) a market or society” (Frankelius, 2009). ”An innovation is an idea, practice, or project that is perceived as new by an individual or other unit of adoption” (Rogers, 2003, p.12). According to Durkin (2007) the business climate and culture is going toward a climate of increasing online completion, banks that have chosen to retain extensive branch networks are re-aligning the
roles of staff in these branches and move towards a relationship driven sales cultures.

Behavioral models such as the theory of planned behavior that links beliefs and behaviors (Ajzen, 1991), theory of diffusion that seeks to explain how, why, and at what rate new ideas and technology spread through cultures (Rogers, 1983) and technology acceptance model that shows how users come to accept and use e technology (Davis, 1989), are used to explain the customers’ adoption process. Following the theory of reasoned action (Fishbein and Ajzen, 1975), if people evaluate the suggested behavior as positive (attitude), and if they think their significant others want them to perform the behavior (subjective norm), this results in a higher intention (motivations) and they are more likely to do so (Sheppard, Hartwick and Warshaw, 1988).

The customer adoption is a key to success in e-banking and banks will have to use different media to customize products and services to fit customer’s specific needs in the future.

2. Research Methodology

The original data for this empirical research are collected through a questionnaire survey of 63 respondents. The questionnaire aim was to capture respondent’s learning experience, behavior and actions undertaken regarding liking or disliking the application of new e-banking services and their preferences and adoption. Questions addressed the means that affected the customer’s knowledge on new services such as advertisements, direct marketing, friends, and opinion leaders and their preferences, as well as the applicable speed and trial ability including factors that influenced whether to adopt or to reject innovative services. The questionnaire focused on some related demographic features that describe the sample size, age, occupation and place of living.

The data obtained from the questionnaires are analyzed by examining the distribution of responses based on frequencies and many other options provided within Statistical Package for Social Sciences (SPSS).

Inputs related to the data that are used by banks and services such as e-billing, e-salary, e-payments and e-Id applicable by respondents are not covered.
3. Data Analysis

The sample size consists of 63 respondents. The respondents were asked to indicate their gender, age, occupation and place of living.

Females comprise 59% of the total and male 41%. In general, the respondents are mainly lawyers and economists comprising 72% of the entire sample. More specifically the percentages for all occupations indicate that 40% of them are lawyers, 32% are economists, 3.3% are politicians, 3.3% are educators, 3.3% are students, 3.3 are IT engineers, 3.3% are translators, 3.3 are administrative officers, 1.7% is psychologist, 1.7% is internal auditor, 1.7% is banker, 1.7% is teacher, and 1.7% is statistician. The study reveals that 41% of respondents belong to age category from 30 to 39, 22% belong to age category from 50 to 59, 19% belong to age category from 40 to 49, and 18% of respondents fall under the age category from 20 to 29.

Within Figure 1 is given the population pyramid showing distribution over occupation split by age and paneled by rows of gender. It is significantly visible that the bars in green and blue identifying economists and lawyers classified by genders are the key occupations to deal with in this study.
**Figure 1:** Distribution over occupation split by age paneled by rows of gender

![Distribution over occupation split by age paneled by rows of gender](image)

**Source:** Authors’ own calculation.

The respondents with different occupations come mainly from Prishtina with 92%, from Lipjan 3.2%, from Decan 3.2% and one case from Istog 1.6%.

Figure 2 shows the population pyramid showing distribution over occupation split by age and paneled by rows of places and it is significantly visible that the bars in green and blue identifying economists and lawyers classified by gender are the key subject to deal with in this study.
Figure 2: Distribution over occupation split by gender paneled by rows of place

Source: Authors’ own calculations.

Economists, lawyers, politicians, psychologists, educators, students, internal auditors, IT engineers, translators and administrative officers in the city of Prishtina comprise 92% of the total. The occupation of banker, teacher and statistician are not found in Prishtina. From the 55 cases in Prishtina 60% of them are female and 40% are male. No female working as IT engineer or politician is found in this category. The female respondents are working as lawyers by 40% of cases, or as economists in 33% of cases. On contrary to this, no male working as administrative officer, educator, psychologist and internal auditor is found to work in Prishtina, based on the survey. The male are serving as lawyers in 41% of cases, and as economists in 36% of cases.

