



Libyan International University
Faculty of Information Technology
Health Informatics Department
Research Methodology Course

**The Impact Of The Quality Of Electronic Banking Services On
Customers Satisfaction In Bank of Commerce & Development In
Benghazi Libya
2017**

**This study conducted to complete Research Methodology Course
Requirements**

Authors:

Jeenan Adel Al-Tawaty	871
Asma Ahmed Al-Legmaty	1009
Heba Faraj Al-Arafi	993
Laila Adam Al-Barghathy	1023

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All our thanks to god. And thanks for participants who filled the questionnaire, thanks to our parents , thanks to LIMU university and Dr. Sabri Elkrqli.

Dedication

To The our beautiful country Libya...

To Libyan International University LIMU and Dr. Sabri Elkrqli for giving us this opportunity to learn from Research Methodology Course practically...

And to our great parents for all their patient and encourage they provide..

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Summary

This study conducted to measure the impact of quality of electronic banking services on customer satisfaction, and this study came to test hypothesis to solve the research problem.

The population of this study was faculty members of Libyan International Medical University customers in Bank Of Commerce & Development in Benghazi Libya. To achieve the objectives of this study an E-SERVQUAL questionnaire model was used to collect data from the sample, the questionnaire was distributed to 40 person and 33 was returned. And SPSS software was used in the analysis. The results was.

- 1- The level of overall satisfaction was high for the target sample.
- 2- Mean score for the dimensions indicates that there is a slight increase in the level of satisfaction for each dimension.
- 3- The satisfaction does not influenced by customs' age , gender, qualification , or faculty.
- 4- The banks must conduct a periodic studies to measure the effectiveness of electronic banking services to maintain the customers.

Chapter 1

Introduction

Chapter 1

Introduction

1-1 Introduction

With huge development in IT applications and globalization nowadays the need of using electronic banking services has increased, especially providing different electronic banking services for customers such as Automated Teller Machines (ATM), Telephone Banking , Cards, Personal Computer Banking and Internet Banking. The main reasons for the development of banking information systems is to use electronic banking systems and reduce the cost of services.

Continuous growth of e-banking services increases customer expectations, so the bank needs to improve and enhance their services, study customer expectations to enhance the level of quality services, and provide high level of quality services to retain customers' satisfaction and loyalty. Because of the increasing need to improve quality of services, companies are looking to improve financial performance and increase their customers in a very competitive environment.

Today, several financial institutions are trying to emphasize customer-oriented services. This is why it is crucial to implement new banking services in order to develop and keep better relationships with customers. Building up competitive predominance depends almost completely on customers' satisfaction with banking services. It is recognized that banks gaining higher customer satisfaction will have greater revenues. This study measures the impact of the quality of electronic banking services on customer satisfaction in the Bank Of Commerce & Development In Benghazi Libya (BCD).

1-2 Research Problem

Banks work in competitive environment so procedures must be taken to measure and enhance the quality of services they provide, increase customers' trust and satisfaction and to increase marketing share. The main problem question for this study is :

- Is the quality of electronic banking services (ease of use, saving time, security, confidentiality) has an impact on customer satisfaction?

And the sub problem questions for this study:

- What is the impact of Ease of Use dimension on customers' satisfaction for faculty members in LIMU in BCD?
- What is the impact of Saving Time dimension on customers' satisfaction for faculty members in LIMU in BCD?
- What is the impact of Security dimension on customers' satisfaction for faculty members in LIMU in BCD?
- What is the impact of Confidentiality dimension on customers' satisfaction for faculty members in LIMU in BCD?

1-3 Research Objectives

The objectives of this study is:

- 1- Identify the impact of e-banking services quality dimensions (Ease of Use, Saving Time, Security, Confidentiality) on customer satisfaction in BCD In Benghazi.
- 2- Identify some of recommendations to improve quality of electronic banking services.

1-4 Research Importance

- 1- This study has a marketing advantage for the banks, to increase customers, because the study gives understanding about the importance

of the relationship between the quality of e-banking services and customer satisfaction.

2- Students can use this study for future researches.

1-5 Research Hypotheses

Research Hypotheses is :

- 1- There is no relationship between satisfaction dimension and the other dimensions.
- 2- There is no relationship between Ease of use dimension and the other dimensions.
- 3- There is no relationship between Saving time dimension and the other dimensions.
- 4- There is no relationship between Security dimension and the other dimensions.
- 5- There is no relationship between Confidentiality dimension and the other dimensions.
- 6- There is no relationship between Customer Satisfaction dimension and the other dimensions.
- 7- Customers are not satisfied with the quality of e-banking services of commerce & development bank.
- 8- There is no difference on satisfaction on the quality of e-banking services of commerce & Development bank between males and females.
- 9- That there is no difference on the customer's satisfaction according to their qualification.
- 10- There is no difference on the customer's satisfaction according to their age.

