

Effect of Online Banking Usage Factors on Reuse Intention: Comparison in Terms of Educational Background

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Abstract

The aim of this study was to determine the effect of bank customers' views of the use of online banking services on their intention to use them again. The study also investigated whether educational background affected bank customers' views of online banking and reuse intention. The research sample consisted of 780 bank customers in the city of Kastamonu. Data were collected using a survey. First, the construct validity and reliability of the scales were tested. Data were analyzed using structural equation modeling. Results showed that reuse intention was positively affected by online banking prevalence and negatively affected by concerns about online banking security. According to discriminant analysis, the benefits and prevalence of online banking services were significantly different in participants with a master's degree, risks of using online banking services were significantly different in those with a primary school degree, and reuse intention was significantly different in those with a bachelor's degree.

Keywords: Online Banking, Bank Customers, Educational Background, Structural Equation Modeling.

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İnternet Bankacılıđı Kullanım Faktörlerinin Tekrar Kullanma Niyeti Üzerindeki Etkisi: Öğrenim Durumu Karşılaştırması

Öz

Çalışmanın amacı banka müşterilerinin internet bankacılıđı kullanımı ile ilgili görüşlerinin internet bankacılıđını tekrar kullanma niyetleri üzerindeki etkisini deđerlendirilmektedir. Çalışma kapsamında internet bankacılıđı ile ilgili tutumun ve tekrar kullanma niyetinin öğrenim durumuna göre anlamlı farklılık gösterip göstermediđi incelenmiştir. Çalışmanın verileri Kastamonu ilinde internet bankacılıđını kullanan 780 banka müşterisinden anket yöntemi ile elde edilen verilerden oluşmaktadır. Öncelikle çalışmada ölçeklerin yapı geçerliđi ve güvenilirliđi test edilmiştir. Anketlerden elde edilen verilerle istatistiki analizler yapılmış ve oluşturulan yapısal eşitlik modeli ile hipotezler test edilmiştir. Analiz sonucunda internet bankacılıđının yaygınlaşma tutumunun, tekrar kullanma niyetini pozitif yönde anlamlı olarak etkilediđi tespit edilmiştir. İnternet bankacılıđı güvenliđine ilişkin tutumun ise tekrar kullanma niyetini negatif yönde anlamlı olarak etkilediđi bulgusuna ulaşılmıştır. Yapılan farklılık analizi sonucunda ise internet bankacılıđının faydalı bulunmasının ve yaygınlaşmasının lisansüstü mezunları lehine anlamlı farklılık gösterdiđi tespit edilmiştir. İnternet bankacılıđı kullanım riskinin ilkökul mezunları lehine anlamlı farklılık gösterdiđi bulgusu elde edilmiştir. Tekrar kullanma niyetinin ise lisans mezunları lehine anlamlı farklılık gösterdiđi bulgusuna ulaşılmıştır.

Anahtar Kelimeler: İnternet Bankacılıđı, Banka Müşterileri, Eğitim Düzeyi, Yapısal Eşitlik Modeli.

Introduction

Advances in information and telecommunication technologies improve the diversity of banking services. Banking services were provided only in branches until the 2000s. Bank customers had to go to branches for banking transactions and sometimes wait in line for hours. Banking transactions consisted mostly of paying electricity, water, and telephone bills, which were transactions not directly related to banking. Going to banks for such simple transactions and waiting for hours result in a significant waste of time. Internet use increases every day (Akman and Mishra, 2010, p. 482). Advances in information and telecommunication technologies have allowed banks to provide online banking services (Koçak and Özbek, 2019, p. 88; Kaya and Arslan, 2016, p. 425). Turkish youth's mastery over technology has promoted the growth of the online banking industry (Aytar et al., 2012, p. 1).

Bank customers' adoption of online banking is affected by numerous factors; security, privacy, awareness, social environment, ease of use and computer skills (Koç, 2015, p. 197). Çınar et al. (2012, pp. 109-110) argue that security, ease of use, individual habits and belief, quality of service, time-saving, 24/7 access, low costs, and information technology skills affect the use of online banking services. Active internet usage increases the use of online banking services (Chau and Lai, 2003, pp. 124-125).

Some customers who have security concerns avoid using online banking services. Cyber-attacks, database hacking, and credit card fraud negatively affect customers' confidence in online banking services. Customers' trust in the online banking increased the use of online banking services (Suh and Han, 2002, p. 247). Usta (2005) argues that security concerns are the greatest obstacle preventing customers from using online banking services. Banks' online cybersecurity certificates increase customers' trust in online banking services.

Online banking significantly reduces the transaction costs of banks and allows customers to make transactions anywhere, anytime (Durer et al., 2009, p. 153). Fast online services allow customers to save time and provide them with transaction flexibility. Online transactions have reduced the workload of branch employees, which has enabled banks to focus more on basic banking services. Banks first built an online banking infrastructure and then began to offer mobile banking services thanks to advances in mobile device technologies. In the early years, online banking played a key role in the development of the banking sector, and the number and amount of mobile banking transactions have increased significantly in recent years. The internet and mobile

devices allow customers to easily access mobile banking and make banking transactions faster and cheaper. The internet and mobile banking not only provide customers with speed, flexibility and cost advantages but also reduce the workload and costs of banks. Online banking, mobile banking, and ATM services increase the profitability of banks (Erol et al., 2015, p. 1).

Advances in online banking have also increased the quality of banking services. For customers, transaction speed and cost are as important as the quality and reliability of banking services. Customers' expectations of banks should be taken into consideration, and service quality and standards should be improved in order to achieve customer satisfaction. The aim of this study was to investigate the reasons why customers use online banking services. There are numerous studies on customers' use of online banking services. Research shows that there is a significant relationship between levels of the use of online banking services and educational background. This study evaluated the effect of the use of online banking services on reuse intention in terms of educational background. We, therefore, believe that our results will contribute to the literature. The study sample consisted of bank customers in the city of Kastamonu. Data were collected using a survey and analyzed using structural equation modeling.

1. Literature Review

There are few studies on the relationship between factors affecting customers' use of online banking services, educational background, and reuse intention. This section addresses the studies on factors affecting the use of online banking services, customers' adoption of online banking and the relationship between online banking and demographic characteristics.

Patricio et al. (2003) conducted interviews with 36 bank customers and 13 bank employees in Portugal to investigate the service quality of online banking, mobile banking, ATM and branch banking. They reported that advances in information technology and the quality of online banking services affected customer preferences.