The survey aimed at discovering the sources that spread out the knowledge on existence of a new e-banking service. For the purpose of this study, the variable of age is compressed into four labels: 20 to 29, 30 to 39, 40 to 49 and 50 59. From total number of respondents 17% had direct phones or email from their banks; 19% of respondents knew about
existence of e-banking through friends; 56% of respondents knew about the service through advertisement; and the rest composing 8% of respondents declared that they are unaware for the existence of such service in this country (see Table 1).

Table 1: Knowledge on existence of e-banking services versus age

<table>
<thead>
<tr>
<th>Knowledge on existence of e-banking services</th>
<th>Direct phoning or emailing from bank</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Count</td>
<td>0 5 4 2 11</td>
<td></td>
</tr>
<tr>
<td>% within knowledge on e-banking services</td>
<td>0% 46.5% 36.4% 18.2% 100.0%</td>
<td></td>
</tr>
<tr>
<td>% within age</td>
<td>0.0% 19.2% 33.3% 14.3% 17.5%</td>
<td></td>
</tr>
<tr>
<td>% of Total</td>
<td>0% 7.9% 6.3% 3.2% 17.5%</td>
<td></td>
</tr>
</tbody>
</table>

| Friends                                     | Count 6 3 3 3 12                      |       |
| % within knowledge on e-banking services    | 0.0% 90.0% 25.0% 25.0% 100.0%         |       |
| % within age                                | 0.0% 23.1% 25.0% 21.4% 15.9%          |       |
| % of Total                                  | 0% 9.5% 4.8% 4.8% 15.9%               |       |

| Advertisement                               | Count 8 13 5 9 35                      |       |
| % within knowledge on e-banking services    | 22.9% 37.1% 14.3% 25.7% 100.0%         |       |
| % within age                                | 72.7% 56.0% 41.7% 94.3% 55.5%          |       |
| % of Total                                  | 12.7% 20.8% 7.9% 14.3% 55.5%           |       |

| Unaware                                     | Count 3 2 0 0 5                        |       |
| % within knowledge on e-banking services    | 60.0% 40.0% 0.0% 0.0% 100.0%           |       |
| % within age                                | 27.3% 7.7% 0.0% 0.0% 7.9%             |       |
| % of Total                                  | 6.8% 3.2% 0.0% 0.0% 7.9%              |       |

| Total                                       | Count 11 26 12 14 63                     |       |
| % within knowledge on e-banking services    | 17.5% 41.3% 19.0% 22.2% 100.0%          |       |
| % within age                                | 100.0% 100.0% 100.0% 100.0% 100.0%      |       |
| % of Total                                  | 17.5% 41.3% 19.0% 22.2% 100.0%          |       |

**Source:** Authors' own calculations.

The age label from 20 to 29 indicates that none of the respondents falling within this particular label have been phoned or emailed directly from the bank in order to get informed related to the bank's new services. The age label from 30 to 39 is the highest one to be contacted via direct marketing counting for 46%. The next age label from 40 to 49 follows with 36%, and the last age label from 50 to 59 counts for not more than 18%.

Advertisement as a part of communication with target audience was effective for 56% of the total respondents and under this category 23% belong to the age label of 20 to 29, 37% age label 30 to 39, 14% age label 40 to 49 and 26% age label 50 to 59.
Friends seem not to play any role in letting other friends know about the new e-banking services for the age label 20 to 29. On contrary to this, friends play quite an important role in sharing the information on new services for the age label from 30 to 39 with 50%. Equality of 25% is shared among age label 40 to 49 and 50 to 59.

Unaware of the e-banking services to our surprise appears the relatively young population aged from 20 to 29 (60%), and 30 to 39 (40%) within 8% of the total number of respondents.

