

The Transition to Online Banking in Greece: Dimensions and Trigger Factors Affecting Customer Satisfaction and Behavioural Intentions

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Abstract: The dual purpose of the current research is a) to investigate the dimensions/parameters affecting customer preferences/intentions for online banking services in Greece, and b) to identify and study the trigger factors motivating customers into moving from traditional branch to online banking. The research also aims at determining whether the trigger factors differentiate between two survey periods. The survey is based on a structured questionnaire answered by personal interviews, and was conducted in various geographical areas in Greece over two periods, the early period of the Greek debt crisis, 2012, and six years later, 2018. In order to survey the trigger factors from branch to online banking services, the research employed the model of Logistic Regression, whereas the factors involved in overall customer satisfaction were analyzed via Factor Analysis. In addition, the differentiation of overall satisfaction was statistically tested using Structural Equation Models (SEM).

The analysis demonstrated that the strongest trigger factor for the transition is security of online transactions although other factors come stronger in the second of the two periods and, finally, that overall satisfaction displayed most positively in the last six years. Analysis also showed that from the six initial hypotheses that could serve as quality dimensions of satisfaction, four (ease of use, usefulness, commitment and recommendation). The results will contribute to the currently stated need of the Greek banking industry to move from the existing, expensive, branch-based model to a digital banking set up. The research results can provide bank managers with some further insights into the potential trigger factors affecting customers' behavioral intentions and satisfaction. The research findings are limited by sampling design and size; it is recommended that further research will provide additional insights into online banking service quality and customer satisfaction. The research contributes to the rather poor literature of the determinants, which eventually determine a smoother transition of bank customers to online banking.

Keywords - Crisis, Trigger factors, online banking, Customer satisfaction

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I. Introduction

Information and communication technologies (ICT) have been significantly affecting the way customer perceive delivered services and products of all industries over the last few years. Inevitably, banks also appear to be affected by the dynamics which have never been so influential before, and which force them to acknowledge new models of development and practices. In an effort to remain competitive in terms of operating expenses and at the same time boost customer-centric models, Banks and financial institutions have been trying to implement various product/service channel approaches, with a view to meeting the ever-changing needs of various customer segments (Frazier, 1999; Moriarty and Moran, 1990). In the new era of digital transformation, Internet is the main distribution channel for banking product / service delivery. Internet banking, defined as accessing online account information or making electronic transactions, such as bank payments or transfers (European Commission, 2018), is considered the new norm, thus, driving any Future-Ready Bank towards digitization and digitalization as absolute priorities. By employing, apart from online banking, Phone Banking, ATM, WAP-banking and other electronic payment systems, which are not Internet-operated (Cheng *et al.*, 2006), the emerging digital-centric banking model, in close collaboration with other major technological changes (i.e. Big Data Analytics and AI), has the potential to provide fully customized and personalized services. It, thus, removes from banking institutions a big part of their fixed cost base by allowing them to operate with fewer staff and physical branches. Overall, digital technologies and practices will play a pivotal role in transition, offering banks "smarter" approaches and loyalty and devotion of customers combined with valuable insights for the improvement of customer experience (CX).

To illustrate, online banking can heavily improve customer satisfaction and loyalty/commitment by facilitating delivery of financial services at better prices, convenience, ease, security, privacy, and without physical bank branch restrictions, i.e. operating hours (Al-Somali *et al.*, 2009; Guerrero *et al.*, 2007; Pikkarainen *et al.*, 200; Polatoglu *et al.*, 2001).

In effect, the transition to online banking is fast gaining traction as the most popular trading method in Europe. According to Eurostat (2018), about half (51%) of adult Europeans use Internet banking, whereas in Greece, the percentage of online banking users is reduced to 25%. Despite the advantages of online banking for banking institutions and customers, a large part of the potential banking clientele in Greece are still skeptical and resist such services (Madininos *et al.*, 2013).

Online banking is a major competitive advantage; however, if seen differently, it is now fast becoming a hygiene factor. Given the enduring harsh economic conditions worldwide, the transition from bank branch to online banking cannot be missed in any bank strategic planning. This becomes especially true for the Greek Banking industry, which continues to operate in highly unfavorable conditions. Following the collapse of many financial institutions worldwide, the Greek banking sector underwent a major reduction in terms of the number of banks (and not only). The number of Greek banks reduced, from December 2007 to December 2016, from 64 to 39 entities, with only four major (now becoming systemic) banks and Attica Bank enjoying a huge concentration of more than 95% of the total volume of assets, compared to only 67.7 % at the end of 2007. According to the Hellenic Bank Association documentation data (2017), from the beginning of the crisis in late 2008-9 -when the banking landscape in Greece had started being negatively affected- to 2017 the number of branches and ATMs dropped to 1,736 (-42.5%) and 2,350 (-26%), respectively.

