Internet Service Quality and Customer Satisfaction: Internet Banking in Greece

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30/9/2012
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Abstract

The aim of the present study is to investigate internet service quality in Greece and to analyze its impact on customer satisfaction. The idea of working on this particular project became from the fact that internet banking is not so popular to Greek customers, but also it consists a sector which shows great development in Europe and tends to get more widespread in the next few years. It is true that, in the near future, transactions and other banking activities will get accomplice mostly through internet. The field research was conducted among Greek customers who use internet banking services and resulted in 107 questionnaires. The results are analyzed in the final chapter and the initial hypothesis is verified and so are the measures that banks take in order to improve their e-banking service quality and consequently, satisfy their clients.

Keywords: Internet Banking, Service Quality, Greece, Banks
1. Introduction
As today’s economic environment becomes more competitive day by day, firms tend to provide more satisfying on-line services to their customers, as an attempt to maintain or gain a bigger market share. More particularly, the banking sector, as well as several industries in general, tries to have a strong on-line presence. In other words, nowadays, internet banking services are a strategic necessity for most of the banks (Gan et. al., 2006 as cited in Lod et al., 2009). The Greek financial system has changed rapidly during the last decades and is still evolving. More analytically, Greek banks follow the changes in the European banking sector, while at the same time try to dominate in the Balkan region. The European economic and monetary union tries to turn the focus of Greek banks on expanding their competitiveness. This is a result of the continuing liberalization process into the European financial market (Mylonidis and Kelnikola, 2005). Greece, as a leader country in the Balkan region, tries to strengthen its position in the banking sector by taking advantage of all opportunities that the Internet could offer to the financial institutions. So, financial institutions are consciousness that by providing satisfactory on line services (internet banking) to their customers could be a competitive advantage in today’s tough economic environment. Internet banking is the way that traditional banks enable customers to perform all routine transactions, such as account transfers, bill payments, and stop-payment requests, and some even offer online loan and credit card applications. Account information can be accessed anytime, day or night, and can be done from anywhere. Collecting all the advantages that internet banking can offer to customers, banks should turn their focus on customer satisfaction in order to create a satisfying feedback base. The Internet use in Greece is not as widespread as in other European countries; it is becoming more famous and appealing day by day. There are a lot of reasons why this happens, such as the easiness of its use, it decreases costs and offers lower prices. Due to all these reasons that are stated above, Greek banks are aware of the advantages that internet and technology (internet banking) can offer them in order to expand their market base.

This particular study is conducted in order to investigate and present the results of customer satisfaction among customers who use e-services in Greek banking sector. More specifically, this dissertation examines the quality on e-services that are provided by the six largest banks in Greece. More analytically, an on-line questionnaire was used to collect data in order to analyze the answers that respondents gave and export results about the quality of on line services. This on-line questionnaire is based on the 22 items of the E-S-QUAL scale which measure e-service quality among 4 dimensions (Parasuraman, 1988). The study consists of 2 parts. Part 1 refers to the theoretical approach of the study and contains two chapters. Chapter 1 makes a brief introduction as well as it presents the conceptual framework of the study. Chapter 2 presents the study’s literature review, in other words all the seminal work that has been conducted so far by researchers. The second part consists of three chapters and contains the empirical work of the study. More analytically, chapter 3 refers to the study’s methodology, meaning the questionnaire that is used,
details about the method, as well as details and tables about the respondent’s profile. Chapter 4 presents the results of the analysis. Finally, chapter 5 includes conclusions, a general approach, theoretical and managerial implications as well as the study’s limitations.

1.1 Theoretical framework – Objectives
The initial focus of this research study is to understand the relationship between internet service quality and customer satisfaction for the Greek banking sector. This relationship is illustrated in Graph 1 below.

Graph 1: Internet service quality (source: Ilias Santouridisa, Panagiotis Triellas and Panagiotis Rekritis, 2009)

<table>
<thead>
<tr>
<th>Tangibles</th>
<th>Age, Gender, Income, Educational level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responsiveness</td>
<td></td>
</tr>
<tr>
<td>Reliability</td>
<td></td>
</tr>
<tr>
<td>Assurance</td>
<td></td>
</tr>
<tr>
<td>Empathy</td>
<td></td>
</tr>
</tbody>
</table>

So, the two objectives of the study are the following:

- Determine the dimensions of the online service quality in Greek banking sector.
- Analyze the customers’ satisfaction level in relation with the Greek banking sector.

Moreover, the research model that this study examines is illustrated in Graph 2. More analytically, the conceptual framework which examines the linkage between internet service quality and aspects of customer satisfaction, controlling for demographics is illustrated below. Thus:
Finally, this research presents an empirical analysis about the online services of the Greek banking sector, limiting the findings’ generalizability.

Hence, the key research questions that this study tries to answer are:

1. What are the dimensions of internet service quality in Greek banking sector?
2. What is the level of customer satisfaction in relation with Greek internet banking service?

2. Literature Review
This Dissertation study investigates and analyses the quality of internet services in the Greek banking sector and is mostly based on the Service Quality Theory as well as to the Internet Service Quality Theory. Based on this, the chapter that follows consists of two parts. The first part refers to the Service Quality Theory while the second part refers to the Internet Service Quality Theory.

Service Quality Theory
During the past decades, as the importance of service quality has become widely acknowledged, many scientists tried to define the exact meaning of this particular term as well as to conclude to a comprehensible conceptualization and to a satisfactory measurement.

Many studies have been published and many researches have been conducted in order to compare customer’s expectations with the actual performance of the bank. These studies were the incentive for scientist to conduct a large number of research programs and finally to develop and define the Service Quality Theory (SERVQUAL). More particularly, Parasuraman (et al. 1985, 1988) conducted a qualitative and quantitative research in order to conclude to the original five – dimensioned (tangibles, reliability, responsiveness, assurance and empathy) and 22 – item of SERVQUAL model, one of the most applied in order to measure and define service quality in organizations. Its development has passed through many stages in order to reach its final and more defined version (Parasuraman et al., 1985, 1988,
1991, 1994). So, according to Parasuraman et al. (1988, 1991) the five dimensioned model of Service Quality Theory is as follows:

- **Dimension One: Tangibles**
  Tangibles refer to physical facilities, equipment, personnel as well as communication materials.
- **Dimension Two: Reliability**
  Reliability refers to the bank’s ability to perform the promised service dependably and accurately.
- **Dimension Three: Responsiveness**
  Responsiveness refers to the bank’s willingness to help its customers and provide prompt service.
- **Dimension Four: Assurance**
  Assurance refers to the knowledge and courtesy of the bank’s employees and their ability to convey trust and confidence.
- **Dimension Five: Empathy**
  Finally, empathy refers to the caring individual attention that the bank provides to its customers.