- 11- There is no difference on the customer's satisfaction according to their faculty.

1-6 Literature Review

In this part of the paper several papers has been reviewed. For instance, Dogarawa (2005) conducted a study about The impact of e-banking on customer satisfaction in University Zaria-Nigeria, the problem was there is benefits that e-banking services can provide, but not many people use e-banking in Nigeria. This study was conducted to determine why customers use e-banking infrequently, he used e-servqual questionnaire, the sample was 180 (60 to each of the three banks), the population was all customers from 3 banks in Yazd city in Nigeria, the measured variables were security, saving time, reliability, confidentiality and ease of use. His results showed that customers using electronic banking services are still not satisfied with the quality and efficiency of the services and banks should try to win customers' confidence by providing adequate security of transactions , and government should provide adequate regulatory framework that will ensure customer protection, and security of transaction.

Musiime et al. (2011) conducted a study about Internet banking, consumer adoption and customer Satisfaction through Their University Business School of Kampala, Uganda. The problem was that there is decrease in customers . The study was conducted to determine the factors that influence consumer adoption of Internet banking service as well as examine the relationship between Internet banking service, customer adoption and customer satisfaction. A questionnaire that was designed on

a 5-point Likert scale to be able to collect good quantitative data, population of this study was 3,752, sample was 351 customers, variables are operationalized in this research as follows: Internet Banking consist of three components: access to account, control of account, and usage of account, consumer adoption is comprised of four items namely: awareness, interest, evaluation and usage as adapted, and customer satisfaction was measured on items of commitment, loyalty, retention and referral or recommendation of service. The study results show that there was a significantly positive relationship between Internet banking and customer satisfaction. Access to account, control of account, and usage of account, awareness, interest, evaluation and usage, commitment, loyalty, retention and referral or recommendation of services, are items that influence on internet banking, customer adaption, and satisfaction. The authors suggested that the bank should not be complacent; instead it should be creative and innovative creating new products or services and marketing strategies that can stimulate the demand to use Internet banking services. Even if the new strategy is implemented generally, it should mainly emphasize its efforts on targeting individual clients.

Ahmadi et al. (2015) conducted a study about The Impact of Electronic Banking Service Quality on Customer Loyalty through Their Intermediary Role of Banks In Yazd city in Iran, the problem was that banks and financial institutions do not give much attention to the quality of electronic services, and they conducted this study to determine the most important factors affecting the quality of banking services and the relationship between these dimensions and provide solutions to customer satisfaction, they used e-servqual questionnaire model and seven Likert

scale, the population consisted of all customers of banks in the city of Yazid, sample size was 80, the questionnaire measure 5 variables (Ease of Use, Saving Time, Suitability, Intellectual property rights, The accuracy of the use of electronic services), their results showed that there is positive impact on customers' perceptions of the quality of services rather than traditional services on the other hand customers' perceptions of the quality of electronic services is more efficiently than traditional service quality on customer satisfaction and customer perception, the authors suggested that banks and financial institutions must give attention to the quality of electronic services to create competitive advantage and to create long-term planning in order to create interest and customers to use electronic services, predict customer needs and creating virtual branches for customers and reduce operations costs of these services, to attract new customers and retain their customers.

Navneet Kaur and Ravi Kiran (2015) conducted a study about E-Banking Service Quality and Customer Loyalty: Changing Dynamics of Public, Private and Foreign Bank Consumers in School of Behavioral Sciences and Business Studies, Thapar University, Patiala, Punjab, India. The problem that private and public institutions do not give e-banking service quality and customer loyalty that attention to improve it. This study conducted to determine the most important factors affecting the quality of banking services and the relationship between these dimensions and provide solutions to customer satisfaction, they used E-servqual questionnaire model and five point Likert scale, the population was 800 customers, sample size was 400, the questionnaire measures 5 variables (access, website interface, trust, attention and credibility),

Findings of the research paper are that improvement in service quality would induce higher customer loyalty that customers using electronic banking services on Public, Private banks and Consumers satisfied with the quality and efficiency of the services, the authors is still room for further area of research as how banks should incorporate all these service features in gaining customer loyalty and customer retention. Further research can be done on making comparisons of different developed economies banks with Indian banks, American, European banking websites & their e-banking practices with Indian banking websites and its e-banking practices for studying service quality variables that enhance the customer loyalty in banks.