The major switch of the Greek society towards non-cash transactions took place in July 2015, when capital control measures were implemented and businesses and consumers in Greece had to adjust rapidly to heavy restrictions on cash withdrawals and capital transfers, and to the use of electronic payments. Inevitably, the restrictions in the flow of cash favored the use of alternative bank customer service channels (Internet, mobile banking, phone banking, ATM, APS) over physical bank branch transactions. Remarkably, in 2015-2016, there was a significant increase in a) the volume and value of Internet banking transactions, which grew by 40% and 29% respectively, and b) the volume and value of mobile banking transactions, with the remarkable respective increase of 142% and 82%.

The research is structured as follows: the first section includes key information on the relevant literature; the following section discusses the conceptual framework of the study and the research hypotheses. Next, the research describes the research methodology and discusses the results. The final section consists of the conclusions and the managerial implications.

II. Literature Review

The present empirical study is based on the concept of technology acceptance model (TAM) (Davis, 1989), which is an instrument widely used by researchers to enable predicting and investigating user adoption and usage of e-services, and aims at exploring the factors affecting the shift towards online banking? in Greece and also examining how the Greek banking clientele has been understanding and potentially adopting online banking at two different time intervals, which actually coincide with the first and the latest (last?) period of the crisis for the Greek environment, i.e. 2012 and 2018, respectively. The research focuses on levels and attributes of customer satisfaction with online service quality and, more specifically, on users' perceptions of frictionless experience and convenience/usefulness of e-banking as well as of the sense of satisfaction and security when using e-banking channels.

Review of the relevant literature reveals that customer- and situational-specific factors affect overall satisfaction (Zeithaml and Binter, 2000). According to Giese and Cote (2000), customer satisfaction is perceived as a summary affective response focused on product acquisition and/or consumption, and displays various degrees of intensity and limited duration.

In terms of banking services, customer satisfaction has been directly associated with service quality (LeBlanc and Nguyen, 1988; Avkiran, 1994; Blanchard and Galloway, 1994); thus, the degree of e-satisfaction is determined by the quality of e-services, price level and e-purchasing processes (Wang, 2003). Santos (2003) defines e-service quality as “the consumers’ overall evaluation and judgment of the excellence and quality of e-service offerings in the virtual marketplace”.

Remarkably, research has indicated that customer satisfaction with service quality is associated with specific behavioral responses and attitudes, such as commitment and recommendation (e.g. Reichheld and Sasser, 1990; Cronin and Taylor, 1992; Parasuraman *et al.*, 1994; Athanassopoulos *et al.*, 2000). Thus, as service quality perceptions are focused on purchase intentions and willingness, they have a positive effect on intentional behaviors (Boulding *et al.*, 1993)

Among the large number of e-service and website quality measurement tools for customer satisfaction, the most frequently used are SITEQUAL (Yoo & Donthu, 2001), WEBQUAL (Loiacono, et

al., 2007), E-SERVQUAL (Zeithaml, et al., 2002), and Parasuraman's *et al.* (2005) E-SQUAL, measuring service quality in terms of four core dimensions: efficiency, privacy, fulfillment and availability. To investigate the determinants of e-banking acceptance over time, the present research has established its conceptual framework on E-SERVQUAL, and, more specifically, on Cheng's *et al.* (2006) service quality dimensions, that is, Perceived Usefulness, Perceived Ease of Use, Perceived Web Security and Fulfillment. In detail, the research examines e-banking users' overall satisfaction and commitment in terms of the specific researched service quality dimensions/factors over two periods, 2012 and 2018. Finally, the study investigates the factors triggering the transition from the traditional service model of branch face-to-face interaction to the digital world of e-banking. In addition, it attempts to highlight and prioritize these transition trigger factors and their differentiation between the two survey periods, 2012 and 2018.

The conceptual framework of the study: proposed model and hypothesis development

As already discussed, the theoretical model of the research explores customer satisfaction on the basis of e-service quality dimensions discussed in the relevant literature. The graph below (Fig.1) illustrates the specific dimensions, which are related to customer overall satisfaction, and contribute to formulating the six research hypotheses.