In addition to the Parasuraman’s SERVQUAL model, Gronroos (1994) presented another model for Service Quality. The difference was that this particular model consisted of only three dimensions and not of five. The first dimension is the technical quality, the second is the function quality and the third is the corporate image (Gronroos, 1994). More analytically, the first dimension is completely objective and deals with the satisfaction that customers receive from the service that is delivered to them. Dimension two, functional quality is completely subjective and deals with the way that the service is delivered to the customer. It also involves all the factors that affect the customers’ psychology as well as the interaction between the buyer and the seller. Some of the elements that are concluded in this dimension are the following: behavioral attitude of employees, relationships between the employees as well as interrelationships between the employees and the customers. Finally, according to Gronroos’ Service Quality, the third dimension shows the results of the view that the consumers have about the firm, and it is the result of the two first dimensions, technical and functional quality.

Problems in the measurement on the Service Quality Theory led to development of another measure known as the SERVPREF instrument. Cronin and Taylor (1994) came to prove that SERVPREF measures are more statistically reliable. The SERVPREF instrument consists only of the 22 performance items of SERVQUAL and the number of the factors which were extracted is not stable (Bouman and Van der Wiele, 1992; Carman, 1990; Cronin and Taylor, 1992, 1994; Gagliano and Hathcote, 1994).

Moreover, a more specialized and extensive instrument than the initial model that Parasuraman et al. (1985) proposed. This instrument, known as Bank’s Service
Quality was developed by Bahia and Nantel (2000). More analytically, this instrument quantifies the satisfaction that customers’ receive from the bank’s services. It consists from six dimensions and 31 items, which are related to the bank sector.

Moreover, various studies which investigate the relationships between Service Quality and Profitability have been conducted. Some of them show that the impact of Service Quality on the profitability as well as on other financial outcomes of various organizations is quite serious and understanding this impact is considered as a priority (Greising, 1994, Zahorik and Keiningham, 1995). Moreover, more extensive studies investigate this relationship between Service Quality and profitability, proving and analyzing the complexity of this relationship (Zahorik and Rust, 1992); while seminal researches show that firms which offer a high quality of services can achieve an even higher market share (Buzzell and Gale, 1987).

**E-service Quality**

Despite the fact that there is not a generally accepted definition among the scientific communities, E-service deals with all the customer’s interactions with a Web site: from the extent to which a Web site facilitates efficient and effective shopping, purchasing, and delivery (Parasuraman et al. 1988).

Considerable studies which focus on measuring and evaluating e-service quality are based on conceptual models such as: SERVQUAL, SITEQUAL (Yoo and Donthu, 2001), WebQUAL/eQUAL (Loiacono et al., 2002), eTailQ, WebQEM.

(Rowley, 2006) defines e-services as: “…deeds, efforts or performances whose delivery is mediated by information technology. Such e-service includes the service element of e-tailing, customer support, and service delivery”. What accrue from Rowley’s definition are its three main components: the service provider, the service receiver and the channels of service delivery (i.e., technology).

Badulescu (2008) approaches E-service Quality by performing: a behavior approach, focusing on the Web site activity (number of users, number of accessed pages, session period) and an attitude approach.

More analytically, WebQUAL scale which is created by Loiacono et al. 2002, rates E-services based on 12 dimensions. These 12 dimensions are:

- Informational fit to task
- Interaction
- Trust
- Response time
- Design
- Intuitiveness
- Visual appeal
- Innovativeness
- Flow-emotional appeal
- integrated communication
- Business processes
- Substitutability

SITEQUAL scale which is created by Yoo and Donthu (2001) rates E-services using nine items and is based on 4 dimensions.

Moreover, the original SERVQUAL theory which Parasuraman et al. (1985) had developed was found not to fit appropriate in measuring E-services. So, many studies have tried to extend its conceptualization to the electronic context. The result was the development of E-S-QUAL scale which consists of 22 items based on 4 dimensions: efficiency, fulfillment, system availability, and privacy.

Service Quality in Greece
It is a fact that internet services in Greece follow a low development and it has been observed that the mail reason for this behavior is the low penetration rate of the internet, compared with other European countries. According to many surveys, including the Eurostat survey in 2006, only 23% of Greeks use the internet, a rate which is the lowest among 25 European countries. A survey that was conducted by Eurostat in 2011 also proved that Greece and six other countries have the lowest rates on internet access. Another survey by National Statistical Service of Greece (2004), showed that Greek on-line users are restricted on searching information or purchasing on line products and only a 10% of them use internet in order to accommodate e-banking services. Nevertheless, this background is ready to change as more and more people in Greece welcome internet in their lives and as banks and other financial institutions are predisposed to promote a system which will be based mostly on on-line transactions and other activities.

A significant point that proves that e-banking in Greece is not as developed as it should be is the fact that research in this sector is still in early stage. The work of Gounaris and Dimitriadis (2003) is an important reference, as they tried to investigate the quality dimensions of business-to-customers portals. Moreover, Kardaras and Papathanassiou (2001) conducted a survey on how e-commerce opportunities can improve customer support on banking transactions in Greece.

Service quality and satisfaction
There is little doubt that customer satisfaction and perceived service quality are strongly attached and they are at the crux of the market theory and practice (Siadat, 2008). Saha and Zoha (2005) define customer satisfaction as ‘a collective outcome of perception, evaluation and psychological reactions to the consumption experience with a product or a service’. Customers’ satisfaction depends on the performance of the service according to their expectations (Yang, 2001), so a positive relationship occurs between them. If the performance of service exceeds their expectations then satisfaction increases and if the performance of service does not reach the desirable standards, then satisfaction decreases (Yang, 2001).
There is little evidence about the relationship between service quality and customer satisfaction as the research that investigates this relationship is still in an early stage. Nevertheless, a conclusion can be made, that customers’ satisfaction is significantly influenced by the service quality that they perceive (Jun et al., 2004, Lee & Lin, 2005, Zhu et al., 2002) and inevitably customers need to perceive a service in order to understand whether they are satisfied or dissatisfied with it (Li et al., 2002).

3. Data and Methodology

3.1 Methodology
The methodology used in this study in order to establish a strong support for this thesis topic is the online structured questionnaire and the literature review, as well as various writings and publications relevant to the study’s subject. Thus, a general analysis of this thesis is achieved. More analytically, the literature review provides an insight into the approaches that different researchers adopt and also a rational reasoning that is used in order to support the results; while the questionnaire (see Appendix) which was administered on the 6 largest banks in Greece (according to their market share) which provide full Internet banking via their WWW pages. By administering this structured questionnaire on the sample population, effective information is collected in order to receive how Internet technology is used by the respondents.

3.2 Data
The research of this study was conducted through an online, structured questionnaire based on the items of E-S-QUAL theory (Parasuraman, 1985) which is presented in the next chapter (3.2) with details. More analytically the 106 responses were retrieved through the following method: the question with which the questionnaire starts is to define the basic bank with which the respondent cooperates most for his/her internet transactions. This bank is considered as the benchmark for all the questions that follow. An option at the end of the first question, named as “None of the above”, gives the respondents the choice to choose another bank which is not included. According to that, a final number of 106 valid responses were created, which respectively leads to an equal number of data set.