1-7 Research Methodology

This section talks about research methodology, sampling, population of the study, data collection method and tools to measure and analyze customers' satisfaction on the quality of e-banking services in BCD In Benghazi Libya. Several pages have been reviewed to have some understanding about the topic. This study talks about the impact of the quality of e-banking services on customer satisfaction in BCD. The population of this study was all faculty members at LIMU who are users in BCD, the sample was convenience, about 33 faculty members. A questionnaire has been used to collect data , an E-SERVQUAL measurement (Zeithaml, et. al. 2002) has been used in the questionnaire to measure the impact of the quality of e-banking services on customers' satisfaction, also a 5-point Likert scale (5= totally agree, 4 = agree, 3 = neutral, 2= disagree, 1= strongly disagree) was used to measure the attitudes of the customer and if the customers may not have an answer.

An E-servqual questionnaire contains several dimensions (variables) to measure the impact of e-banking services on customers' satisfaction. The main dimensions are (Ease of Use, Saving Time, Security, Confidentiality), and sub dimensions are (Satisfaction, Customer Satisfaction), the questionnaire contains 40 items, and the questionnaire has been distributed to 33 person. To analyze the data a SPSS version20 was used. Participant were asked to participate on a voluntary and anonymous basis. Every attempt was made to prevent tracking of participants identity.

Chapter 2

Empirical Studies

Chapter 2

Empirical Studies

2-1 Introduction

This chapter will discuss the results of the statistical analysis for the data that have been collected from the targeted customer, through means and hypothesis test and reliability test, and other statistical tests. Demographic data and the variables of the questionnaire has been tested.

2-2 Demographic Data Analysis

In this section, demographic data such as (age, gender, highest qualification, and Faculty) that have been collected from faculty members of LIMU, will be analyzed by SPSS version 20.

Missing Value

Missing value is when people fail to reply the query in the questionnaire, which results a missing data that will bias the result of the study. So the missing value has been given 99 number to replace. Missing value for each demographic variable must be known.

**Table 1 Missing Value
Statistics**

		Highest Qualification	Gender	Age	Faculty
N	Valid	33	33	33	32
	Missing	0	0	0	1

From Table 1, it can be noticed that there is no missing value for the variables except one value missing in faculty variable.

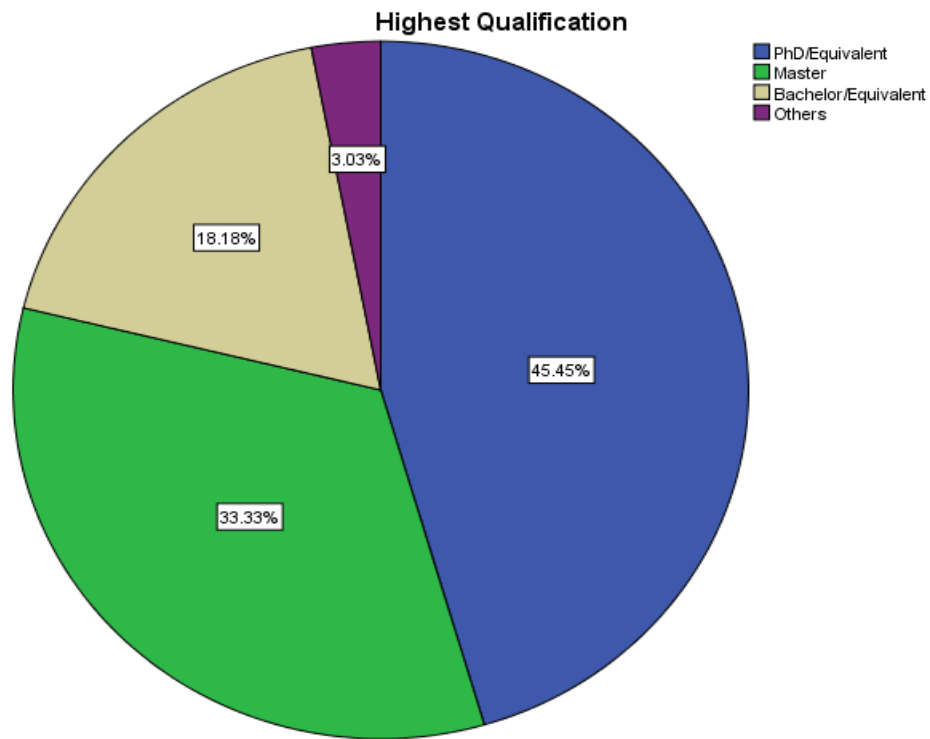
Participants' Highest Qualification

Highest Qualification is one of the most important elements to measure customers' educational level. To know if the data that have been collected from those customers is more reliable or not.