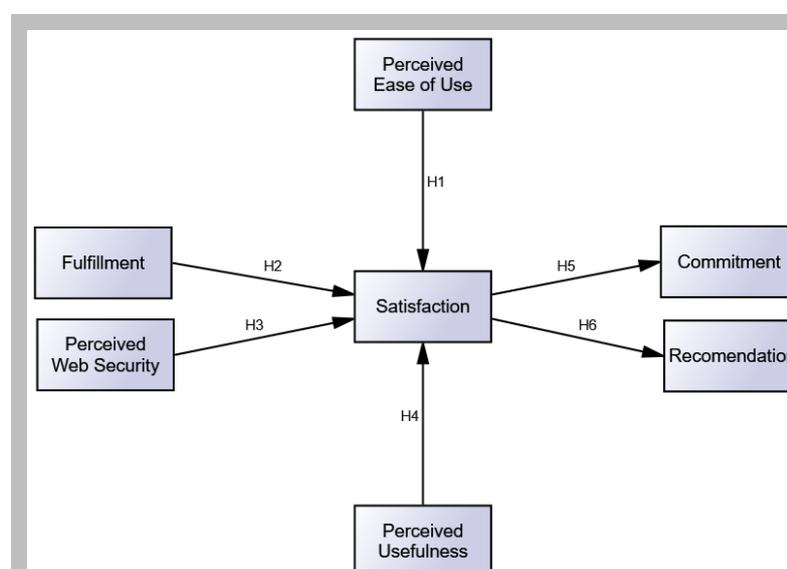


Fig.1. Research model

To elaborate on the conceptual framework, the following interrelationships between the research factors and hypothesis testing are explored:

Perceived Ease of Use. Davis *et al.* (1989; p. 985) defines ease of use (PEU), as “the degree to which the user expects the target system to be free of efforts”, whereas Jun and Cai (2001) indicate a direct relationship between ease of use and e-services. They argue that customers prefer online services on account of their specific significant aspects, such as speed of response and easy navigation. In this framework, customer satisfaction appears to be closely related to Perceived Ease of Use. Thus, the hypothesis formulated in terms of the specific dimension is:

H1. Perceived Ease of Use has a positive impact on customer satisfaction.

Perceived Fulfillment. It implies the degree to which expectations and promises about a product or service delivery and availability are fulfilled; it also includes accuracy of service promises (Zeithaml *et al.*, 2002), thus, highlighting its impact on customer satisfaction. The following hypothesis is made in terms of Perceived Fulfillment:

H2. Perceived Fulfillment has a positive impact on customer satisfaction.

Perceived Web Security. It is defined as “the extent to which one believes that the World Wide Web is secure for transmitting sensitive information” (Salisbury *et al.*, 2001), and determines customers' behavioral intentions (i.e. willingness) to use online services and information (Friedman *et al.*, 2000; Wang *et al.*, 2003). Security is considered a major determinant for e-service quality. Thus:

H3. Perceived Web Security has a positive impact on customer satisfaction.

Perceived usefulness. In terms of Davis *et al.* (1989; p. 985), perceived usefulness (PU) is one’s “subjective probability that using a specific application system will increase his or her job performance”. Perceived usefulness is positively related to the adoption of information technology and, according to the relevant literature, is considered as a most popular factor (Guriting *et al.*, 2006; Gounaris *et al.*, 2008). In this framework, the following hypothesis is formulated:

H4. Perceived Usefulness has a positive impact on customer satisfaction.

Customer satisfaction. It is a rather ambiguous and multi-dimensional concept, which reflects customers’ perception and evaluation of a product or service, and is often measured along various dimensions. The state of satisfaction results from consumers’ purchasing experiences, and is determined by a number of emotional and physical variables associated with behavioral responses. Overall, e-banking service quality is directly related to customer satisfaction (Ranaweera and Neely, 2003; Zhou, 2004; Bei and Chiao, 2006), and, consequently, customer commitment (loyalty), which is commonly considered a major requirement for developing long-term relationships with customers (Reichheld and Scheffer, 2000). Thus, focusing on the great significance of satisfaction and the interrelationship it has with commitment (loyalty) and recommendation, the two hypotheses made in terms of customer satisfaction are:

H5. Customer satisfaction has a positive impact on Commitment.

H6. Customer satisfaction has a positive impact on Recommendation.

Finally, based on the considerations deriving from a pilot survey prior to the present study, the research is focused on the following 7 parameters (factors), which trigger a shift from traditional to online banking:

F1: Transparency of Customer contractual terms

F2: Security of web-based transactions

F3: Effective & Efficient operational structure of the bank site

F4: User-Friendly bank site

F5: Bank Credibility

F6: Availability of on-line customer services

F7: Aesthetics & Design of site

Apart from online service Security, Effective & Efficient operational structure of the bank site and Availability of on-line customer services, which have already been discussed above as key considerations of online transactions, Transparency of Customer contractual terms (Junuzović, 2018), and Bank Credibility (Cox & Dale, 2001; Jun & Cai, 2001) are major quality dimensions, which are likely to trigger transition to online banking. In addition, research on e-service quality has demonstrated that site Aesthetics and Design are considered significant for engaging customers in online services (Santos, 2003).