3.3 The Questionnaire
This survey uses, as it was mentioned in Chapter 3.1 above, an online structured questionnaire as an instrument in order to collect its data. This questionnaire was posted to the most popular social networking site (Facebook) as well as it was mailed to students of the International Hellenic University and it could be easily accessed at the link: https://docs.google.com/spreadsheet/viewform?pli=1&formkey=dEpFZG9EM2ctajg1MGVvSVczVG1UekE6MQ#gid=0, which is presented at the Appendix. More analytically, this questionnaire consists of 22 items which measures internet service quality along 6 dimensions. These items were retrieved from Parasuraman’s E-S-
QUAL (1985) and some of them were reworded with that way so that they could be more applicable to the web-based banking environment. A five point Likert-scale was used so that the possible answers were ranged from ‘Strongly Disagree (1)’ to ‘Strongly Agree (5)’. Moreover, the instrument that was used in order to collect the data was statistically tested for its validity, and its final version which consists of 3 sections is the following one:

Section one: Customer Demographics

This part of the questionnaire consists of demographic questions which aim to determine the gender, age, educational level, income and frequency of internet banking usage of the respondents.

Section two: Customer Perceived Quality Measurement

This section includes the 22 items of the questionnaire which measure the 6 dimensions of E-S-QUAL theory. More analytically,

Questions 1-5 measure efficiency,
Questions 6-10 measure reliability,
Questions 11-15 measure responsiveness,
Questions 16-20 measure empathy,
Question 21 measures assurance, while
Question 22 is on overall valuation of e-banking services.

Section three: Customer Satisfaction Measurement

In this section a self-reported item that measures the overall customer satisfaction is included. This section uses a five-point Likert-scale in order to range the possible answers from ‘Highly Dissatisfied (1)’ to ‘Highly Satisfied (5).

4. Analysis of the Results

The data that were collected from the structured questionnaire were analyzed to show the various responses for each bank. By noting the trend of answers, each response was analyzed based on analyses and theories that were retrieved from earlier seminal studies. Thus a summary review accrued which is presented at the end of this chapter and supports this thesis’ topic. Before analyzing the responses, a brief presentation of the sample selection as well as a presentation of the respondents profile is needed to be done.

4.1 Sample selection

This section briefly analyzes the sample of the respondents as well as their profile and their particular demographic characteristics.
More analytically, the survey that needed to be done in order to complete the present research was conducted in Greece. The purpose was to collect answers that refer to e-banking service of the six largest banks in Greece, which hold almost 70% of the Greek market share. In order to collect answer that would lead to safe results, it was decided that the customers who responded to this survey would be customers of these six banks and would use often their e-banking services.

The survey took place between June and September 2012. Respondents were asked to complete the questionnaire through internet, using social media network, as it is more likely to approach e-banking users and more importantly to approach customers from all around the country. Before answering the questionnaire they were asked if they use e-banking services or not. In the occasion that the answer was positive, they were asked to complete the questionnaire. The sample consists of 107 valid questionnaires.

The basic demographic characteristics of the survey in order to have a general profile of the respondents are presented in this part. So, the male respondents reached the amount of 56%, while female respondents were 44%. The main body of the respondents consists of young people (72%), aged from 18 -34. Moreover, the education level is high, as 81% of the sample has a college or Master’s degree education. Finally, considering the annual income of the sample, the results vary mostly from zero to 1000 euros per month, a result that reflects the present economic situation in Greece. The basic demographic characteristics of the respondents are summarized in Table 1.
Table 1: Demographic Characteristics

<table>
<thead>
<tr>
<th>Gender</th>
<th>Number of Respondents</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>59</td>
<td>55</td>
</tr>
<tr>
<td>Female</td>
<td>48</td>
<td>45</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age</th>
<th>Number of Respondents</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 24</td>
<td>19</td>
<td>18</td>
</tr>
<tr>
<td>25 - 34</td>
<td>56</td>
<td>52</td>
</tr>
<tr>
<td>35 - 44</td>
<td>22</td>
<td>21</td>
</tr>
<tr>
<td>45 - 54</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td>55 - 64</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>65 and older</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Education</th>
<th>Number of Respondents</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary School</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Secondary school</td>
<td>14</td>
<td>13</td>
</tr>
<tr>
<td>College or University</td>
<td>55</td>
<td>51</td>
</tr>
<tr>
<td>Master’s Degree</td>
<td>33</td>
<td>31</td>
</tr>
<tr>
<td>PhD</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Post Doctorate research</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Income (per month)</th>
<th>Number of Respondents</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 500€</td>
<td>25</td>
<td>23</td>
</tr>
<tr>
<td>501€ - 750€</td>
<td>17</td>
<td>16</td>
</tr>
<tr>
<td>751€ - 1000€</td>
<td>30</td>
<td>28</td>
</tr>
<tr>
<td>1001€ - 1250€</td>
<td>10</td>
<td>9</td>
</tr>
<tr>
<td>1251€ - 1500€</td>
<td>11</td>
<td>10</td>
</tr>
<tr>
<td>1501€ or more</td>
<td>14</td>
<td>13</td>
</tr>
</tbody>
</table>

In this part of the study, it is important to analyze the results which are retrieved from the online questionnaire. First of all, there is a need to examine the data according to the age and sex of the respondents. The following table, Table 2, shows the general profile of the banks’ customers that use internet banking and answered the questionnaire.

Table 2: General profile of the respondents

<table>
<thead>
<tr>
<th>Age</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>18 – 24</td>
<td>9</td>
<td>10</td>
<td>19</td>
</tr>
<tr>
<td>25 – 34</td>
<td>34</td>
<td>22</td>
<td>56</td>
</tr>
<tr>
<td>35 – 44</td>
<td>12</td>
<td>10</td>
<td>22</td>
</tr>
<tr>
<td>45 – 54</td>
<td>3</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>55 – 64</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>65 or more</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>59</td>
<td>48</td>
<td>107</td>
</tr>
</tbody>
</table>
The following graph, Graph 3, shows the same results in order to understand the exceptional difference that exists in usage of e-banking services according to the age range. People among 25-34 use more services that banks provide through internet in relation with people who belong to other age groups. Moreover, it is obvious that male users have a small advantage against female users of e-banking.