Table 2 Highest Qualification

Highest Qualification

	Frequency	Percent
Valid PhD/Equivalent	15	45.5
Master	11	33.3
Bachelor/Equivalent	6	18.2
Others	1	3.0
Total	33	100.0

Pie Chart 1 Highest Qualification

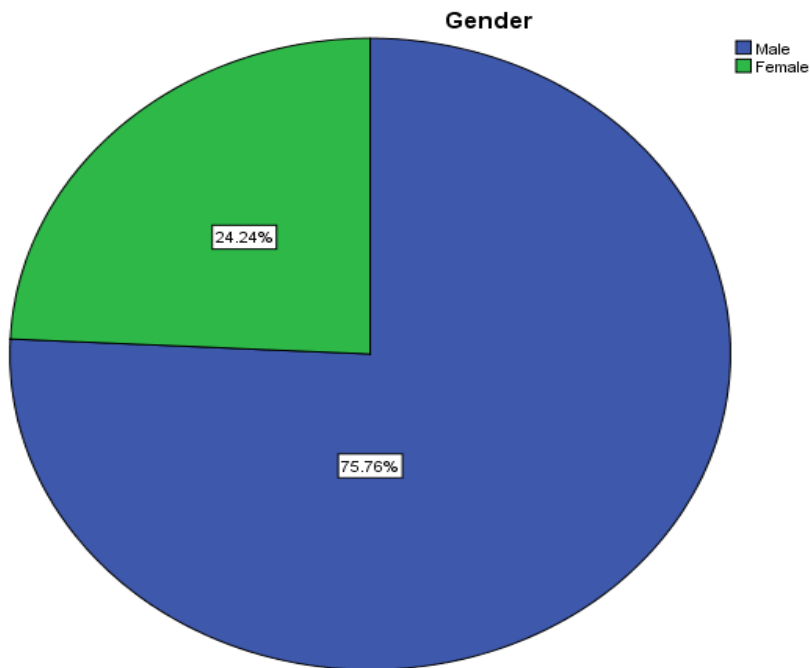
Form Table 2 and Chart 1 it can be noticed that most of the respondents (97%) hold a high degrees, so The results explain that the data has been collected is more confidence and reliable.

Participants' Gender

Gender is one of the most important elements to know the type of customers in the sample, and this table conducted to know the frequency of each gender in the sample.

Table 3 Gender

Gender		
	Frequency	Percent
Valid Male	25	75.8
Valid Female	8	24.2
Total	33	100.0

Pie Chart 2 Gender

From Table 3 and Chart 2 it can be noticed that 25 person approximately 75.8% from the respondents from the sample are males, and 8 person about 24.2% are females. The results explain that most of respondents that use the e-service banking in LIMU in BCD were males.

Participants' Age

Age is one of the most important elements to know in which age category

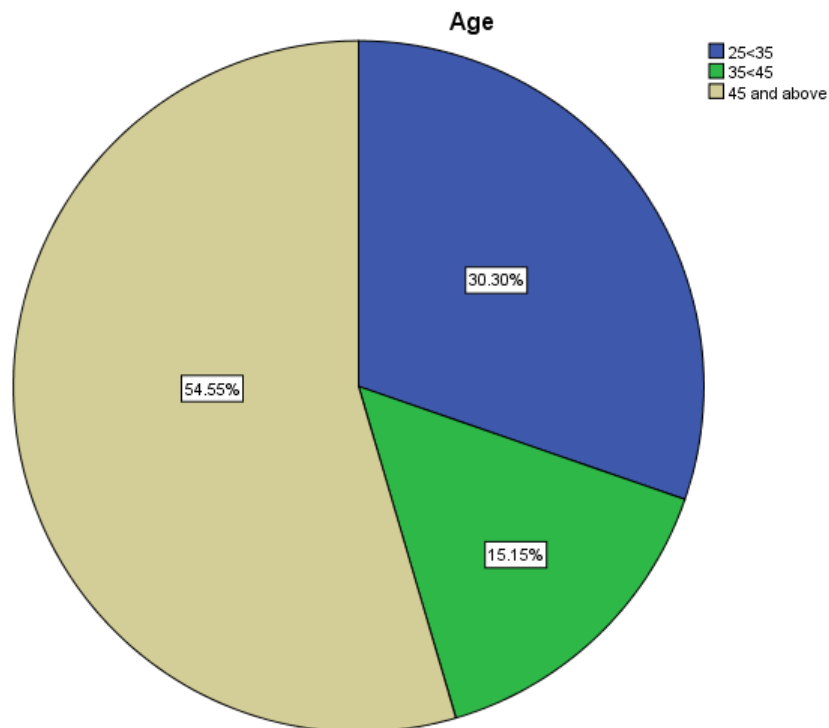
customers in, this table is for calculate the frequency in each category.