Kurtuldu and Karataş (2005) investigated why customers use online banking. They collected data from 530 participants through a survey and analyzed it using factor analysis and t-test. They reported a significant correlation between bank customers' educational background, the convenience, speed and ease of online banking transactions.

Durer et al. (2009) investigated the factors affecting customers' decisions to use online banking services. They collected data from 535 participants through a survey and analyzed it using factor analysis and t-test. They found that service, security, time flexibility, solution of problems,

cost, design and speed were the factors affecting bank customers' use of online banking services. They concluded that banks should take security measures to encourage customers to use online banking services more.

Lee (2009) collected data from 368 bank customers through a survey to investigate the factors affecting the use of online banking services. According to results, customers' intention to use online banking services is mainly affected by security, confidentiality, and financial risks; the perceived benefit is most positively affected by attitudes and usefulness, and the intention to use online banking again is negatively affected by security risks.

Pala and Kartal (2010) collected data from 196 Izmirian bank customers through a survey to investigate their attitudes towards online banking. They reported that ease of access and use, variety of transactions, inadequate websites, security, payment, and lifestyle had an effect on the use of online banking services.

Okumus et al. (2010) collected data from 232 bank customers through a survey to investigate their attitudes towards online banking. They analyzed the data using clustering and chi-square methods. They reported that the banking and internet usage habits of people, who use, tend to use and do not use online banking differed by demographic and socio-economic factors. They concluded that bank customers with a bachelor's or master's degree used online banking more frequently were satisfied with the quality of online banking services and more likely to use them again.

Ustasüleyman and Eyüboğlu (2010) examined how individuals adopted online banking. They collected survey data from 413 bank customers in eight cities of Turkey and analyzed the data using structural equation modeling. They found that perceived ease of use had an effect on perceived usefulness, that perceived usefulness had a significant effect on trust and that trust, perceived usability, ease of use, and that web security had an effect on the intention to use online banking. Martins et al. (2014) also analyzed how customers adopted online banking and concluded that the most important factor affecting the adoption of online banking was the intention to use it.

Nasri (2011) investigated the factors affecting Tunisian bank customers' use of online banking services. He collected survey data from 253 customers and analyzed the data using factor and regression analysis. He found that vocational and educational levels had an effect on the use of online banking services.

Çakmak et al. (2011) examined customers' tendency to use online banking. They collected survey data from 306 bank customers and analyzed the data using factor and discriminant methods. The number of customers using online banking was low. They use online banking because it saves time, easy to use, and cheap. The most important difference between online banking users and non-users is education level. However, İşler (2015) reported that education level had no effect on the use of online banking services.

Bayrakdaroğlu (2012) examined the factors affecting use of online banking services. He collected survey data from 525 bank customers in five cities in the Aegean region and analyzed the data using factor analysis, t-test, ANOVA and regression analysis. He reported that security, confidentiality, trust, innovation, internet connection quality, and social environment as well as demographic characteristics affected the use of online banking services.

Yurttadur and Süzen (2016) collected survey data from 1.604 bank customers to investigate their attitudes towards online banking and reported that age, gender, education, marital status and total family income affected the use of online banking services. They also found that participants' perceptions of online banking differed by gender, suggesting that female customers regarded the use of online banking services as a lifestyle more than did male customers.

Boateng et al. (2016) took human behavior changes into consideration and investigated the effect of social cognitive theory on online banking reuse intention and analyzed the relationship between website features, trust, ease of use, online customer service and lifestyle compliance and use of online banking services. They analyzed the data using factor analysis and structural equation modeling, and concluded that customers' intention to use online banking was significantly affected by website social features.

Gürsoy (2016) investigated bank customers' profiles regarding online banking. He collected survey data from 1.500 bank customers in five cities of Turkey and analyzed it using a data mining method. He concluded that banks are in intense competition, and therefore, should serve their customers better and offer a variety of products and services at an affordable price.

Doğan and Burucuoğlu (2018) investigated the relationship between consumers' perceptions of mobile banking service quality and their intention to reuse it. They recruited 321 bank customers using convenience sampling, collected survey data and analyzed it using SmartPLS 3.2.6. They found that customers' satisfaction with mobile banking services had a significant impact on their intention to reuse them.

Vural et al. (2019) collected survey data from 600 bank customers from the city of Sivas to investigate their perceptions of the quality of internet and mobile banking services. They reported a significant difference between the financial service quality of internet and mobile banking services. The higher the level of education, the greater the diversity of mobile and internet banking transactions.

Başaran and Aksoy (2019) examined the components of e-service quality in online banking in terms of customer satisfaction, repurchase intention, and word of mouth communication. They collected survey data from 875 bank customers and analyzed it using structural equation modeling. They found that e-service quality affected customer satisfaction and that there was a relationship between e-service quality and repurchase behavior.

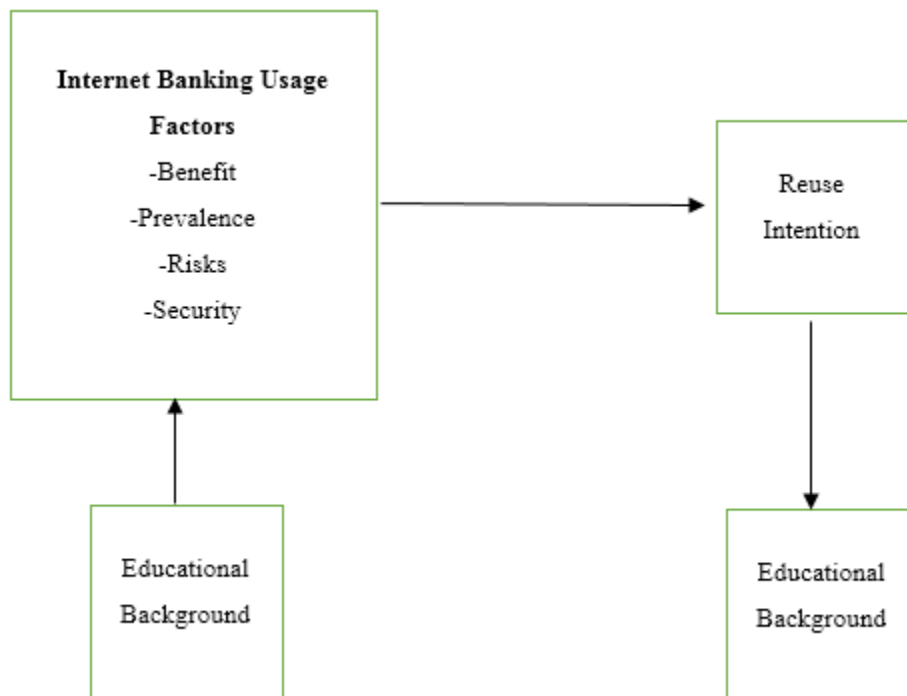
2. Research Method

This section first discussed the research model and hypotheses, and then the data collection method and sample.