Graph 3: Age groups of the respondents

A more analytical presentation follows according to the respondents’ education level. As concluded, most of the respondents have a college/university or a master’s degree, 51% and 31% respectively. A considerable number of respondents have completed obligatory education (secondary school) which lasts 12 years in Greece. Only 2 of the respondents have completed the 6-year basic education and only 3 have continued their studies in PhD or Post Doctorate Research. These results reflect reality in Greece as well as the general profile of an internet user, and particularly, a user of e-banking services.
<table>
<thead>
<tr>
<th>Education</th>
<th>Age Range</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary School (6 years of education)</td>
<td>18 – 24</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>25 – 34</td>
<td>1</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>35 – 44</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>45 – 54</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>55 – 64</td>
<td>-</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>65 or more</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Secondary School (12 years of education)</td>
<td>18 – 24</td>
<td>2</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>25 – 34</td>
<td>3</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>35 – 44</td>
<td>1</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>45 – 54</td>
<td>-</td>
<td>2</td>
<td>2</td>
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<tr>
<td></td>
<td>55 – 64</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>65 or more</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>6</td>
<td>8</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>College or University Degree</td>
<td>18 – 24</td>
<td>5</td>
<td>8</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>25 – 34</td>
<td>11</td>
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<td>30</td>
</tr>
<tr>
<td></td>
<td>35 – 44</td>
<td>6</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>45 – 54</td>
<td>2</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>55 – 64</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>65 or more</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
<td>32</td>
<td>56</td>
<td></td>
</tr>
<tr>
<td>Master’s Degree</td>
<td>18 – 24</td>
<td>2</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>25 – 34</td>
<td>18</td>
<td>7</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>35 – 44</td>
<td>4</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>45 – 54</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>55 – 64</td>
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<td></td>
<td>65 or more</td>
<td>-</td>
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<tr>
<td>Total</td>
<td>25</td>
<td>12</td>
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<td></td>
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<td>18 – 24</td>
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<td>25 – 34</td>
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<td>35 – 44</td>
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<td>45 – 54</td>
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<tr>
<td></td>
<td>55 – 64</td>
<td>1</td>
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<tr>
<td></td>
<td>65 or more</td>
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<tr>
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<td>Post Doctorate Research</td>
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<td>55 – 64</td>
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<td>65 or more</td>
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</tr>
<tr>
<td>Total</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>
Finally, it is important to see the distribution of the respondents according to which bank they are customers and therefore use their e-banking services. As it appears in Table 4, most of the respondents, 30% of them, are customers of National Bank of Greece and EFG Eurobank, 19% of them. Other banks follow with lower percentages. This result may seem logical considering the fact that National Bank of Greece holds the bigger market share among the 6 banks.

<table>
<thead>
<tr>
<th>Bank</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Bank of Greece</td>
<td>32</td>
<td>30%</td>
</tr>
<tr>
<td>Agrotiki Bank of Greece</td>
<td>7</td>
<td>7%</td>
</tr>
<tr>
<td>Emporiki Bank</td>
<td>12</td>
<td>11%</td>
</tr>
<tr>
<td>Alpha Bank</td>
<td>13</td>
<td>12%</td>
</tr>
<tr>
<td>Pireaus Bank</td>
<td>14</td>
<td>13%</td>
</tr>
<tr>
<td>EFG Eurobank</td>
<td>20</td>
<td>19%</td>
</tr>
<tr>
<td>None of the Above</td>
<td>9</td>
<td>8%</td>
</tr>
</tbody>
</table>

4.2 Analysis of the results
This section analyses the responses that bank’s customers gave. The analysis is based on writings and publications from various sources of information relevant to the study’s subject.

Question 1: How satisfied are you with your bank’s primary e-banking service?

Customers in this question were able to express their satisfaction about the time needed in order to have access on the bank’s website. Most of the e-banking users find that the time needed is satisfactory enough. The results are presented in Graph 3 with more answers to verify that customers seem not to face difficulties in time when they enter their bank’s website. More analytically, none of them are strongly dissatisfied and 75% of them seem to be satisfied with the time needed in order to enter their bank’s website.
Graph 4: How satisfied are you with your bank’s primary e-banking service?

Question 2: How satisfied are you with the ability of your bank’s website to provide you easily and quickly with information?

As e-banking in Greece is not as rife as it is in other European countries, banks need to provide customers with the useful information that would make this environment easy for them to learn and follow. In case that information is not understandable could create problems to both the bank and the customer. Again, most of the respondents seem to be satisfied with the convenience and the time that is needed in order to receive useful information. In this part, it would be interesting to investigate results according to the age of the respondents. As resulted in graph 5, most of the respondents feel dissatisfied with the way that banks offer provide them with information. Customers of 18 – 24 (47% of them) and customers of 45 – 54 (50% of them) seem to be the most disgruntled. On the other hand respondents of 55 – 64 seem to be separated as 50% are completely content with bank’s intention to provide them with information easily and quickly and the other 50% of them believe that the bank do not perform the service as it should do but this drawback do not create problems during the use of the online services.
Graph 5: How satisfied are you with the ability of your bank’s website to provide you easily and quickly with information?

Question 3: How satisfied are you with the time needed in order to complete a transaction through the bank’s website?

In this question respondents were asked to express their satisfaction according to the time that they spend in order to complete their online transactions. Considering the fact that nowadays time is an important aspect of everyday life, the results of this question will be helpful in order to appraise the quality of e-banking in Greece. Here it would be interesting to investigate results according to each bank. Graph 6 shows respondents’ satisfaction expressed in percentages referring to each bank at a time. It is surprising that only customers of National Bank of Greece (about 15% of them) seem to feel dissatisfied with the time needed for an e-banking transaction. Agrotiki Bank also fluctuates in similar stages as most of their customers (about 43% of them) are neither satisfied nor dissatisfied. Finally, Eurobank customers (45% of them) seem to be satisfied with the time that they spend in order to complete an e-banking transaction and Alpha Bank customers (with a percentage of 39%) are totally content by this service.
Question 4: How satisfied are you with the simplicity and comprehension of your bank’s website?

In an effort to attract their customers to use e-banking services, banks need to plan their websites in order to be simple and understandable for the majority of people. This necessity may sound simple; nevertheless many times it is difficult to be implemented considering customers’ different needs and demands. Many people are disheartened in using online services because of the fact that is difficult for them to comprehend the way that they officiate. On the other hand, from the beginning of e-banking in Greece, banks have tried to develop easily accessible websites for all the age groups of their customers and they are still working to make them simpler so, in the near future the majority of people will find it easier to make their banking transactions only through internet.

As it can be concluded from the results shown in Graph 7, customers seem to be pleased with the simplicity that the banks have constructed their websites. For 4 of these banks, Emporiki, Eurobank, Alpha Bank and Agrotiki Bank, most of the respondents (50%, 55%, 54% and 43% respectively) were acquaint with the fact that their bank’s website is simple and comprehensive but there are still margins of improvement. On the other hand, Piraeus Bank and National Bank seem to keep their customers fully satisfied, as the respondents, 56% of them for National Bank and 57% for Piraeus Bank, believe that their banks’ website is complete in simplicity and comprehension and need no further improvements.
Question 5: How satisfied are you with the organization and the structure of the bank’s website?

Another factor, in order to appraise e-service quality, is the organization and structure of each bank’s website. Even if the site is simple and comprehensible, people may find difficult to localize the exact fraction of the transactions that they want to make and also to spend more of the prospective time in order to achieve it. Another important perspective is for the website to contain these transactions that most of the people need to deal with. Nevertheless, banks in Greece have tried to follow European standards in order to organize their websites in a way that most of the customers will feel content with. It is true that most of Greek banks provide their customers the possibility to make transactions in real time such as: transactions through banking accounts, all sorts of payments and information on balances of their accounts. Commercial users have the possibility to use more exceptional transactions.