Table 4 Age

Age

	Frequenc y	Percent
Valid 25<35	10	30.3
35<45	5	15.2
45 and above	18	54.5
Total	33	100.0

Pie Chart 3 Age



From Table 4 and Chart 3 it can be noticed that most of the respondents are aged 45 and above (54.5%). The results explain that most of respondents

that use the e-service banking in LIMU in BCD are aged from 45 and above.

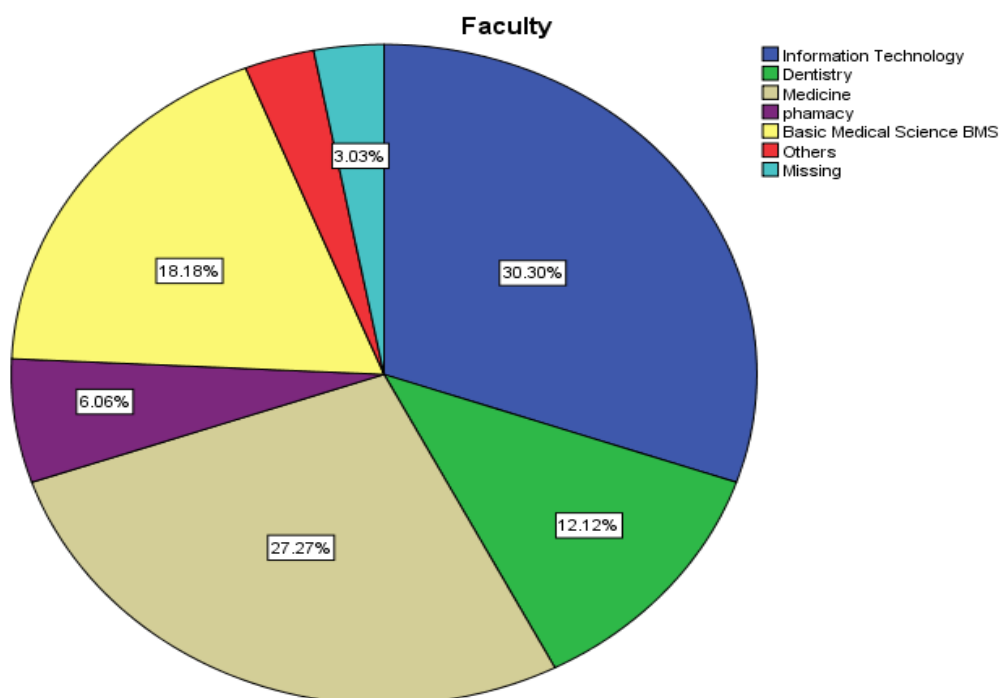
Participants' Faculty

The need to know the frequency of customers' faculty to see which the most faculty that use e-banking services more.

Table 5 Faculty

Faculty

		Frequenc y	Percent
Valid	Information Technology	10	30.3
	Dentistry	4	12.1
	Medicine	9	27.3
	pharmacy	2	6.1
	Basic Medical Science BMS	6	18.2
	Others	1	3.0
	Total	32	97.0
Missing	99	1	3.0
Total		33	100.0

Pie Chart 4 Faculty

From Table 5 and Chart 4 the results explain that most of the respondents are from Information Technology faculty in LIMU. And that explains the ones who used e-banking services in LIMU in BCD are from Information Technology Faculty.

2-3 Data Analysis

In this section, data that have been collected for the dimensions of the study will be analyzed.

Descriptive statistics

Descriptive statistics are used to measure mean scores, and to measure the level of customer satisfaction on e-banking services in BCD.