Economists make up 32% of the total percentage of sample size and among this group 26% is contacted directly from the bank via phone or via mail, 58% are informed through advertisement, 5% through friends and 11% is completely unaware of the service. Lawyers make up 40% of the total percentage of the sample and there aren’t found any lawyers that are unaware for existence of the e-banking services. Advertisement is becoming a strong source of information for 58%, friends with 29% and direct phone or email from bank received only a small percentage of 13%.

Direct marketing as a communication mean worked out for 19% of females that were contacted directly from the bank via phone or emails versus 15% of males. Friends were a good source of information for 14% of females and 27% of males taking into account the possibility of having an influence on a group innovation decision; advertising as a source was for 62% of females and 46% of males; 5% of females and 12% of males declared that they are unaware of the new service.

The second question of interest for e-banking services was categorized into four categories (see figure 3):
Figure 3: Interest for e-banking service among genders

Source: Authors’ own calculations

People who looked for information right after they knew about its existence 29%; People who were partially informed for the new services from friends 27%; People who are informed but are satisfied with their traditional services 20% and the people who don’t express any interest for e-banking 24%. The gender of the people that will seek further information just after they knew about the new services is 39% female and 62% male. The category of people that still requires full information on what is really the new e-banking service and that are partially informed from friends is 53% female and 47% male. Traditional services seem to satisfy 69% females and 31% of males, and no interest for the service is expressed by 80% of females and 20% of males.

Figure 4 provides the occupations of the respondents and their actions and preferences as per the above mentioned categories. Respondents bearing variety of occupations such as economists, lawyers, psychologists, auditors, teachers, administrative officers and even a student don’t show any interest for e-banking services. Traditional way of banking is satisfactory for economists, lawyers, translators and administrative officers. Economist, lawyers, IT engineers and bankers are the quickest group to react. Some economists, lawyers, politicians, educators, translators and statistician do not have the exact knowledge on e-banking and declare that they possess just partial information given from friends.
The third question dealt with respondent’s psychological approach toward analyzing the benefits or costs of the new product by considering the time savings, security terms, risks during transactions, and those that simply are avoided doing any thinking. Figure 5 illustrates that 40% of the respondents declared that their further undertaking after being aware for the existence of the e-banking service was to take into account the time saving (52% females and 48% males). Only 3% of the respondents were concerned related to the security terms. On the other hand, 22% of the respondents were concerned about the risks during transactions (71% females and 29% males), and 35% of respondents were neutral to the new information received (59% females and 41% males).

**Figure 5:** Undertakings for e-banking service among genders

![Figure 5: Undertakings for e-banking service among genders](image)

**Source:** Authors’ own calculations.

Figure 6 illustrates that economists and lawyers are somewhat equal to having taken into account time saving, risks during the transaction and quite a large number of economists declared as neutral to further undertakings in this regards. Variance of occupations is seen between two categories those that counted for time saving and those that haven’t done any evaluation. Lawyers appear to be more concerned related to security terms compared to all other professions.

**Figure 6:** Undertakings for e-banking service among occupation

![Figure 6: Undertakings for e-banking service among occupation](image)
Influence of Marketing on Consumer's Adoption of E-Banking

Trial of e-banking services was the fourth question of the questionnair and it was intended to figure out how quickly people are stimulated to react (see figure 7). The group category that has given a chance to try e-banking immediately counted for 35% (37% females and 64% males); group category that delayed the trial for few months counts for 12% (63% females and 37% males); group category that is comfortable with existing traditional services counts for 37% (74% females and 26% males); category group that is strictly loyal to traditional banking and doesn’t even think of trying the new e-banking services make up 16% of the total (70% females and 30% males).

**Figure 7:** Trial of e-banking service among genders

**Figure 8:** Trial of e-banking service among occupations

Source: Authors’ own calculations.

The questionnair revealed quite a contradictory position (see figure 8) between lawyers and economists by having 54% of lawyers trying immediately the new e-banking service compared to 63% of economists that feel good with existing services and none of them tried the service after few months, with a very low occurrence of 21% in an immediate trial.