The respondents of this research had the possibility to evaluate the organization and the structure of their banks’ website and the answers are presented below in Graph 8. As resulted, customers keep a more neutral attitude and believe that banks should organize in a better way their websites in order for the people to feel more familiar with them every time they need their services. More analytically, most of the respondents who are customers (44% of them) of National Bank of Greece believe that this bank’s website is good but it is not as manageable as it should be. The other banks seem to approach the customers’ standards but they should, also, organize their websites in a better way. It seems quite surprisingly the fact that a great percentage of Piraeus bank customers (57% of them) are satisfied with the structure and 21% of them are not willing to accept any changes to the structure and finally 43% of Agrotiki Bank customers seem to be quite content with the organization that they are provided with but also many of them (29%) feel neutral or dissatisfied by it.
Graph 8: How satisfied are you with the organization and the structure of the bank’s website?

Question 6: How satisfied are you with the ability of your bank to fulfill its promises towards you in the expected time?

It is true that, despite the satisfactory way that e-banking services of most of Greek banks operate, there will always be a necessity for improvement. Customers who use these online services are able to express the difficulties that they face during an online transaction. Banks feel obligated to listen and try to solve these problems or try to improve their website in order to satisfy their customers. Other times banks make promises referring to improvements of their e-services, towards their customers in an effort to keep them content. The most important is not only for the bank to keep its promises but also to make them real in the expected time.

Graph 9 explains this situation in Greece. Most of the respondents believe that the expected time and the time that a promise is realized usually coincide. Banks seem to have margins of improvement as their customers have doubts on the fact that their bank has the ability to realize its promises in the expected time or it needs improvement in that specific area. More analytically, customers of Alpha Bank (46% of them), Eurobank (45% of them), Emporiki Bank (50% of them) and Piraeus Bank (43% of them) believe that these banks accomplish their promises in time, whereas customers of Agrotiki Bank (57% of them) and National Bank of Greece (31% of them) believe that their banks are in the right stage but still can be improved. It is surprising the fact that customers of smaller banks in Greece, with a percentage of 44%, are completely satisfied with the services of their banks in this area.
Graph 9: How satisfied are you with the ability of your bank to fulfill its promises towards you in the expected time?

<table>
<thead>
<tr>
<th>Bank</th>
<th>Satisfied</th>
<th>Strongly Satisfied</th>
<th>Neutral</th>
<th>Dissatisfied</th>
<th>Strongly Dissatisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agrotiki Bank</td>
<td>43%</td>
<td>3</td>
<td>16%</td>
<td>16%</td>
<td>12%</td>
</tr>
<tr>
<td>Alpha Bank</td>
<td>54%</td>
<td>2</td>
<td>10%</td>
<td>12%</td>
<td>20%</td>
</tr>
<tr>
<td>EFG Eurobank</td>
<td>52%</td>
<td>2</td>
<td>12%</td>
<td>12%</td>
<td>24%</td>
</tr>
<tr>
<td>Emporiki Bank</td>
<td>28%</td>
<td>12%</td>
<td>48%</td>
<td>12%</td>
<td>12%</td>
</tr>
<tr>
<td>National Bank</td>
<td>31%</td>
<td>15%</td>
<td>25%</td>
<td>20%</td>
<td>29%</td>
</tr>
<tr>
<td>Piraeus Bank</td>
<td>78%</td>
<td>20%</td>
<td>5%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

Question 7: How satisfied are you with the bank's intention to solve the problems or the questions that occur during your online transactions?

It is possible that sometimes problems or questions occur while using online services. These problems are may be more serious during an online transaction and customers have to contact their bank in order to find the appropriate solution. In an effort to improve their relations with the customers, banks provide e-mails and feedback forms to them in order to receive suggestions or complaints. Despite the fact that this particular way of communication is cheaper than others, such as mailing information or call services, the banks are able to understand the needs of their customers, get structured information and finally create a better relationship with them.

In graph 10 that follows, it can be concluded that most of the respondents receive satisfactory help in order to solve problems that occur during an online transaction. In particular, customers of Alpha Bank and Piraeus Bank, 54% and 78% respectively, feel content from their bank’s intention to help them during an online transaction. On the other hand, customers of Eurobank (40% of them), Emporiki Bank (50% of them) and National Bank (31% of them) of Greece believe that the service that they receive from the bank is satisfactory but could get improved. Finally, Agrotiki Bank seem to offer exceptional services as the 43% of the respondents feel completely content with the support that the bank shows to them when a problem occur during a transaction.
Question 8: How satisfied are you with the accuracy that the bank performs the online services?

As online transactions are realized completely through internet, it is obvious that accuracy of e-banking is an extremely important factor in order to appraise e-service quality in banking sector in Greece. It is true that no one, not even the banks, can give assurance to the customers that transactions that they want to make will be executed as demanded. These problems may occur from the bank’s system or even from a malfunction of the computer and it is important that banks pay great attention to it in order to keep their customers content.

In general, respondents feel that banks perform online services with accuracy (Graph 11). Specifically, customers of National Bank of Greece (44% of them), Emporiki Bank (58% of them), Eurobank (40% of them), Alpha Bank (46% of them) and Agrotiki Bank (43% of them) answered that they normally do not face technical difficulties that may put their transactions in danger but there is always the doubt that something might go wrong. Customers of Piraeus Bank, in a percentage of 50%, feel quite confident towards the accuracy that their bank performs the online services.
Graph 11: How satisfied are you with the accuracy that the bank performs the online services?

![Graph showing satisfaction levels of different banks](image)

**Question 9: How satisfied are you with the bank's promotion of the online services at the time it promises to do so?**

As e-banking in Greece is still in its early stages, there are few transactions that can be made through internet until now. On the other hand, banks are trying to strengthen their online services by offering new opportunities to their customers. Promotion of new online products is really important for banks in order to reinforce their profile but it is, also, important for the customers as they expect from their bank to adopt technology in every part of their activities. Time has an important role in order to investigate the quality of internet banking in Greece, as banks have to be accurate on their promises towards their customers and so customers will be able to appreciate and receive the offered services.

Graph 12 shows how satisfied feel customers of Greek banks towards their promotion of online services at the time they promise to do so. Here, the answers vary from bank to bank. Piraeus Bank and Eurobank seem to fulfill their promises on time according to 79% and 65% of their clients respectively. Customers of National Bank of Greece (41% of them) and Eurobank (34% of them) believe that their bank is accurate to its promises with a possibility of improvement and customers of Agrotiki Bank are undecided whether their bank can fulfill its promises on time, as 29% of them feel satisfied, 29% of them feel neither satisfied nor dissatisfied and 29% of them feel dissatisfied. Finally, 50% of Emporiki Bank’s customers feel neither satisfied nor satisfied with their banks intention to promote the online services at the time it promises to do so.
Graph 12: How satisfied are you with the bank’s promotion of the online services at the time it promises to do so?