Table 6 Descriptive

	N	Mean	Std. Deviation
satisfaction	27	3.29	.674
Ease of Use	31	3.27	.706
Saving Time	30	3.01	.842
Security	32	3.54	.701
Confidentiality	33	3.63	.556
Customer Satisfaction	27	3.55	.801
Overall Satisfaction	21	4.23	.756
Valid N (listwise)	21		

Table 6 shows that the mean of overall satisfaction is 4.23 out of 5 points on Likert Scale, it's close to the score 5 in the scale, which score 5 indicates that customers are totally satisfied on the Customer satisfaction of e-banking service quality, so the faculty members customers in LIMU are satisfied on the e-banking services quality in commerce and development bank. while the mean scores of sub-components ranged between (3.01) to (3.63) that indicates there is a slight increase in satisfaction level of the customers in LIMU on the e-banking services quality in BCD.

Correlations

Correlation has been used to measure the relationship between each dimension with other dimensions.

Table 7 Correlations
Correlations

		satisfaction	Ease of Use	Saving Time	Security
satisfaction	Pearson Correlation	1	.724**	.573**	.363
	Sig. (2-tailed)		.000	.003	.069
	N	27	27	24	26
Ease of Use	Pearson Correlation	.724**	1	.771**	.409*
	Sig. (2-tailed)	.000		.000	.025
	N	27	31	28	30
Saving Time	Pearson Correlation	.573**	.771**	1	.365*
	Sig. (2-tailed)	.003	.000		.047
	N	24	28	30	30
Security	Pearson Correlation	.363	.409*	.365*	1
	Sig. (2-tailed)	.069	.025	.047	
	N	26	30	30	32
Confidentiality	Pearson Correlation	.675**	.486**	.506**	.549**

Customer Satisfaction	Sig. (2-tailed)	.000	.006	.004	.001
	N	27	31	30	32
	Pearson Correlation	.826**	.681**	.598**	.466*
	Sig. (2-tailed)	.000	.000	.002	.016
Overall Satisfaction	N	23	26	25	26
	Pearson Correlation	.865**	.884**	.796**	.554**
	Sig. (2-tailed)	.000	.000	.000	.009
	N	21	21	21	21

Correlations

		Confidentiality	Customer Satisfaction	Overall Satisfaction
satisfaction	Pearson Correlation	.675	.826**	.865**
	Sig. (2-tailed)	.000	.000	.000
	N	27	23	21
Ease of Use	Pearson Correlation	.486**	.681	.884**
	Sig. (2-tailed)	.006	.000	.000
	N	31	26	21

Saving Time	Pearson	.506**	.598**	.796
	Correlation			
	Sig. (2-tailed)	.004	.002	.000
	N	30	25	21
Security	Pearson	.549	.466*	.554*
	Correlation			
	Sig. (2-tailed)	.001	.016	.009
	N	32	26	21
Confidentiality	Pearson	1**	.811**	.835**
	Correlation			
	Sig. (2-tailed)		.000	.000
	N	33	27	21
Customer Satisfaction	Pearson	.811**	1**	.886**
	Correlation			
	Sig. (2-tailed)	.000		.000
	N	27	27	21
Overall Satisfaction	Pearson	.835**	.886**	1**
	Correlation			
	Sig. (2-tailed)	.000	.000	
	N	21	21	21

From Table 7 it can be noticed that the correlation between overall satisfaction and satisfaction dimension = 0.865 that indicates that correlation is direct/positive strong correlation so the satisfaction dimension is highly correlated to the other dimensions so the measurement scale is strong and coherent, p value = 0.000 it is less than 0.05 so we reject the Null

Hypothesis and accept the Alternative Hypothesis that states that There is relationship between satisfaction dimension and the other dimensions.

The correlation between overall satisfaction and Ease of use dimension = 0.884 that indicates that correlation is direct/positive strong correlation so the Ease of use dimension is highly correlated to the other dimensions so the measurement scale is strong and coherent. p value = 0.000 it is less than 0.05 so we reject the Null Hypothesis and accept the Alternative Hypothesis that states that There is relationship between Ease of use dimension and the other dimensions.

The correlation between overall satisfaction and Saving time dimension = 0.796 that indicates that correlation is direct/positive strong correlation so the Saving time dimension is highly correlated to the other dimensions so the measurement scale is strong and coherent. p value = 0.000 it is less than 0.05 so we reject the Null Hypothesis and accept the Alternative Hypothesis that states that There is relationship between Saving time dimension and the other dimensions.