Adoption is a key factor for successful life cycle of the new services and within the questionnair it is the fifth question that indicates the speed toward adoption of e-banking services. The four categories are divided into respondents that have adopted very quickly, quickly, slowly and not at all.
Figure 9 presents the difference between females and males and adoption speed indicating that 46% of respondents do not adopt at all (70% females and 30% males); 3% are still struggling to adopt, 19% of them adopted quickly (64% females and 36% males) and 32% adopted very quickly (32% females and 68% males).

On contrary to the gender comparison, struggling for adoption and an easy adoption is very much contradictory among the major occupations provided within the sample. As an easy process without much trouble, the e-banking services was a serious difficulty to adapt for 75% of economists that declared that they are not adapted at all with the new e-banking service and seven more occupations of respondents have the same adaption difficulty originating or due to lack of interest for learning or due to inadequate skills to use the service in contrast to lawyers that are adapted very quickly and didn’t face obstacles on adoption of this service.

**Figure 9:** Adoption of e-banking service among genders

![Graph showing adoption rates among genders.](image1)

**Figure 10:** First application of e-banking service among occupations

![Bar chart showing first application times among occupations.](image2)

**Source:** Authors’ own calculations.

In order to know how attractive was the new e-banking service, the sixth question addressed the issue of applying for the first time during the periodical frame from one week, few months, after a year, and never applied for it. From the total number of respondents 29% have applied for e-banking services within the first week of those that knew about the services (39% females and 61% males); 16% of respondents applied for e-
banking after three to six months of knowing about the service (50% females and 50% males); only a very small percentage of respondents have applied for it after a year (1%); and 54% of respondents didn’t apply yet for the services (67% females and 33% males).

Figure 10 is clearly indicating that 79% of economists refused to apply for it for the first time and none of them has made any effort toward application even after a year has passed and they were aware of the service. Lawyers seem to give more weight to the application for a first time (54%) and 17% after three to six months.

**Figure 11:** Factors influencing application of e-banking - genders

Source: Authors’ own calculations.

Self motivations is a stimuli for using e-banking service for 25% of males and only 9% of females whereas good judgment from opinion leaders is relevant for 46% of male and 18% of females, advertisement and friends do not play much role in this regard for males 4% and for females 15% (see figure 11). The varieties of factors not given within the questionnair are dominant factors affecting the choice of males with 25% and females with 59%.

The adequate factors to influence application for e-banking are to be investigated and researched carefully since 44% of the total number of
respondents are not motivated, do not appreciate the judgment of opinion leaders and are not influenced by advertisement and friends and in this category 75% of them are economists. The profile of lawyer in this sample is more equally distributed among categories with 36% of them who appreciate and consider the judgment of opinion leaders, 23% who are motivated to experience changes and it is the only group that is influenced by advertisement or good word of mouth from friends with 23%.

Delaying application for e-banking may have many uncovered factors, since 44% of all respondents are declaring that they have applied for it immediately without further delay (24% females and 48% males); preferring the old traditional services is an attitude of 11% of respondents (22% females and 28 males); resisting changes and not preferring to learn new application is the respond of 29% (38% females and 12% males); and not trusting the recommendations given by opinion leaders (16 % females and 12% males).

Not trusting the good recommendation of opinion leaders is the dilemma of economists, lawyers and psychologists (12% of total number of respondents). Economists are strongly resisting the changes with 53% compared to 17% of lawyers (see figure 12). Traditional services are a preference of variety groups of administrative officers, economists, educators, lawyers, translators, teachers and students. Lawyers are the first ones to apply immediately for the services with 54% compared to economists with 32%.

Purposely to gain the key results from this survey the testing of difference between three or more group means using the procedure of One-Way ANOVA is being applied. Since the first research question is concerned with having significant difference among gender to adoption of e-banking services, an execution of this type of analyses will make possible to determine which group means between genders on categories of very quickly, quickly, slowly, and not at all are significantly different from those within. The null hypothesis $H_0$ is that gender doesn’t affect adoption to e-banking services and the alternative hypothesis $H_a$ is that females are significantly different from males on adoption of e-banking services. Thus, it is given as follows:

$H_0$: $\mu = \mu_0$ whereas $\mu$ is the true mean of the population under analysis

$H_a$: $\mu \neq \mu_0$ whereas $\mu_0$ is the true hypothesized mean of the population under analyses in our case:

$H_0$: Gender doesn’t affect adoption of e-banking services.
Hₐ: Females are significantly different from males on adoption of e-banking services.