III. Research Methodology

Sample and data collection

The sample was drawn from various geographical areas in Greece. The survey was based on a questionnaire, which the subjects were asked to answer via personal interviews taken by trained students to ensure response validity and reliability, and, accordingly, indicate the differentiation of banking overall customer satisfaction over two survey periods: the first, which is the period during the first years of the Greek debt crisis (from 20th October to 20th December 2012), and the second, a six-year time after the onset of the debt crisis (from 20th October to 20th December 2018). The corpus of data includes 332 questionnaires for 2012 and 286 for 2018. The participants’ demographic information is demonstrated in Table 1 below.

Table 1: Demographic information

Percent (%)	2012 Y	2018 Y
Gender		
Male	50	52.1
Female	50	47.9
Age	32.2	26.9
≤24	25.6	17.5
25-34	19.3	22.0
35-44	14.5	21.7
45-54	5.7	9.4
55 -64	2.7	2.4
65+		

Income per year (€)	35.6	47.7
≤10000	46.8	43.8
10001-30000	13.7	4.4
30001-60000	3.9	1.1
60000+		
Education level	33.7	28.7
Secondary education graduates	66.3	71.3
Higher education graduates		
Working Status		
Private employee	24.8	25.5
Self-employed	14.6	18.5
Civil servant	15.5	14.9
Student	28.6	25.1
Special scientist	2.2	3.3
Pensioner	6.5	5.1
Unemployed	7.8	7.6

Research instruments

To measure the 4 study variables, the research includes 20 items (questions). In detail, it includes six items to investigate Perceived Usefulness (Cheng *et al.*, 2006), six for Perceived Ease of Use (Jun and Cai, 2001; Cheng *et al.*, 2006), four for Perceived Web Security (Davis, 1989; Salisbury *et al.*, 2001), and four items for Fulfillment (Zeithaml *et al.*, 2002; Parasuraman *et al.*, 2005).

To measure e-banking customers' perceptions of e-banking quality, a seven-item battery was developed (*1 Absolutely disagree – 7 Absolutely agree*), whereas overall satisfaction was examined on the basis of a 7-point Likert-type scale (*1 Completely dissatisfied – 7 Completely satisfied*); similarly, commitment and recommendation were also examined in terms of a 7-point Likert-type scale (*1 Very unlikely – 7 Very likely*).

Transition from traditional to online banking was measured via a seven-item battery (*1 Not at all important – 7 Very important*), and in terms of:

- F1: Transparency of Customer contractual terms
- F2: Security of web-based transactions
- F3: Effective & Efficient operational structure of the bank site
- F4: User-Friendly bank site
- F5: Bank Credibility
- F6: Availability of online bank services
- F7: Aesthetics & Design of site

Use of online transactions was measured by a nominal variable with Yes/No values.

IV. Data Analysis And Results

The research results were drawn by carrying out, first, an Exploratory Factor Analysis (EFA) in order to determine the 4 study variables, surveyed in 20 items (questions); the modified model for the data of 2018 was produced by means of Confirmatory Factor Analysis (CFA). Next, the time differentiation of the customers' overall satisfaction and behavioral intentions (recommendation, fulfillment) was investigated by means of Structural Equation Model Analysis (SEM), and, finally, the model of Logistic Regression was applied for the data of 2012 and 2018, using the 7 factors as predictors, and the Yes/No variable question about the *use of online transactions* as the dependent variable.

Model 2018

Exploratory Factor Analysis (EFA 2018)

The corpus of data was analyzed via an Exploratory Factor Analysis using SPSS. Table 2 below shows the rotated factor matrix, which results from a Varimax rotated principal axis factor extraction of the independent variables, and indicates the four factors emerged as well as their factor loadings. The SPSS Exploratory Factor Analysis (EFA) evaluates the Cronbach's alpha, ranging from 0.640 to 0.849. To ensure convergent validity and item reliability, each item was evaluated separately. All factor loadings, which were larger than 0.5, represent an acceptable significant level of internal validity, and ranged from 0.550 to 0.846 for

Perceived Ease of use (PEOU), 0.746 to 0.767 for Fulfillment (FUL), 0.741 to 0.802 for Perceived Web Security (PWS) and 0.689 to 0.736 for Perceived Usefulness (PU). As all factor loadings were of an acceptable significant level, 14 questionnaire items were further analyzed (6 items-questions were deleted as factor loading <0.4).