The correlation between overall satisfaction and Security dimension = 0.554 that indicates that correlation is direct/positive intermediate correlation so the security dimension is intermediate correlated to the other dimensions so the measurement scale is intermediate and coherent. p value = 0.009 it is less than 0.05 so we reject the Null Hypothesis and accept the Alternative Hypothesis that states that There is relationship between Security dimension and the other dimensions.

The correlation between overall satisfaction and Confidentiality dimension = 0.835 that indicates that correlation is direct/positive strong correlation so the Confidentiality dimension is highly correlated to the other dimensions so the measurement scale is strong and coherent. p value = 0.000 it is less than

0.05 so we reject the Null Hypothesis and accept the Alternative Hypothesis that states that There is relationship between Confidentiality dimension and the other dimensions.

The correlation between overall satisfaction and Customer Satisfaction dimension = 0.886 that indicates that correlation is direct/positive strong correlation so the Customer Satisfaction dimension is highly correlated to the other dimensions so the measurement scale is strong and coherent. p value = 0.000 it is less than 0.05 so we reject the Null Hypothesis and accept the Alternative Hypothesis that states that There is relationship between Customer Satisfaction dimension and the other dimensions.

T-Test (1)

T-test have been used to measure customers' satisfaction on e-banking services quality in BCD.

Table 8 One-Sample Statistics

	N	Mean	Std. Deviation
Overall Satisfaction	21	4.23	.756

Table 9 One-Sample Test

	Test Value = 3		
	t	df	Sig. (2-tailed)
Overall Satisfaction	7.429	20	.000

Table 9 shows that p value = 0.000, it's less than 0.05 so we reject the null hypothesis and accept the alternative hypothesis that states that customers are satisfied with the quality of e-banking services of commerce & development bank. And that is alignment with the mean score from Table 8 which is equal 4.23 out of 5 point Likert scale, which score 5 indicates that customers are totally satisfied.

T-test (2)

This time t-test has been used to measure the difference on customers' satisfaction between females and males.

Table 10 Group Statistics

	Gender	N	Mean	Std. Deviation
Overall	Male	16	4.19	.805
Satisfaction	Female	5	4.34	.639

Table 11 Independent Samples Test

		Levene's Test for Equality of Variances	t-test for Equality of Means
		F	Sig.
Overall	Equal variances assumed	.287	.598
Satisfaction	Equal variances not assumed		-.412

Table 11 shows that $p = 0.598$, it's greater than 0.05 so we accept the Null hypothesis that states that there is no difference on satisfaction on the quality of e-banking services in BCD between males and females. Even the means score are close, 4.19 for males and 4.34 for females.

One way ANOVA (1)

ANOVA test has been done to measure the differences on customers' satisfaction according to their qualification.

Table 12 Overall Satisfaction(1)

	F	Sig.
Between Groups	.909	.421
Within Groups		
Total		

Table 13 Post Hoc Tests(1)

(I) Highest Qualification	(J) Highest Qualification	Std. Error	Sig.
PhD/Equivalent	Master	.361	.384
	Bachelor/Equivalent	.580	.446
Master	PhD/Equivalent	.361	.384
	Bachelor/Equivalent	.609	.220
Bachelor/Equivalent	PhD/Equivalent	.580	.446
	Master	.609	.220

Table 12 shows that p value = 0.421, it's greater than 0.05, so we accept the null hypothesis that states that there is no difference on the customer's satisfaction according to their qualification.

One way ANOVA (2)

ANOVA test has been done to measure the differences on customers' satisfaction according to their age.

Table 14 Overall Satisfaction(2)

	F	Sig.
Between Groups		
Within Groups	.028	.972
Total		

Table 15 Post Hoc Tests(2)

(I) Age	(J) Age	Std. Error	Sig.
25<35	35<45	.563	.851
	45 and above	.398	.831
35<45	25<35	.563	.851
	45 and above	.514	.967
45 and above	25<35	.398	.831
	35<45	.514	.967

The table 14 shows that p value = 0.972, it's greater than 0.05, so we accept the null hypothesis that states that there is no difference on the customer's satisfaction according to their age.

One way ANOVA (3)

ANOVA test has been done to measure the differences on customers' satisfaction according to their faculty.

Table 16 Overall Satisfaction(3)

	F	Sig.
Between Groups	1.658	.205
Within Groups		
Total		

Table 16 shows that p value = 0.205, it's greater than 0.05, so we accept the null hypothesis that states that there is no difference on the customer's satisfaction according to their **faculty**.

Reliability Test

Reliability test has been done to measure the relationship among items in each dimension and to measure the relationship among items for the overall measurement.