2.1. Research Model and Hypotheses

The research model was based on a literature review (Figure 1).

Figure 1: Research Model



This study investigated the effect of customers' attitudes towards the variables "benefit," "prevalence," "risks," and "security" on their online banking reuse intention (Figure 1) and examined whether their online banking reuse intention was affected by their educational background.

The hypotheses based on theoretical analysis and literature review were as follows:

- H1: Benefit has a significant positive effect on reuse intention.
- H2: Prevalence has a significant positive effect on reuse intention.
- H3: Risks have a significant negative effect on reuse intention.
- H4: Security has a significant negative effect on reuse intention.
- H5: Benefit significantly differs from educational background.
- H6: Prevalence significantly differs from educational background.
- H7: Risks significantly differ from educational background.
- H8: Security significantly differs from educational background.
- H9: Reuse intention significantly differs from educational background.

2.2. Data Collection Tools and Sampling

The study sample consisted of 780 bank customers living in the city of Kastamonu. Participants were recruited using convenience sampling. Data were collected using a survey. The online banking usage scale was developed by Kaya and Arslan (2016), while the repurchase scale was developed by Bülbül et al. (2012).

3. Results and Discussion

In the first part of this section, the demographic findings of the research are included. In the second part, the construct validity and reliability of the scales were examined. In the third part, the structural equation model is studied. In the fourth and last part, the variation analysis of the educational status variable is included.

3.1. Demographic Characteristics

Table 1 shows the participants' demographic characteristics.

Table 1: Demographic Characteristics

Age (years)	F	%
18-24	224	28,72
25-34	214	27,44
35-44	197	25.25
45-54	98	12.56
55 and older	47	6.02
Gender	F	%
Female	323	41.41
Male	457	58.59
Education (Degree)	F	%
Primary school	44	5.64
Secondary school	176	22.56
Associate	115	14.74
Bachelor's	406	52.05
Master's	39	5.00
Income (TL)	f	%
... < 2.000	228	29.23
2.001 TL-4.000	287	36.79
4.001 TL-6.000	178	22.82
6.001 TL-8.000	61	7.82
... > 8.001	26	3.33
Sector	f	%
Private sector	194	24.87
Public employee	160	20.51
Private sector executive	29	3.72
Government executive	8	1.02
Academics/teachers	49	6.28
Student	177	22.69
Tradesman/company owner	128	16.41
Housewife	15	1.92
Self-employed (lawyer, pharmacist, etc.)	20	2.56

Of participants, 224 were aged 18 to 24 years, 214 were aged 25 to 34 years, 197 were 35 to 44 years, 98 were 45 to 54 years and 47 were 55 years of age or and older. Most of the participants were young. 457 of the participants were male, 323 were female. 406 had a bachelor's degree, 176 had a secondary school degree, 115 had an associate degree, 44 had a primary school degree, and

39 had a master's degree. Of participants, 287 had a monthly income of 2.000 to 4.000 TL, 228 had a monthly income of less than 2.000 TL, 178 had a monthly income of 4.000 TL to 6.000 TL, 61 had a monthly income of 6.000 TL to 8.000 TL, and 26 had a monthly income of over 8.000 TL. 194 were private sector employees with no titles, 177 were students, 160 were public sector employees, 128 were tradesmen, 49 were academics/teachers, 29 were private sector executives, 20 were self-employed, 15 were housewives, and 8 were government executives.

Table 2 shows the banks with popular online services among participants.

Table 2: Demographic Findings About the Banks with Popular Online Services

Banks	Frequency
Akbank	53
Albaraka Türk	4
Denizbank	11
Finansbank	14
Garanti Bank	84
Halk Bank	50
İngbank	15
İş Bank	70
Kuveyt Türk	7
Şekerbank	1
Türk Ekonomi Bank	19
Vakıfbank	85
Yapı ve Kredi Bank	54
Ziraat Bank	311

Of participants, 311, 85, 84, 70, 54, 53, 50, 19, 15, 14, seven, four, and one used the online services of Ziraat Bank, Vakıfbank, Garanti Bank, İş Bank, Yapı ve Kredi Bank, Akbank, Halk Bank, Türk Ekonomi Bank, Ingbank, Finansbank, Kuveyt Türk Bank, Albaraka Türk Bank and Şekerbank, respectively. Two participants did not answer this question.

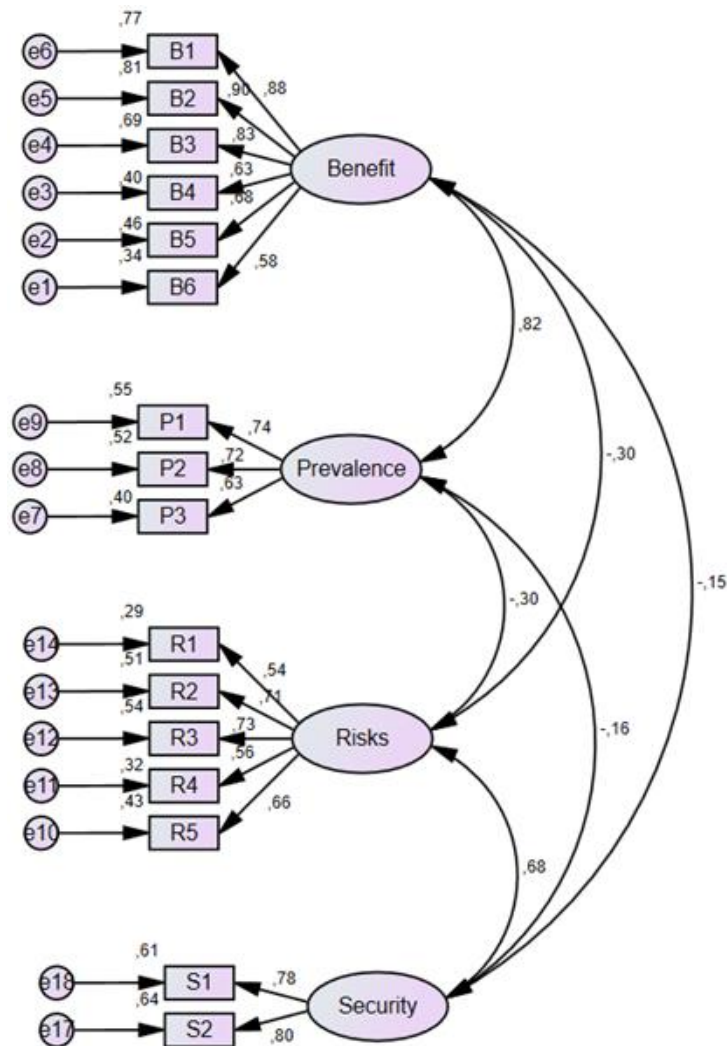
3.2. Construct Validity and Reliability of Scales

CFA aims to examine the extent to which a predetermined or constructed structure has been verified by the data collected. It is a technique frequently used in scale adaptation studies from abroad related foreign literature. It is the best way to test whether a scale whose structure validity has been tested also protects this structure in the language and culture to be adapted (Seçer, 2015:171-172).