<table>
<thead>
<tr>
<th>Bank</th>
<th>Strongly Satisfied</th>
<th>Satisfied</th>
<th>Neutral</th>
<th>Dissatisfied</th>
<th>Strongly Dissatisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pireaus Bank</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>National Bank</td>
<td></td>
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<td></td>
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<tr>
<td>Emporiki Bank</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EFG Eurobank</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alpha Bank</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agrotiki Bank</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
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</table>

Question 10: How satisfied are you with the ability of your bank to inform you the exact time that your transaction will be performed?

In this question, respondents had to express their opinion about how satisfied they feel towards their bank’s intention to inform them on the accurate time that their transaction will be performed (Graph 13). The results seem to be relatively the same for all the banks that are included in the research. Customers of most of the banks, with percentages between 43% and 54%, believe that their bank is able to inform them on the exact time that the transaction will be performed. On the other hand, customers of Eurobank feel less confident, as 35% also feel content with their bank, but 30% of them feel that the bank have many possibilities of improvement.
Graph 13: How satisfied are you with the ability of your bank to inform you the exact time that your transaction will be performed?

Question 11: How satisfied are you with the bank's intention to accommodate you when you make an online transaction?

As online transactions are realized through internet, banks need to reassure that these transactions will be performed with safety, there would not be efforts of electronic stealing and there would be no mistakes by the system. In an effort to accomplish all of these matters, banks may create difficulties to customers during their transactions. On the other hand, customers want to finish their transactions as soon as possible. In need of conciliating, banks tried to make online transactions simpler but not by abrogating what is needed in order to keep the system safe. Also, customers need to understand that there are many dangers that could cause great problems not only to banks but to them as well.

Graph 14 explains that respondents (with percentages that vary from 38% - 55%) are quite content with their bank’s intention to accommodate them during an online transaction. Especially 44% of the customers of Agrotiki Bank feel that their bank performs in an exceptional way the online transactions, without the possibility to occur any of the problems that are mentioned above.
Graph 14: How satisfied are you with the bank's intention to accommodate you when you make an online transaction?

Question 12: How satisfied are you with the willingness of the bank's staff to help you when an online problem occurs?

Considering that online services in general and specifically e-banking services is a relatively new sector in Greek market, it is logical for customers to face difficulties in everyday use; difficulties that customers may not able to confront on their own and may ask for banks’ staff for help. It is important for a bank, not only to have a well-structured and organized website in order to please its customers, but also to provide them with help every time that it is needed. Furthermore, employers should be willing to help and solve every problem that may occur.

The answers that were received during the research were helpful in order to understand how bank customers feel about the support that they receive from their bank’s staff. Graph 15 shows that customers of Piraeus Bank (50% of them), Euorbank (45% of them) and Alpha Bank (62% of them) feel quite content. Customers of National Bank of Greece are separated with 25% of them being dissatisfied with the staff’s intention to help, 22% of them holding a neutral attitude and only 34% of them feeling quite content with the service. Finally, customers of Emporiki Bank (42% of them) and Agrotiki Bank (43% of them) also believe that this service needs improvement.
Graph 15: How satisfied are you with the willingness of the bank’s staff to help you when an online problem occurs?

Question 13: How satisfied are you with the connection that the online service of the bank shows when questions occur?

In this question, respondents could evaluate their bank’s correspondence when a question occurs during an online transaction (Graph 16). Customers of Alpha Bank (54% of them), Eurobank (35% of them), Emporiki Bank (50% of them), National Bank of Greece (38% of them) and Piraeus Bank (43% of them) feel quite content, while 43% of customers of Agrotiki Bank believe that their bank do not correspond immediately when questions occur during an online transaction.

Graph 16: How satisfied are you with the connection that the online service of the bank shows when questions occur?
**Question 14:** How satisfied are you with the bank's ability to resolve problems encountered with your online transactions on a certain time?

Considering the fact that problems during online transactions are likely to happen, banks should have a developed system that would be able to resolve any problem that might occur. As Graph 17 shows, respondents seem to receive the proper help from their bank in order to resolve problems. Customers of National Bank of Greece, Emporiki Bank, Eurobank and Alpha Bank feel quite content with their bank’s intention to provide them with the appropriate help, while customers of Piraeus Bank (86% of them) believe that their bank have an exceptional system of dealing with online problems and customers of Agrotiki Bank (57% of them) believe that the bank should improve this online service.

![Graph 17](image)

**Question 15:** How satisfied are you with the attention that the bank gives at you individually?

It is true that every customer, especially a bank customer, need personal attention in order to feel that there is a friendly and healthy environment. Greek Banks managed to provide their customers with the attention that they need as it occurs in Graph 18. In most of the banks customers feel satisfied with the attention that their bank gives them individually. Customers of Alpha Bank (46% of them), Eurorobank (50% of them), Emporiki Bank (42% of them) and National Bank of Greece (47% of them) feel quite content with the attention that they receive from their bank. Customers of Agrotiki Bank (43% of them) believe that they receive exceptional attention, while customers of Piraeus Bank are separated as 58% of them believe that they receive the proper attention and 29% of them believe that their bank need to get improvements in this sector.
Question 16: How satisfied are you with the operating hours of your bank's help center for all its customers?

One of the great advantages of e-banking is that customers have the opportunity to make their transactions every time of the day, even late at night. This service seems extremely functional especially for working people with the least spare time. In the same way it would be a great advantage for banks to provide their customers with help, through help centers and call centers, as much as possible during the day. In that way, customers will use e-services of the banks when they will be able to do it, having the confidence that if a problem occurs, a solution will be provided at the same time.

In general, customers of Greek banks seem to be satisfied from the operating hours of banks’ help center (Graph 19). More specifically, customers of Agrotiki Bank (29% of them) are not satisfied with the operating hours of their bank’s help center, but the other 29% of them feel that their bank provides them with the proper service. Emporiki Bank (50% of them) and National Bank of Greece (41% of them) feel that they can contact the help center of each bank whenever it occurs. 75% of Eurobank customers and 72% of Piraeus Bank customers are completely satisfied by the service they are provided with. Finally, 31% of Alpha Bank customers believe that they are not able to contact help center of their bank at any time they need to.
Question 17: How satisfied are you with the attention that the help center and the call center of your bank give you personally?

Help centers and call centers have been created in order to offer help to customers while using the online services. In such important issues as financial transactions people need to feel that they have the proper attention and also to feel that the bank will be there any time to solve every problem that might occur. Banks should confront every customer separately and not as a part of a group in order to succeed not only to keep customers content but also they will succeed to reinforce their own profile to the market.

Respondents had to evaluate the attention that they receive personally from the call center or the help center of their bank (Graph 20). Customers of Piraeus Bank (57% of them), Emporiki Bank (58% of them) and Eurobank (45% of them) feel that they receive the proper attention of their bank’s call center and help center. Customers of National Bank of Greece (41% of them) and Alpha Bank (31% of them) believe that this service still needs improvement. Finally, 29% of Agrotiki Bank’s customers feel dissatisfied with the service, in contrast with the other 29% of them who believe that the bank provides them with the proper service.
Question 18: How satisfied are you with the understanding that the help center and the call center of your bank show to your specific needs?