Table 2: Factor Loadings (2018)

	Factor loading	Cronbach alpha	Variance explained (%)
Perceived Ease of use (PEOU)		.849	21.900
B1: Using bank website (BW) services is easy for me	.832		
B2: I find my interaction with BW services clear and understandable	.846		
B3: Overall, I find BW services easy	.737		
B5: It is easy for me to remember how to perform tasks using BW	.657		
B8: I find it easy to get BW to do what I want to do	.550		
Fulfillment (FUL)			11.742
B6: Banks keep their promises	.746	.640	
B7: My online bank transactions are always accurate	.767		
Perceived Web Security (PWS)		.798	15.695
B12: I would feel secure when I send sensitive information via BW	.741		
B13: BW is a secure means to send sensitive information	.802		
B14: Overall, BW is a safe place to communicate sensitive information	.766		
Perceived Usefulness (PU)		.792	18.030
B17: Using BW would enable me to accomplish tasks faster	.709		
B18: Using BW is time saving	.736		
B19: Using BW makes it easier to do my job	.735		
B20: Overall, I find BW useful	.689		
	Total cumulative (%)		67.367

Confirmatory Factor Analysis

To test model fitness, a hypothesis model (Fig. 1) was applied and a Confirmatory Factor Analysis (CFA) was performed on the data. The results demonstrate a recursive hypothesis model; in other words, it indicated that the model is uni-directional (Table 2). The default model estimates were calculated on the basis of 153 distinct sample moments (i.e., pieces of information); 41 individual parameters were estimated, leaving 112 degrees of freedom. Minimum iteration was achieved, thereby ensuring that the estimation process produced an acceptable solution; thus, it eliminated concerns about multicollinearity effects. The result analysis also enabled a quick overview of the model fit, which includes the χ^2 value (193.08), in accordance with its degrees of freedom (112) and probability value (<0.0005) (Table 3).

Figure 2 demonstrates that two of the originally hypothesized items are insignificant (direct positive impact of FUL and PWS on SATISFACTION); five new items have also been added to the model, based on the modification index function of AMOS. As a result, the modified structural model fits to the data well. In detail, Chi-Square/df is 1.724 (indices less than 5 indicate acceptable fit values (Kline, 2015). In addition, CFI and GFI fit values exceed threshold 0.9 (CFI = 0.952, GFI = 0.903), and RMSEA is 0.06 and PCLOSE is 0.118, which are considered acceptable in the specific statistics. NFI estimate is 0.895; thus, it equals threshold 0.9, that is, the lowest limit to indicate acceptable model fit (Table 3). It becomes, therefore, evident that, in terms of the goodness-of-fit test results, the model is acceptable as all significant indicators are above the acceptable values (Hoyle, 1995).

Table 3: Fit statistics

Model fit	Suggested	Obtained
Chi-Square		193.08
df		112
Chi-Square Significance	P<0.05	<0.0005
Chi-Square/df	<5.0	1.724
GFI	>.90	.903
NFI	>.90	.895
CFI	>.90	.952

RMSEA	<.08	.06
PCLOSE	>.05	.118

When it comes to hypothesis testing (H1-H6), four of the originally formulated hypotheses (H1, H4, H5 and H6) are acceptable, and two (H2, H3) are rejected. In detail, it is demonstrated that PEOU has a statistically significant positive effect on SATISFACTION (0.46) with e-banking services, whereas FUL does not have a direct impact on SATISFACTION, in contrast to the initial hypothesis. On the other hand, FUL appears to have a direct impact on PU (0.41), and, thus, a statistically significant positive impact on SATISFACTION (0.42). Similarly, PWS, despite the fact it does not have a direct statistically significant positive impact on SATISFACTION, it has a direct statistically significant impact on PU (0.46), and, consequently, a statistically significant positive impact on SATISFACTION. It is also worth noting that PEOU has a statistically significant positive impact on COMMITMENT (0.57), and, thus, on RECOMMENDATION (0.48). Finally, SATISFACTION has a statistically significant positive effect on both COMMITMENT (0.21) and RECOMMENDATION (0.42). Overall, despite the fact that the initial hypotheses are not directly accepted (H2, H3), since there is a causal relationship with PU, they can be partially acceptable.