CFA is divided into three as single factor, first level multi-factor and second level multi-factor CFA. One-factor model where all observed variables that make up an implicit variable are gathered under a single factor; the first level multi-factor CFA model to the model where the observed variables in a scale are gathered under more than one factor; The fact that the factors that compose some scales in a multi-factor structure and gather relatively independent factors from each other under a wider and inclusive upper level or second level factor is called the second level verification factor model (Gürbüz ve Şahin, 2016:335).

The Turkish construct validity and reliability of the scales were established. Therefore, Confirmatory Factor Analysis (CFA) and reliability analysis were performed. Figure 2 shows the online banking CFA diagram.

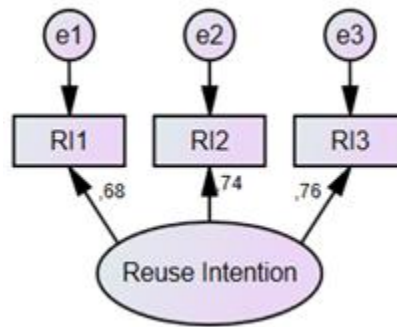
Figure 2: Online Banking CFA



The factor loadings for benefit, prevalence, risk, and security ranged from 0.58 to 0.90, from 0.63 to 0.74, from 0.54 to 0.73, and from 0.78 to 0.80, respectively.

Figure 3 shows the CFA diagram of the reuse intention scale.

Figure 3: Reuse Intention CFA



According to the CFA results of the reuse intention scale, the factor loadings ranged from 0.68 to 0.76.

The goodness of fit values obtained from CFA for both scales are given in Table 4 together with the structural equation model.

Table 3 shows the correlation and reliability analysis results.

Table 3: Correlation and Reliability Analysis

	Mean	Standard Deviation	Skewness	Kurtosis	Benefit	Prevalence	Risks	Security	Reuse
Benefit	4.3418	.76684	-1,723	1,418	(.903)				
Prevalence	4.1876	.74578	-1,086	1,479	.695**	(.741)			
Risks	2.7528	.91793	,132	-,631	-.260**	-.220**	(.775)		
Security	2.7179	1.11556	,115	-,707	-.122**	-.123**	.533**	(.772)	
Reuse	4.0147	.75606	-,805	,937	.500**	.510**	-.197**	-.182**	(.769)

According to the results of the correlation analysis, the prevalence was weakly negatively correlated with risks and security ($p < 0.01$). Prevalence was moderately positively correlated with repurchase ($p < 0.01$). The benefit was weakly negatively correlated with risks and security ($p < 0.01$). The benefit was moderately positively correlated with the repurchase ($p < 0.01$). Risks were moderately positively correlated with security. Risks were weakly negatively correlated with the repurchase. Security was weakly negatively correlated with repurchase. According to the reliability analysis, the Cronbach's alpha coefficient for benefit was 0.903, indicating high

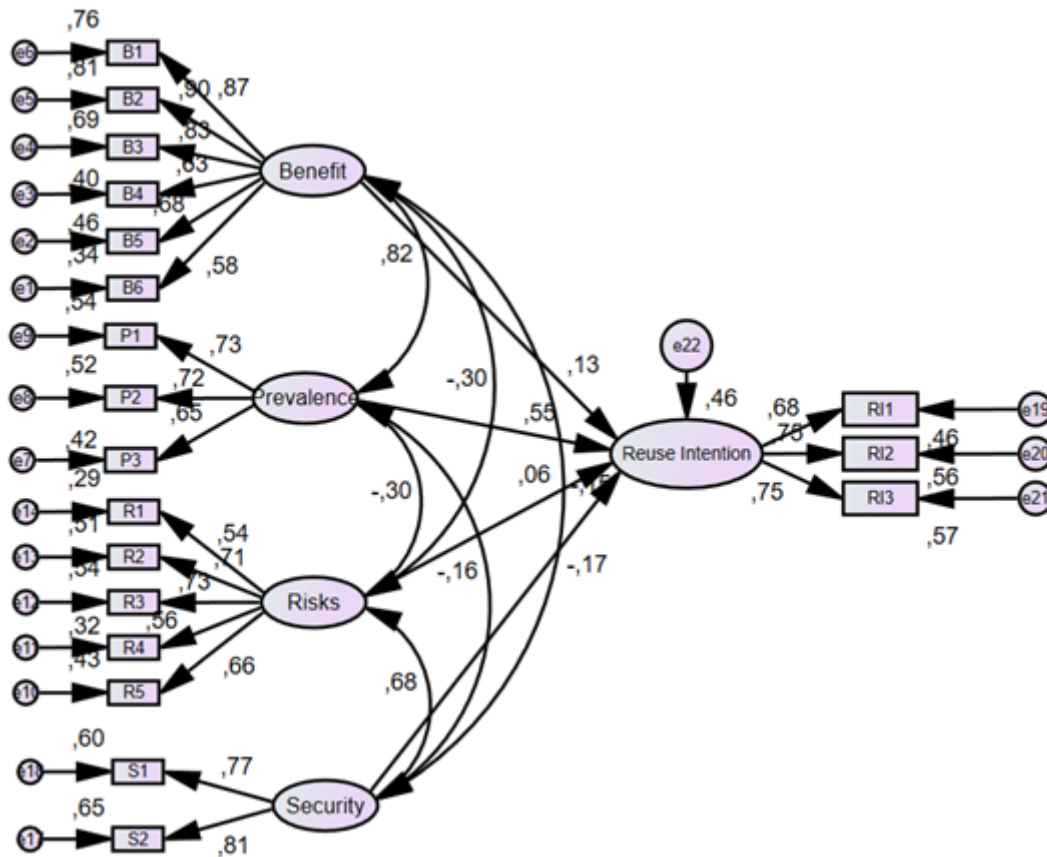
reliability. The Cronbach's alpha values of the other variables were above 0.70, indicating reliability. In addition, skewness and kurtosis values were examined in order to test whether the data has normal milking. Since it is determined to take values between -2 and +2, the data show normal distribution. (Lin vd., 2016).