In this third question that refers to call center and help center of bank’s e-banking services, respondents had to evaluate the way that call center and help center confront their specific needs. The results here differ from bank to bank (Graph 21). Customers of Eurobank (40% of them) and Piraeus Bank (36% of them) believe that they receive the proper attention and customers of Emporiki Bank (42% of them) also believe that their bank provides them with the proper service with a possibility of improvement. Customers of Agrotiki Bank (43% of them), Alpha Bank (38% of them) and National Bank of Greece (38% of them) believe that their bank needs to improve the way that help center and call center operate.
Question 19: How satisfied are you with the way that the bank uses your personal information given by online transactions?

In order to promote their products or to proceed research which be helpful in the future, banks accustom to use their customers’ personal information. Usually other companies, authorized by the banks, use that information and many times without customers’ permission. In the past, banks were facing a great problem as customers felt dissatisfied with their decision to use their data with no permission. Nowadays this problem has been eliminated, as every time that someone decides to use e-banking services and completes his personal information, he is asked whether he wants to allow the use of them for further briefing or research or not.

Results from this question are surprising (Graph 22). Only Piraeus Bank seem to protect its customers personal information, as 50% of them are satisfied with their bank’s behavior. Customers of Emporiki Bank (33% of them) believe that their bank do not protect their personal data but the other 33% of them has a different opinion by supporting that they receive the proper service. Customers of Alpha Bank (50% of them), Eurobank (35% of them) and National Bank of Greece (38% of them) believe that their bank do not protect their individual information in the proper way. Finally, 29% of customers of Agrotiki Bank are satisfied with the way that their bank handle their personal data.
Graph 22: How satisfied are you with the way that the bank uses your personal information given by online transactions?

In this question customers were asked, in a scale of 1 for strongly dissatisfied to 5 for strongly satisfied, whether they are satisfied with the safety that the bank provides them during an online transaction or not. Most of the respondents feel that their bank manages to maintain their online transactions safe from external invaders (Graph 23). Customers of Alpha Bank (50% of them), Eurobank (45% of them), Emporiki Bank (58% of them) and National Bank of Greece (47% of them) are satisfied with the safety that they receive from their bank. Customers of Piraeus Bank (43% of them) believe that their bank provide them with an exceptional safety system and customers of Agrotiki Bank seem to have different opinions as 33% of them are completely satisfied with the safety system but another 33% of them believe that there could be improvements. Also, none of the banks seem to approach the perfect safety system.

Question 20: How satisfied are you with the safety that the bank provides you during your online transactions?
These results raise a discussion on how banks protect their online customers. Most of Greek banks use the SET system, which is analyzed as ‘Secure Electronic Transaction’ and it is supported by the two most important financial institutions, MasterCard and Visa and from other companies as well, such as IBM and Microsoft. It is a strong system which use, through cryptography, Personal Identity Numbers (PIN), digital certificates or TAN numbers, in order to maintain high safety levels. Nevertheless, despite the developed security systems, the frequency of electronic attacks increases over the years, as invaders try and usually find ways to break banks’ safety systems. So, banks need to control and improve these systems constantly.

**Question 21: How satisfied are you with the confidence that the online service of the bank provides you?**

In the end, it is important to know how people feel by using online services of each bank. Customers need and should feel confidence towards their bank after a financial transaction. Confidence in online transactions is built by many things that this research examined above such as: simple structure and organization of the site, helpful staff towards the customers, intention to provide proper solutions at the exact time and intention of the banks to keep their promises. But the most important for the bank is to provide customers that use e-banking with the safety that an online transaction needs and to protect them from external dangers.

As it is concluded from Graph 24, banks seem to provide their customers with proper confidence. Customers of National Bank of Greece (50% of them), Emporiki Bank (42% of them), Eurobank (40% of them) and Alpha Bank (46% of them) feel satisfied with the confidence that their bank provides them with. Costumers of Piraeus Bank, with a percentage of 86% feel quite confident towards their bank’s e-banking services.
Graph 24: How satisfied are you with the confidence that the online service of the bank provides you?

<table>
<thead>
<tr>
<th>Bank</th>
<th>Strongly Satisfied</th>
<th>Satisfied</th>
<th>Neutral</th>
<th>Dissatisfied</th>
<th>Strongly Dissatisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pireaus Bank</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>National Bank</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emporiki Bank</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EFG Eurobank</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alpha Bank</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agrotiki Bank</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Question 22: How satisfied are you with your bank's overall e-banking service?

Finally, it is really important to know, besides the way that respondents confront every aspect of offered e-banking services, how they feel about the general picture of their banks’ e-services. This question is really important as it reflects the total results of all the questions and gives banks the opportunity to evaluate their offering e-services and to able to understand customers’ needs and demands. In the end, it would be a great tool in order to help the research to investigate whether quality of e-banking services in Greece is satisfying, according to European standards or it may need further improvement.

This last question is a summary of all the questions that are preceded. As Graph 25 shows, customers of most of the banks are satisfied with the overall services that they receive from their bank. More specifically, 54% of Alpha Bank customers, 60% of Eurobank customers, 67% of Emporiki Bank customers, 44% of National Bank of Greece customers and 50% of Piraeus Bank customers feel quite satisfied with the received services. On the other hand, customers of Agrotiki Bank (43% of them) believe that the bank should make improvements in order to keep its customers satisfied and be able to compete other banks in sector of online services.
5. Conclusions

5.1 General Conclusion
First it should be mentioned are a general view on how customers evaluate e-banking services of Greek banks. The view that is received from the questionnaire is that have adapted e-banking to their services and customers are positive to this behavior. In general terms, customers are satisfied with e-services that they receive from their banks as it is concluded from the final question. It is obvious, as it is resulted from most of the questions that the majority of the respondents, who represent the aggregate of Greek banks’ customers, seem to be satisfied with the most of the e-services that they receive from the banks. Nevertheless some improvements should be made in order customers to feel more confident in using e-banking services. These improvements are referring to privacy, problem solution, accuracy and organization of websites. The fact that there are some ambiguities in the way that banks perform some of the e-services that they provide to their customers should not be faced as a drawback in evaluation of e-banking quality in Greece due to the fact that e-services in Greek banking sector are still in their early stages and has a long way of improvement.

5.2 Limitations of the Study and Future Research
This Dissertation investigates and focuses its work on internet service quality and its effects on customer satisfaction by examining the Greek internet banking sector. Despite the fact that the results provide an obvious relation between the perceived quality of internet banking service and the overall customer satisfaction level, there are several limitations which may have cause biases.

First of all, the main limitation appertains with the chosen sample of the research. More analytically, the number of the structured questionnaires that was used to collect
the data was quite small. A larger sample it could be used to produce a more reliable result, but this could not be possible due to unwillingness of responding the questionnaire. The time period that the research was conducted was restrictive. Also, a larger number of respondents may overcome the purposes of this research study.

Another limitation that is relevant to the sample is the population’s variety. The majority of the respondents (53%) was between 26 and 35 and had a bachelor degree. Due to that, the population does not present large variety, so the results might differ with other participant populations.