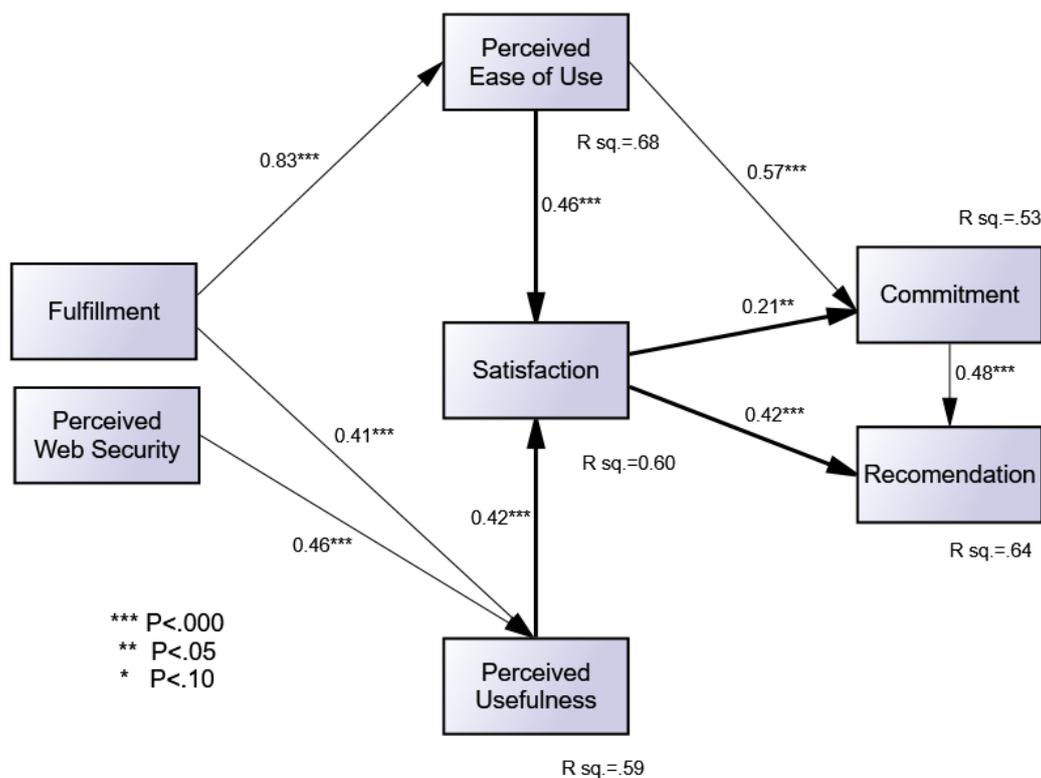


Fig. 2: The modified model (2018)

Comparing Model 2018 and Model 2012

Analysis of 2012 data resulted in a modified structural model which fits the data well (see Fig. 3). In detail, Chi-Square/df is 2.015, CFI, GFI and NFI fit indices exceed limit 0.9 (CFI = 0.954, GFI = 0.922 and NFI = 0.914). In addition, RMSEA is 0.058 and PCLOSE 0.108, acceptable in the statistics literature. Thus, the model is considered acceptable.

With regard to covariance between the two models (2012 and 2018), the analysis demonstrated the following results:

- Although FUL does not have a direct impact on SATISFACTION in 2018, it has a direct statistically significant positive impact (0.22) in 2012.
- In both models, 2012 and 2018, PEOU has a direct statistically significant positive impact on SATISFACTION (0.23 and 0.46, respectively)
- PWS has a direct statistically significant positive impact on SATISFACTION (0.13) in 2012, whereas there is no direct impact on SATISFACTION in 2018.

- PU has a statistically significant positive impact on SATISFACTION in both models (0.27 in 2012 and 0.42 in 2018).
- No significant differentiation of user intentions between 2012 and 2018 was demonstrated.