3.3. Structural Equation Model

Structural equation modeling (SEM) is a multivariate statistical method based on defining observable and invisible variables based on a particular theory in a causal and relational model. SEM can also be evaluated as more than one regression analysis performed simultaneously. Unlike other statistical methods, SEM adopts a confirmatory approach rather than an exploratory approach. As such, it can be said that YEM is more successful than other methods for hypothesis testing. Also, while traditional multivariate methods do not have any ability to calculate or correct the measurement error; YEM shows very clear results in error calculations. While traditional methods can only operate on variables that can be observed in the analysis; YEM can test on both observable and invisible variables within the same model (Meydan ve Şeşen, 2015:5-6).

The data were analyzed using structural equation modeling developed to test the research model. Figure 4 shows the structural equation model. Table 4 shows the goodness of fit of the model. Table 5 shows the analysis results of the model.

Figure 4: Structural Equation Model



Participants' use of online banking services and the effect of their perceptions of benefit, prevalence, risk, and security on their repurchase intention (their intention to use online banking again) were analyzed. Goodness of fit values of scales and structural equation model are given in Table 4.

Table 4: Goodness of Fit Values

Variable	CMIN	DF	CMIN/DF	GFI	CFI	SRMR	RMSEA
Critical value			<5	>0.85	>0.90	>0.08	>0.08
Structural Equation Model	527.55	142	3.715	0.93	0.94	0.0486	0.059
Online Banking	460,053	98	4,694	0,928	0,935	0,0532	0,069
Reuse Intention	0	0	-	1	1	0	0

The structural equation model provided an acceptable goodness of fit values (Yang vd., 2004; Hong vd., 2014; Bashir, 2019) (Table 4).

Table 5: Structural Equation Model Analysis Results

Structural Path			Estimate	S.E.	C.R.	P
Repurchase	<---	Benefit	0.128	0.099	1.418	0.156
Repurchase	<---	Prevalence	0.548	0.099	5.439	***
Repurchase	<---	Risks	0.06	0.047	0.91	0.363
Repurchase	<---	Security	-0.174	0.039	-2.738	0.006

Prevalence had a positive effect on reuse, whereas security had a negative effect on reuse. Online banking prevalence affected reuse. In this effect, the estimation coefficient was 0.548, suggesting that one unit of increase in online banking prevalence led to a 0.548 unit of increase in reuse. One unit of increase in participants' perceptions of security led to a 0.174 unit of reduction in reuse intention. These results confirmed the hypotheses H2 and H4, but not H1, H3, and H5.

3.4. Educational Background Anova Test

ANOVA test was used to determine the effect of educational background on the variables. Table 6 shows the results of the analysis.

Table 6: ANOVA Test Results

		Sum of Squares	df	Mean Square	F	Sig.
Benefit	Between-Groups	16.630	4	4.158	7.299	.000
	Within-Groups	441.455	775	.570		
	Total	458.086	779			
Prevalence	Between-Groups	11.139	4	2.785	5.113	.000
	Within-Groups	422.130	775	.545		
	Total	433.269	779			
Risks	Between-Groups	13.264	4	3.316	3.996	.003
	Within-Groups	643.124	775	.830		
	Total	656.389	779			
Security	Between-Groups	4.196	4	1.049	.842	.498
	Within-Groups	965.252	775	1.245		
	Total	969.449	779			
Reuse	Between-Groups	9.994	4	2.498	4.448	.001
	Within-Groups	435.309	775	.562		
	Total	445.303	779			

According to ANOVA test results, the educational background had a significant effect on benefit, prevalence, risks, and repurchase. Because it was found that $p < 0.01$.

Levene Test results for homogeneity of variances are given in Table 7.

Table 7: Levene Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
Benefit	3,128	4	775	,114
Prevalence	,580	4	775	,677
Risks	,692	4	775	,598
Security	,335	4	775	,855
Reuse	1,894	4	775	,110

Since it is Sig > .01, it was found that variances are homogeneous. Therefore, it has been found that anova test can be continued. After this stage, the tukey option was preferred because the Tukey test is considered as a suitable post hoc comparison test. A Tukey test was used to determine which groups the difference existed. Table 8 shows the Tukey test results.

Table 8: Tukey Results

Dependent Variable			Mean Difference	Standard Error	Mean
Benefit	Primary School	Secondary School	-.47727*	.12721	3.811
		Associate	-.47925*	.13379	
		Bachelor's	-.61690*	.11979	
		Master's	-.63384*	.16599	
	Secondary School	Primary School	.47727*	.12721	4.288
		Associate	-.00198	.09050	
		Bachelor's	-.13963	.06811	
		Master's	-.15657	.13357	
	Associate	Primary School	.47925*	.13379	4.290
		Secondary School	.00198	.09050	
		Bachelor's	-.13765	.07973	
		Master's	-.15459	.13985	
	Bachelor's	Primary School	.61690*	.11979	4.428
		Secondary School	.13963	.06811	
		Associate	.13765	.07973	
		Master's	-.01694	.12653	
Master's	Primary School	.63384*	.16599	4.444	
	Secondary School	.15657	.13357		
	Associate	.15459	.13985		
	Bachelor's	.01694	.12653		
Prevalence	Primary School	Secondary School	-.28883	.12439	3.803
		Associate	-.37668*	.13083	
		Bachelor's	-.45436*	.11714	
		Master's	-.54740*	.16231	
	Secondary School	Primary School	.28883	.12439	4.092