Except for a larger population sample that was mentioned above, future work could focus on the collection of sample that consists of various populations or even various cultural contexts (lower or higher penetration rates). In other words, the research could be extended to populations from other countries.

Moreover, the instrument of the internet service quality measurement (E-S-QUAL, Parasuraman (1985), may have cause biases due to the fact that it is a nonrealistic instrument, which despite the rewordings on the items, is entirely based on published literature. So, future studies could use a more complete as well as a more realistic instrument for measuring internet service quality in banking sector.

5.3 Managerial Implications
As the results of the study showed, internet banking services quality in Greece is decisive on customer’s overall satisfaction. Due to this, bank managers should give bigger attention on the quality of internet banking. This could be applicable by using a complete and extensive internet services quality program which could provide banks with feedback, in order to improve their internet services. Moreover, emphasis should be given in the creation of a stable, reliable financial institution which provides their customers with efficiency, reliability, responsiveness, empathy, privacy and assurance. In other words, to satisfy all the 6 aspects that E-S-QUAL covers.
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EFG Eurobank: [http://www.eurobank.gr](http://www.eurobank.gr)

Emporiki Bank: [http://www.emporiki.gr](http://www.emporiki.gr)

National Bank of Greece: [http://www.nbg.gr](http://www.nbg.gr)

Piraeus Bank: [http://www.piraeusbank.gr](http://www.piraeusbank.gr)
Appendix
The Quality of e-banking and the Satisfaction of Greek Customers While Using it and its Services

This questionnaire is part of a master's thesis conducted by MSc student of The Hellenic International University of Thessaloniki. Your answers are strictly confidential and will only be used for statistical analysis. Therefore, you will not be asked to provide any information that can identify you.

* Απαιτείται

Which is your primary bank? *Using the term "primary bank" means the bank that you perform most of your banking transactions

- National Bank of Greece
- Agrotiki Bank of Greece
- Emporiki Bank
- Alpha Bank
- Pireaus Bank
- EFG Eurobank
- None of the Above

Have you contacted your primary bank during the past 12 months with a problem or question? *

- Yes
- No

How satisfied are you with your primary bank's e-banking services in each of the following areas? [Get on the website quickly] *

1 2 3 4 5
<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>Strongly Agree</th>
</tr>
</thead>
</table>

How satisfied are you with the ability of your primary bank's website to provide you with information easy and quick in each one of the following areas? [Easy to find the information on the website] *

1 2 3 4 5

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>Strongly Agree</th>
</tr>
</thead>
</table>

How satisfied are you with the time that is needed in order to complete a transaction through the bank's website in each one of the following areas? [Easy to complete a transaction through the bank's website] *

1 2 3 4 5

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>Strongly Agree</th>
</tr>
</thead>
</table>

How satisfied are you with the simplicity and comprehension of your bank's website in each of the following areas? [Using the bank's website does not require a lot of effort] *

1 2 3 4 5

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>Strongly Agree</th>
</tr>
</thead>
</table>

How satisfied are you with the organization and structure of the bank's website in each of the following areas? [The organization and structure of the online content is easy to follow] *

1 2 3 4 5

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>Strongly Agree</th>
</tr>
</thead>
</table>

43
How satisfied are you with the ability of your bank to fulfill its promises towards you in the expected time in each of the following areas? [following its promises on a certain time] *


1 2 3 4 5

strongly disagree ❌ | ❌ | ❌ | ❌ | ❌ | strongly agree

How satisfied are you with the bank's intention to solve the problems or the questions that occur during your online transactions in each of the following areas? [It always shows interest in solving online problems] *


1 2 3 4 5

strongly disagree ❌ | ❌ | ❌ | ❌ | ❌ | strongly agree

How satisfied are you with the accuracy that the bank performs the online services in each of the following areas? [Performs the online services right the first time] *


1 2 3 4 5

strongly disagree ❌ | ❌ | ❌ | ❌ | ❌ | strongly agree

How satisfied are you with the bank's promotion of the online services at the time it promises to do so in each of the following areas? [The bank makes accurate promises about the services being delivered] *


1 2 3 4 5

strongly disagree ❌ | ❌ | ❌ | ❌ | ❌ | strongly agree

How satisfied are you with the ability of your bank to inform you the exact time that your transaction will be performed in each of the following areas? [The bank tells exactly when the transaction will be performed] *


1 2 3 4 5
How satisfied are you with the bank's intention to accommodate you when you make an online transaction in each of the following areas? [The bank gives you prompt online service] *

1 2 3 4 5

Strongly disagree 〇 〇 〇 〇 〇 Strongly agree

How satisfied are you with the willingness of the bank's staff to help you when an online problem occurs in each of the following areas? [The bank is always willing to help you] *

1 2 3 4 5

Strongly disagree 〇 〇 〇 〇 〇 Strongly agree

How satisfied are you with the connection that the online service of the bank shows when questions occur in each of the following areas? [It is never too busy to respond to your questions] *

1 2 3 4 5

Strongly disagree 〇 〇 〇 〇 〇 Strongly agree

How satisfied are you with the bank's ability to resolve problems encountered with your online transactions on a certain time in each of the following areas? [It resolve problems quickly] *

1 2 3 4 5

Strongly disagree 〇 〇 〇 〇 〇 Strongly agree
How satisfied are you with the attention that the bank gives at you individually in each of the following areas? [It gives individual attention] *

1 2 3 4 5

strongly disagree ◯ ◯ ◯ ◯ ◯ strongly agree

How satisfied are you with the operating hours of your bank's help center for all its customers in each of the following areas? [It have convenient operating hours] *

1 2 3 4 5

strongly disagree ◯ ◯ ◯ ◯ ◯ strongly agree

How satisfied are you with the attention that the help center and the call center of your bank give you personally in each of the following areas? [It gives personal attention] *

1 2 3 4 5

strongly disagree ◯ ◯ ◯ ◯ ◯ strongly agree

How satisfied are you with the understanding that the help center and the call center of your bank show to your specific needs in each of the following areas? [It understands your specific needs] *

1 2 3 4 5

strongly disagree ◯ ◯ ◯ ◯ ◯ strongly agree

How satisfied are you with the way that the bank uses your personal information given by online transactions in each of the following areas? [The bank misuses your personal information] *

1 2 3 4 5
### Demographic questions

Please answer the following demographic questions. These questions will help us categorize your answers according to your demographic parameters and will help us reach useful conclusions.

**Your gender.** *

- [ ] Male
- [ ] Female
Your age range. *

- ☐ 18-24
- ☐ 25-34
- ☐ 35-44
- ☐ 45-54
- ☐ 55-64
- ☐ 65+

Education level you have completed *

- ☐ Primary school (6 years of education)
- ☐ Secondary School (12 years of education)
- ☐ College or University Degree
- ☐ Master's Degree or other Postgraduate studies
- ☐ Phd
- ☐ Post Doctorate Research

Range of your annual income that lies in monthly. *

- ☐ less than 500
- ☐ 501-750
- ☐ 751-1000
- ☐ 1001-1250
- ☐ 1251-1500
• 1501 or more