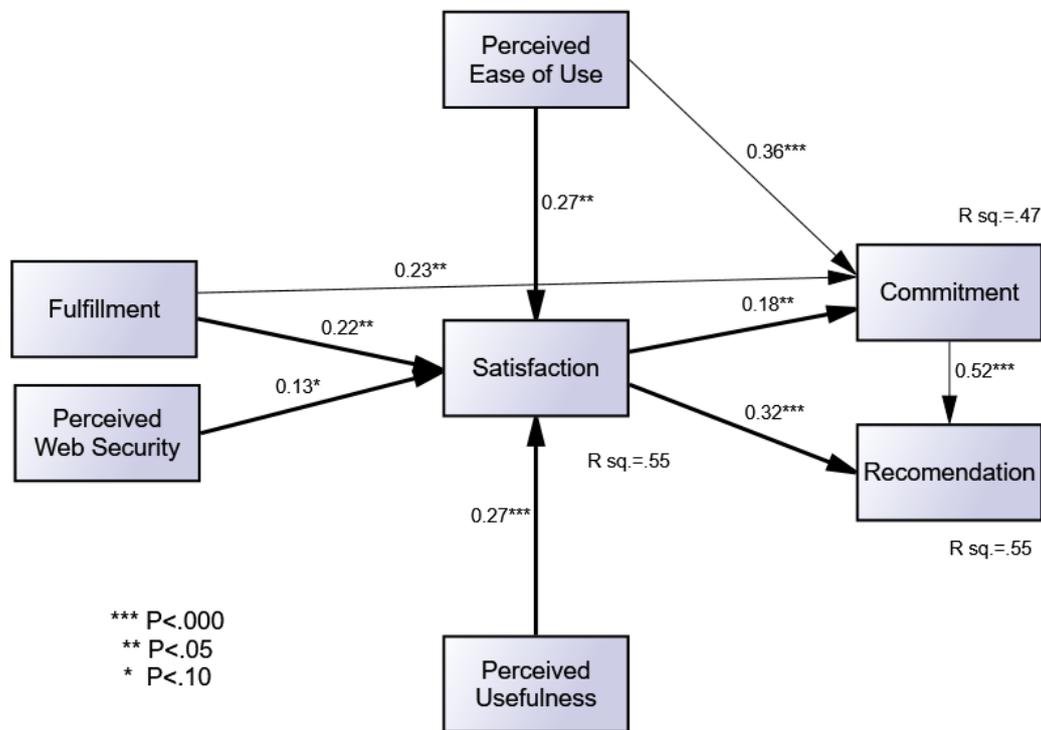


Fig. 3: The modified model (2012)

Transition Trigger Factors

Logistic Regression (2012)

In this section, the study focuses on the common trigger factors related to traditional bank services against online banking transactions for both 2012 and 2018.

Review of the relevant literature reveals the following 7 factors (see, column1, Table 4) affecting bank customer attitudes towards online rather than traditional banking transactions. Firstly, the data of Y 2012 were examined via Logistic regression with dependent variable the nominal Yes/No values for the item *use of online transactions*. The predictors are the variables below:

- F1: Transparency of Customer contractual terms
- F2: Security of web-based transactions
- F3: Effective & Efficient operational structure of the bank site
- F4: User-Friendly bank site
- F5: Bank Credibility
- F6: Availability of online bank services
- F7: Aesthetics & Design of site

The results are demonstrated in Table 4. The fitting indicators of Logistic regression displayed acceptable values, in accordance with the relevant literature. In detail, Chi-square= 111.925 with df=7, p-value<0.05 and R-Square of Cox & Snell and Nagelkerke, 0.316 and 0.446, respectively. Of the independent variables, only F2, Security of transactions executed on the web, seems to be statistically significant with b2=0.534 (see, column B, Table 4) and p<0.05 (see column p, Table 4). It becomes, therefore, evident that security of online transactions affects customers' attitudes, which may indicate, not surprisingly, preference of traditional branch over-the-counter payment.

Table 4: Logistic Regression (2012)

Dependent variable: Use of online transactions	Values Yes No					
Independent variables	B	SE of B	Wald's χ^2	df	p	Exp(B) Odds ratio
F1: Transparency of Customer contractual terms	.212	.140	2.308	1	.129	1.236
F2: Security of web-based transactions	.534	.127	17.566	1	.000	1.705
F3: Effective & Efficient operational structure of the bank site	.179	.154	1.354	1	.245	1.196
F4: User-Friendly bank site	.054	.139	.154	1	.695	1.056
F5: Bank Credibility	.154	.128	1.449	1	.229	1.166
F6: Availability of online bank services	.065	.138	.219	1	.640	1.067
F7: Aesthetics & Design of site	-.107	.097	1.205	1	.272	.899
Constant	-5.297	.843	39.487	1	.000	.005
Statistical test (Overall model evaluation)	χ^2			df	p	
	111.925			7	.000	
Score test	Cox & Snell		Nagelkerke			
R Square	.316		.446			

Logistic regression (2018)

Logistic regression was also applied on the 2018 data, with dependent variable the nominal variable for *use of online transactions* and predictors the same variables shown below:

- F1: Transparency of Customer contractual terms
- F2: Security of web-based transactions
- F3: Effective & Efficient operational structure of the bank site
- F4: User-Friendly bank site
- F5: Bank Credibility
- F6: Availability of online bank service
- F7: Aesthetics & Design of site

Data analysis for 2018 is shown in Table 5. The model of Logistic regression is fitting well to the data with indicators Chi-square=174.999 with df=7, p-value<0.05 and R-Square of Cox & Snell and Nagelkerke, 0.458 and 0.610, respectively. Variables F2 (p<0.05), F3 (p<0.05), F4 (p<0.05), F5 (p<0.05), F6 (p<0.05) and F7 (p<0.05) are statistically significant (see column p, Table 5) with coefficients B, b2=0.737, b3=0.570, b4=0.654, b5=0.621, b6=0.424 και b7=0.563, respectively (see column B, Table 5). Therefore, beyond any security concerns, it seems that, for 2018, a number of new parameters emerge for bank customers, such as overall ease of use, easy-to-browse bank site, as well as site aesthetics and design, and bank credibility and ability to support and deliver services.