		Associate	-.08785	.08849	
		Bachelor's	-.16553	.06661	
		Master's	-.25857	.13062	
	Associate	Primary School	.37668*	.13083	4.180
		Secondary School	.08785	.08849	
		Bachelor's	-.07768	.07796	
		Master's	-.17072	.13676	
	Bachelor's	Primary School	.45436*	.11714	4.257
		Secondary School	.16553	.06661	
		Associate	.07768	.07796	
		Master's	-.09304	.12372	
	Master's	Primary School	.54740*	.16231	4.350
		Secondary School	.25857	.13062	
		Associate	.17072	.13676	
		Bachelor's	.09304	.12372	
Risks	Primary School	Secondary School	.13920	.15354	3.055
		Associate	.28411	.16148	
		Bachelor's	.40762*	.14458	
		Master's	.32506	.20034	
	Secondary School	Primary School	-.13920	.15354	2.915
		Associate	.14491	.10923	
		Bachelor's	.26842*	.08221	
		Master's	.18585	.16122	
	Associate	Primary School	-.28411	.16148	2.770
		Secondary School	-.14491	.10923	
		Bachelor's	.12351	.09623	
		Master's	.04095	.16880	
	Bachelor's	Primary School	-.40762*	.14458	2.647
		Secondary School	-.26842*	.08221	
		Associate	-.12351	.09623	
		Master's	-.08257	.15271	
	Master's	Primary School	-.32506	.20034	2.729
		Secondary School	-.18585	.16122	
		Associate	-.04095	.16880	
		Bachelor's	.08257	.15271	
Repurchase	Primary School	Secondary School	-.28598	.12632	3.689
		Associate	-.19177	.13285	
		Bachelor's	-.40790*	.11895	
		Master's	-.40462	.16483	
	Secondary School	Primary School	.28598	.12632	3.975
		Associate	.09422	.08986	
		Bachelor's	-.12191	.06764	
		Master's	-.11864	.13264	
	Associate	Primary School	.19177	.13285	3.881

		Secondary School	-.09422	.08986	
		Bachelor's	-.21613	.07917	
		Master's	-.21286	.13888	
	Bachelor's	Primary School	.40790*	.11895	4.097
		Secondary School	.12191	.06764	
		Associate	.21613	.07917	
		Master's	.00327	.12564	
	Master's	Primary School	.40462	.16483	4.094
		Secondary School	.11864	.13264	
		Associate	.21286	.13888	
		Bachelor's	-.00327	.12564	

The mean difference in benefit was greatest between participants with a primary school degree and those with a master's degree, indicating that those with a master's degree considered online banking more beneficial than others with lower education. This result is supported by those of previous studies. Okumuş et al. (2010) reported that bank customers with a bachelor's or master's degree used online banking more than others with lower education. Nasri (2009) stated that occupation and education level had an effect on the use of online banking services. However, İşler (2015) reported that education level had no effect on the use of online banking services.

Çakmak et al. (2009) stated that the most important difference between online banking users and non-users was their educational level. Our results confirm this as well. Prevalence showed a significant difference in favor of participants with a master's degree. In other words, participants with a master's degree think that online banking is more widespread than do others with lower education.

Risks showed a significant difference in favor of participants with a primary school degree, suggesting that they consider online banking risky than others. Lee (2009) argues that online banking reuse intention is adversely affected by security.

Ustasüleyman and Eyüboğlu (2010) stated that trust, perceived usability, ease of use and web site had an effect on usage intention. Reuse shows a significant difference between participants with a primary school degree and those with a bachelor's degree in favor of the latter. This result indicates that customers with a bachelor's degree are likely to use online banking more than those with a primary school degree. Doğan and Burucuoğlu (2018) stated that customers' satisfaction with mobile banking had a significant effect on reuse intention. Okumuş et al. (2010) found that customers were satisfied with online banking service quality and were likely to use those services again. Our result supports the hypotheses H5, H6, H7, and H9, but not H8.

4. Conclusion

This study investigated the effect of customers' views of the use of online banking services on their intentions to use them again. The study also determined whether educational background had an effect on participants' perceptions of online banking and their reuse intention. To that end, data were collected from 780 online banking customers in Kastamonu. Most of the participants are aged between 18 to 44 years, most of them are male, and they had a bachelor's degree. Most of their incomes are between 2.000 TL to 6.000 TL. 194 are private sector employees with no titles and 177 are students. 160 participants are public sector employees.

First, the construct validity and reliability of the scales were tested, and then the structural equation model was analyzed. The results of the model analysis showed that participants' perceptions of online banking prevalence positively affected their reuse intention while their perceptions of online banking security negatively affected their reuse intention. Ustasüleyman and Eyüboğlu (2010) stated that trust, perceived usability, ease of use and web site had an effect on usage intention. The discriminant analysis showed that participants with a master's degree considered online banking more useful and widespread than those with a lower education levels. Nasri (2009) stated that occupation and education level had an effect on the use of online banking services. Participants with a primary school degree considered online banking riskier than those with higher educational levels. Participants with a bachelor's degree were more likely to use online banking services again. Okumuş et al. (2010) found that customers were satisfied with online banking service quality and were likely to use those services again. It is believed that the internet and mobile banking usage will increase with an increase in educational level.

New generations growing in the age of information and communication will not have to go to branches to make banking transactions. Online banking services should be diversified to encourage customers to use them more. Making e-signature applications more widespread and activating the internet or mobile banking may enable customers to use online banking services more. Internet banks should invest more in cyberinfrastructure. Customers should be insured for possible losses in case of online banking security breaches. This makes customers feel safe. We believe that comparing the factors affecting the use of internet and mobile banking will contribute to the literature.