From the data of the survey it is selected as the independent variable within analyses the adoption of population to e-banking services pertaining the groups of very quickly, quickly, slowly, and not at all as the factor one, whereas the dependent variable is gender pertaining females and males as factor two, and applying tests between subjects effects it is expected to have the significance level \( \alpha =0.05 \) and in case the p-value \( \geq \alpha \), then it is rejected \( H₀ \) but if p-value \( \leq \alpha \), then it fails to reject \( H₀ \).

**Table 2:** Tests of Between-Subjects Effects

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrected Model</td>
<td>1.762a</td>
<td>3</td>
<td>.587</td>
<td>2.528</td>
<td>.067</td>
</tr>
<tr>
<td>Intercept</td>
<td>50.184</td>
<td>1</td>
<td>50.184</td>
<td>215.965</td>
<td>.000</td>
</tr>
<tr>
<td>Dh</td>
<td>1.762</td>
<td>3</td>
<td>.587</td>
<td>2.528</td>
<td>.067</td>
</tr>
<tr>
<td>Error</td>
<td>12.780</td>
<td>55</td>
<td>.232</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>137.000</td>
<td>59</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrected Total</td>
<td>14.542</td>
<td>58</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. R Squared = .121 (Adjusted R Squared = .073)

From the table above it is seen that \( p=0.67 \) that is bigger than \( a =0.05 \) and in this case the null hypothesis that gender doesn’t affect adoption of e-banking services is rejected. The test revels that females are significantly different from males on adoption of e-banking services.

4. Conclusions and Recommendations

Marketing communication can play a crucial role to influence customers on adaption of e-banking services. As the survey revealed, bank customers have low involvement and perceive little differentiation between traditional and new innovative service. Quite a large percentage of respondents (54%) compared to 8% of them who are unaware of service
declared that they have never tried the service, and there is a group of people (21%) that is very well informed related to the benefits of the new service but they still feel very comfortable with their traditional services and do not express any interest to changes.

Another important factor of adoption of innovative services is the gender issue. After testing of hypothesis it is concluded that females are significantly different from males. Females were aware of the service 37% through advertisement compared to 19% of males and only 3% of them were unaware, but 32% of females did not adopt at all the e-banking service compared to 14% of males.

Therefore it is strongly recommended to the banks to compile marketing communication strategies that can be measurable and that are exposed to the right customer, through the right message, in order to motivate the female customers to consider the usage of the service; to pay attention for new service; and to build awareness among people that might be interested for that service. Females might have awareness for the service, but don’t show willingness to adopt the e-banking service. Hence it is required to study further the spectrum of motivation and stimulus of females for not being satisfactorily involved on usage of e-banking. Building consumer preference is a hard achievable effort for banks, but their marketing activities are to be consisted of key message to be conveyed alongside other intangible benefits: the clear message on the quality, performance, and security. The quest to maximize customer involvement and adaption of customers to e-banking, in addition seeks considerable time and resources searching for motivating the rest of customers who remain outside the e-banking platform.

Advertising is often a central element of a marketing communications program. It provides a great opportunity to promote the service by enabling banks to choose the beneficial aspects of the service and to communicate them effectively. Usage of other marketing mix communication means can be strongly recommended as is the case of the survey revealing that word-of-mouth marketing (20% from the survey) is an important element of spreading knowledge for e-banking services. People communicate among each other through oral, written or electronic communication means, which generally occur in a form of an intimate dialogue between friends or family members without having a need to be official. In principal, during such communications people share among each other information, knowledge, merits, opinions, facts or experiences.
related to respective subjects. The importance of word of mouth marketing on e-banking is strongly related to the share of consumers experience and achievements of its expectations. As human beings and customers, we are all affected from the word-of-mouth that in many decision making sequences can be highly influential.

List of References