Table 5: Logistic Regression (2018)

Dependent variable: Use of online transactions	Values					
	Yes No					
Independent variables	B	SE of B	Wald's χ^2	df	p	Exp(B) Odds ratio
F1: Transparency of Customer contractual terms	.186	.179	1.085	1	.298	1.204
F2 Security of web-based transactions	.737	.267	7.639	1	.006	2.089
F3: Effective & efficient operational structure of the bank site	.570	.215	7.055	1	.008	1.769
F4: User-Friendly bank site	.654	.205	10.201	1	.001	1.924
F5: Bank Credibility	.621	.225	7.624	1	.006	1.860
F6: Availability of online bank service	.424	.207	4.201	1	.040	1.528
F7: Aesthetics and Design of site	.563	.119	22.314	1	.000	1.755
Constant	-22.153	2.812	62.062	1	.000	.000
Statistical test (Overall model evaluation)				χ^2	df	p
				174.999	7	.000
Score test						
R Square				Cox & Snell		Nagelkerke
				.458		.610

V. Conclusions and implications

In the context of digitalization, which seems to determine the rules of competition and economy, Banking & Finance, despite having been the most stable and controlled industries resisting changes for long, has been experiencing a dramatic change. The impetus of transformations produced by digitalization has been recognized only recently. In the new global financial framework, trends such as the Internet of Things, cloud and virtualization, big data analytics, social media, advanced machine learning, 3D printing, and mobile networks, are becoming the way to do business, which implies that digital technology is the core rather than support of any kind of business. In banking, the new model is a direct or Internet-only bank, encompassing all new trends in customer's seamless and frictionless experience, technological capabilities, regulatory requirements, in an even more digitized world. Review of the relevant literature demonstrates the multiple benefits of e-banking for customers, such as faster and time saving services and fewer practical problems, i.e. traffic or queues (Gurau, 2002; Chavan, 2013). In addition, it highlights how modern and new age technology has gradually transformed interactions among businesses and customers (Mayer, 2009), and formed a new background for the design, development and delivery of services. Customers' tastes, "spoiled" by advanced industries, such as the mobile telephony, appear to be developing expectations of very high standard services on a "here and now" basis, from all other industries engaged in service delivery, as well.

The results of the present research demonstrate that customer expectations and satisfaction are setting new imperatives for change. The search on the transition trigger factors on 2012 and then 2018 have highlighted a factor that is, unsurprisingly, a pivotal trigger to customers' minds, the *security of web-based transactions*. Yet, our research also recorded a notable behavioral shift from 2012 to 2018. On the 2012 survey, the strong preference to on-line security (B of .534 vs. B of .212 for the second closet following variable of *transparency of contractual terms*), leads to a strong bias of customer perception towards security over all other variables selected. In contrast, the survey of 2018 demonstrates a host of other variables that are now virtually on par with security (on line security B of .737 vs User Friendly site B .654, Bank Credibility B .621, Site design B of .563 etc.). This trend was emphasized in the survey as the subjects/customers in model 2018 seem to be more focused

on “easy” and “fast” rather than “safe” and “efficient” use, as their behavioral shift has been greatly affected by a number of significant environmental externalities: capital control cash flow restrictions, tax reductions on the count of payments done electronically, smartphone penetration, advanced m-banking environments, and increased digital literacy. Likewise, the six research hypotheses considered (i.e. the six possible dimensions that ensure customer satisfaction), enhance the research directions. Following hypotheses testing, the four hypotheses that have statistically significant positive effects in 2018 were *Ease of Use*, *Usefulness*, *Commitment* and *Recommendation*, while the two lesser performing (and therefore rejected) were *Fulfillment* and *Perceive Web Security*. Once again, the pattern of ease over security was reconfirmed. Notably, both fulfillment (FUL) and perceived web security (PWS) had direct statistically significant positive impact in 2012, positions that were lost in 2018.

Our research has a direct implication for the management approach. As an advice to Greek bank management, and, based on the findings of the research, we would suggest that Banking executives should no longer consider traditional over-the-counter transactions as the establishment for a fortified customer–bank relationship and they will do well to accelerate the transition to the new digital world. In the framework of the new digitalized developments, and by extrapolating the trends identified in the study, significant transformations in banking processes should be expected. The Greek banking industry should stay focused in accommodating the current shift on physical network presence reduction by reducing staff number, loss-making branches, and relevant operating expenses (opex). Our research indicates that Greek audiences have reached the maturity levels that will allow for smoother adaptation of the new banking ways. However, Greek Banks should also be in search of methods, which will enable delivering a seamless customer experience, integrating sales and services across all channels (Omni-channel approach). Branches may still be a “safety zone” for a declining number of customers; however, not before long they will be seen as outdated, and institutions that have not adapted will be left behind.

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