References

- Akman, I., & Mishra, A. (2010). Gender, age and income differences in internet usage among employees in organizations. *Computers in Human Behavior*(26), 482-490.
- Aytar, O., Yeğen, İ., & Erdemir, N. K. (2012). Elektronik Şube ve Elektronik Bankacılık Hizmetleri. *Uşak Üniversitesi Akademik Bilişim Konferansı, 1-3 Mart*, 1-11.
- Bashir, A.M. (2019). Effect of halal awareness, halal logo and attitude on foreign consumers' purchase intention. *British Food Journal*, 121(9), 1998-2015.
- Başaran, Ü., & Aksoy, F. (2019). İnternet Bankacılığında E-Hizmet Kalitesinin Analizi Üzerine Bir Araştırma. *Uluslararası İktisadi ve İdari İncelemeler Dergisi*, 12(24), 93-114.
- Bayrakdaroğlu, A. (2012). Bireylerin İnternet Bankacılığı Kullanımını Etkileyen Faktörlerin Belirlenmesi Üzerine Bir Alan Araştırması. *Business and Economics Research Journal*, 3(4), 57-75.
- Boateng, H., Adam, D. R., Okoe, A. F., & Anning-Dorson, T. (2016). Assessing the determinants of internet banking adoption intentions: A social cognitive theory perspective. *Computers in Human Behavior*(65), 468-478.
- Bülbül, H., Akın, M., Demirer, Ö., & Doğan, İ. C. (2012). Türk Bankacılık Sektöründe Hizmet Kalitesinin Müşteri Tatmini ve Tekrar Satın Alma Niyeti Üzerine Etkisi: Yapısal Eşitlik Modeli İle Bir İnceleme. *Doğuş Üniversitesi Dergisi*, 13(1), 28-40.
- Chau, P. Y., & Lai, V. S. (2003). An Empirical Investigation of the Determinants of User Acceptance of Internet Banking. *Journal of Organizational Computing and Electronic Commerce*, 13(2), 123-145.
- Çakmak, A. Ç., Güneşer, M. T., & Terzi, H. (2011). Bankaların Müşterilerine Sunduğu İnternet Bankacılığı Hizmetinin Müşteriler Tarafından Değerlendirilmesi: Karabük Şehir Merkezinde Uygulama. *Erciyes Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*(31), 1-30.
- Çınar, O., Yavuz, S., & Arslan, İ. (2012). Akademisyenlerin İnternet Bankacılığı Hakkındaki Tutum, Düşünce ve Davranışları: Erzincan Üniversitesi Örneği. *SÜ İİBF Sosyal ve Ekonomik Araştırmalar Dergisi*, 103-124.
- Doğan, H., & Burucuoğlu, M. (2018). Tüketicilerin Mobil Bankacılık Hizmet Kalitesi Algıları ve Tekrar Kullanma Niyetleri: Ampirik Bir Araştırma. *Uluslararası Yönetim İktisat ve İşletme Dergisi*, 14(4), 1183-1198.
- Durer, S., Çalışkan, A. Ö., Akbaş, H. E., & Gündoğdu, C. E. (2009). İnternet Bankacılığının Kullanma Kararını Etkileyen Faktörler: Türk Banka Müşterileri Üzerine Bir Araştırma. *Marmara Üniversitesi İ.İ.B.F. Dergisi*, 16(1), 133-154.
- Erol, İ., Çınar, S., & Duramaz, S. (2015). Bankalarda Yeni Gelir Kaynağı Elektronik Bankacılık İşlem Ücretleri, Türk Bankacılık Sektöründe Banka Karlılığı Üzerindeki Etkisi. *AİBÜ Sosyal Bilimler Enstitüsü Dergisi*, 15(2), 1-21.

- Gürbüz, S. & Şahin, F. (2016). Sosyal bilimlerde araştırma yöntemleri felsefe, yöntem, analiz (3. baskı). Ankara: Seçkin Yayıncılık.
- Gürsoy, U. T. (2016). Banka Müşterilerinin İnternet Bankacılığına İlişkin Yaklaşımlarının Veri Madenciliği Teknikleri İle İncelenmesi. *Kafkas Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, 7(14), 421-442.
- Hong, P., Yang M.G. & Dobrzykowski D.D. (2014). Strategic customer service orientation, lean manufacturing practices and performance outcomes: An empirical study. *Journal of Service Management*, 25(5), 699-723.
- İşler, A. U. (2015). İnternet Bankacılığı E-Hizmet Kalitesinin Kullanıcılar Tarafından Değerlendirilmesi: Kuveyt Türk Örneği. *Business & Management Studies: An International Journal*, 3(2), 220-233.
- Kaya, F., & Arslan, T. R. (2016). İnternet Bankacılığın Müşterilerin Banka Tercihlerine Etki Eden Faktörler: Bolu İlinde Kamu Çalışanları Üzerine Bir Araştırma. *Finansal Araştırmalar ve Çalışmalar Dergisi*, 8(15), 423-449.
- Koç, F. (2015). İnternet Bankacılığında Farkındalık ve Güvenin Kullanma Niyeti Üzerindeki Etkisi. *Sosyal Bilimler Dergisi*, 2(4), 196-208.
- Koçak, S. B., & Özbek, C. Y. (2019). Banka Müşterilerinin İnternet Bankacılığı Algısı ve Hizmetlerine Banka Müşterilerinin İnternet Bankacılığı Algısı ve Hizmetlerine Dönük Görüşleri Üzerine Bir Araştırma: Burdur İli Bucak İlçesi Örneği. *Bankacılık ve Finansal Araştırmalar Dergisi*, 6(2), 87-99.
- Kurtuldu, H. S., & Karataş, M. (2005). İnternet Bankacılığında Müşteri Tercihleri Üzerine Bir Araştırma. *I.Ü. Siyasal Bilgiler Fakültesi Dergisi*, 29-44.
- Lee, M.-C. (2009). Factors influencing the adoption of internet banking: An integration of TAM and TPB with perceived risk and perceived benefit. *Electronic Commerce Research and Applications*(8), 131-140.
- Lin, Y., Luo, J., Cai, S., Ma, S. & Rong, K. (2016). Exploring the service quality in the e-commerce context: a triadic view. *Industrial Management & Data Systems*, 116(3), 388-415.
- Martins, C., Oliveira, T., & Popovic, A. (2014). Understanding the Internet banking adoption: A unified theory of acceptance and use of technology and perceived risk application. *International Journal of Information Management*(34), 1-13.
- Meydan, C. H. & Şeşen, H. (2015). Yapısal eşitlik modellemesi amos uygulamaları (2. baskı). Ankara: Detay Yayıncılık.
- Nasri, W. (2011). Factors Influencing the Adoption of Internet Banking in Tunisia. *International Journal of Business and Management*, 6(8), 143-160.

Okumuş, A., Bozbay, Z., & Dağlı, R. M. (2010). Banka Müşterilerinin İnternet Bankacılığına İlişkin Tutumlarının İncelenmesi. *Erciyes Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*(36), 89-111.

Pala, E., & Kartal, B. (2010). Banka Müşterilerinin İnternet Bankacılığı ile İlgili Tutumlarına Yönelik Bir Pilot Araştırma. *Celal Bayar Üniversitesi İİBF Yönetim ve Ekonomi Dergisi*, 17(2), 43-61.

Patricio, L., Fisk, R. P., & Cunha, J. F. (2003). Improving satisfaction with bank service offerings: measuring the contribution of each delivery channel. *Managing Service Quality*, 13(6), 471-482.

Seçer, İ. (2015). SPSS ve LISREL ile pratik veri analizi analiz ve raporlaştırma. Ankara: Anı Yayıncılık.

Suh, B., & Han, I. (2002). E ffect of trust on customer acceptance of Internet banking. *Electronic Commerce Research and Applications*, 247-263.

Usta, R. (2005). Tüketicilerin İnternet Bankacılığını Kullanmama Nedenleri Üzerine Bir Araştırma. *Doğuş Üniversitesi Dergisi*, 6(2), 279-290.

Ustasüleyman, T., & Eyüboğlu, K. (2010). Bireylerin İnternet Bankacılığını Benimsemesini Etkileyen Faktörlerin Yapısal Eşitlik Modeli ile Belirlenmesi. *BDDK Bankacılık ve Finansal Piyasalar*, 4(2), 11-38.

Vural, E., Işık, K. C., & Koç, S. (2019). İnternet Bankacılığı ve Mobil Bankacılık Uygulamalarının Finansal Hizmet Kalitesi Açısından Müşteriler Tarafından Değerlendirilmesi. *Finans Ekonomi ve Sosyal Araştırmalar Dergisi*, 4(1), 74-89.

Yang, Z., Jun, M. & Peterson, R.T. (2004). Measuring customer perceived online service quality Scale development and managerial implications. *International Journal of Operations & Production Management*, 24(11), 1149-1174.

Yurttadur, M., & Süzen, E. (2016). Türkiye’de Banka Müşterilerinin İnternet Bankacılığına Yaklaşımlarının İncelenmesi Üzerine Bir Uygulama. *Tüketici ve Tüketim Araştırmaları Dergisi*, 8(1), 93-120.

APPENDIX: Turkish questionnaire is given below.

Sayın Katılımcı, internet bankacılığının kalitesinin değerlendirilmesine yönelik bu anketten elde edilecek veriler akademik kullanılacak olup kesinlikle gizli tutulacak ve üçüncü kişilerle asla paylaşılmayacaktır. Lütfen anketi eksiksiz doldurunuz ve anket üzerine isim yazmayınız. Desteginizden dolayı teşekkür ederiz.

1.Yaşınız?

18-24 25-34 35-44 45-54 55 ve üzeri

2.Cinsiyetiniz? Kadın Erkek

3.Eğitim Durumunuz?

İlköğretim Ortaöğretim Ön lisans

Lisans Lisansüstü

4.Aylık Geliriniz?

2.000TL altı 2.000TL-4.000TL arası

4.000TL-6.000TL arası 6.000TL-8.000TL arası

8.000TL ve üstü

5. Mesleğiniz?

Özel sektör çalışan Kamu çalışan

Özel sektör yönetici Kamu yönetici

Akademisyen / öğretmen Öğrenci

Esnaf / şirket sahibi Ev hanımı

Serbest meslek (Avukat, doktor, eczacı vb.)

6. İnternet bankacılığı hizmetini en çok aldığınız banka hangisidir?.....

7. İnternet bankacılığında en çok yaptığımız işlemler hangileridir?

Para transferi (eft, havale) Kredi ödemeleri Fatura vb. ödemeler Kredi kartı işlemleri

Yatırım işlemleri Diğer finansal işlemler.....

Aşağıdaki soruları internet bankacılık hizmetini en çok kullandığınız bankayı düşünerek cevaplandırınız

Cevaplamalarınızı 1: Kesinlikle katılmıyorum 2: Katılmıyorum 3: Ne katılıyorum ne katılmıyorum 4: Katılıyorum 5: Kesinlikle katılıyorum şeklinde yapınız.	1	2	3	4	5
8. İnternet bankacılığı şubeye gitme ve bekleme zorunluluğunu ortadan kaldırdığı için kullanışlıdır.	1	2	3	4	5
9. İnternet bankacılığı bankacılık işlemlerimi daha hızlı yapabileceğim önemli bir araçtır.	1	2	3	4	5
10. Bankacılık ihtiyaçları için internet bankacılığı hayatı kolaylaştıran bir gelişimdir.	1	2	3	4	5
11. İnternet bankacılığı kullanmak zamandan tasarruf sağlar.	1	2	3	4	5
12. İnternet bankacılığı ile çalışma saatleri dışında banka işlemlerini gerçekleştirebilmek önemlidir.	1	2	3	4	5
13. İnternet bankacılığı çalışan bireyler için ihtiyaçtır.	1	2	3	4	5
14. İnternet bankacılığı kullanımı yaygınlaştırılmalıdır.	1	2	3	4	5
15. İnternet bankacılığı bankacılık sektörünü büyüten farklılık yaratan önemli bir uygulamadır.	1	2	3	4	5
16. İnternet bankacılığımı çevremdekilere tavsiye ederim.	1	2	3	4	5
17. İnternet bankacılığı kullanırken hatalı işlem yapma endişesi taşırım.	1	2	3	4	5
18. İnternet bankacılığımı teknolojik yönüyle karmaşık bulmaktayım.	1	2	3	4	5
19. Bankacılık işlemlerimi yaparken yönlendirecek bir yetkiliye ihtiyaç duyarım.	1	2	3	4	5
20. Şube bankacılığı internet bankacılığına göre beni daha çok tatmin eder.	1	2	3	4	5
21. İnternet bankacılığı kullanmakta tecrübeli değilim.	1	2	3	4	5
22. Bankanın tanınmışlığı ve maaşımı aldığım banka internet bankacılığımı tercih etme nedenimdir.	1	2	3	4	5
23. İnternet bankacılığı kullanmak işlem performansımı artırır.	1	2	3	4	5

24. İnternet bankacılığı kullandığımda bankacılık işlemlerimin güvenliğinden endişe duyuyorum.	1	2	3	4	5
25. İnternet bankacılığı kullanımı için önemli kişisel bilgilerimin yer almasından güvensizlik duyuyorum.	1	2	3	4	5
26. İnternet bankacılığı ile ilgili hatırladığım/dikkatimi çeken reklamlar oldu.	1	2	3	4	5
27. İnternet bankacılığı ile ilgili bir sorun olursa bankamın müşteri hizmetleri kolay ve hızlı şekilde çözümleyecektir.	1	2	3	4	5
28. Bankanın sunduğu internet bankacılığı hizmetlerden tatmin olma düzeyim yüksektir.	1	2	3	4	5
29. Bankanın internet bankacılığı beklentilerimin üzerinde hizmet sunmaktadır.	1	2	3	4	5
30. Bankanın sunduğu internet bankacılığı hizmetleri ideal bir bankanın hizmetlerine yakındır.	1	2	3	4	5
31. Bu bankanın internet bankacılığı hizmetlerini kullanmaya istekliyim.	1	2	3	4	5
32. Yakınlarıma ve arkadaşlarıma hizmet aldığım bankanın internet bankacılığı uygulamasını tavsiye ederim.	1	2	3	4	5
33. Gelecekte bu bankanın internet bankacılığı hizmetlerini tekrar kullanmayı düşünüyorum.	1	2	3	4	5