Reliability Test For Overall Dimensions

Reliability test to measure the relationship among items for the Overall Satisfaction.

Table 17 Reliability Statistics

(1)

Cronbach's Alpha	N of Items
.956	40

From Table 17 it can be noticed that Cronbach's alpha value for the overall satisfaction = 0.956, the value is above (0.65) and close to 1 so the measurement is excellent, strong, reliable and coherent, and there is strong relationship among items in this measurement (E-SERVQUAL), so we can rely and depend on this measurement.

Reliability Test For Satisfaction Dimension

Reliability test to measure the relationship among items in Satisfaction dimension.

**Table 18 Reliability
Statistics (2)**

Cronbach's Alpha	N of Items
.820	7

From Table 18 it can be noticed that Cronbach's alpha value for the satisfaction dimension = 0.820, it is above (0.65), so the measurement is reliable and coherent and there is relationship among items in the satisfaction dimension.

Reliability Test For Ease Of Use Dimension

Reliability test to measure the relationship among items in Ease Of Use dimension.

Table 19 Reliability**Statistics (3)**

Cronbach's Alpha	N of Items
.876	7

From Table 19 it can be noticed that Cronbach's alpha value for the Ease of use of the e-service = 0.876, it is above (0.65) and close to 1, so the measurement is reliable and coherent and there is relationship among items in the Ease To Use dimension.

Reliability Test For Saving Time Dimension

Reliability test to measure the relationship among items in Saving Time dimension.

Table 20 Reliability**Statistics (4)**

Cronbach's Alpha	N of Items
.873	6

From Table 20 it can noticed that Cronbach's alpha value for the Save time dimension = 0.873, it is above (0.65) and close to 1, so the measurement is reliable and coherent and there is relationship among items in the Saving

time dimension.

Reliability Test For Security Dimension

Reliability test to measure the relationship among items in Security dimension.

Table 21 Reliability Statistics

(5)

Cronbach's Alpha	N of Items
.886	5

From Table 21 it can be noticed that Cronbach's alpha value for the security dimension = 0.886, it is above (0.65) and close to 1 so the measurement is reliable and coherent and there is relationship among items in the Security dimension.

Reliability Test For Confidentiality Dimension

Reliability test to measure the relationship among items in Confidentiality dimension.

Table 22 Reliability Statistics (6)

Cronbach's Alpha	N of Items
.844	6

From Table 22 it can be noticed that Cronbach's alpha value for the

Confidentiality Dimension = 0.844, it is above (0.65) and close to 1, so the measurement is reliable and coherent and there is relationship among items in the Confidentiality dimension.

Reliability Test For Customer Satisfaction Dimension

Reliability test to measure the relationship among items in Customer satisfaction dimension.

**Table 23 Reliability
Statistics (7)**

Cronbach's Alpha	N of Items
.903	9

From Table 23 it can be noticed that Cronbach's alpha value for the Customer Satisfaction Dimension = 0.903 , it is above (0.65) and close to 1, so the measurement is excellent, strong , reliable and coherent and there is strong relationship among items in the Customer Satisfaction dimension.

Chapter 3

Conclusion

Chapter 3

Conclusion

3-1 Introduction

This chapter presents the results of this study, as an answer for the questions that have been asked in chapter 1, which include the problem and the hypothesis, then the authors will present some recommendations.

3-2 Results

3-2-1 Descriptive Analysis Results

- 1- Quality of e-banking services has a positive impact on customer satisfaction, where mean score for the overall satisfaction on the quality of e-banking services = 4.23, it's close to the score 5 in the scale, which score 5 indicates that customers are totally satisfied on the quality of e-banking services in BCD. This result is in agreement with Ahmadi et al. (2015) and Kaur et al. (2015) results, which said that the quality of e-banking services has a positive impact on customers' satisfaction.
- 2- The mean of Ease of Use dimension is 3.27 out of 5 points on Likert Scale, it's close to the score 5 in the scale, which score 5 indicates that customers are totally satisfied on the ease of use of e-banking services, so the faculty members customers in LIMU are satisfied on the ease of use of the e-banking services in BCD. So ease of use dimension has an impact on customers' satisfaction.
- 3- The mean of Saving Time dimension is 3.01 out of 5 points on Likert Scale, it's close to 3 score, which score 5 indicates that customers are Neutral , so the faculty members customers in LIMU

are not that satisfied with the time saving dimension in BCD. So saving time dimension has an impact on customers' satisfaction.

- 4- The mean of Security dimension is 3.54 out of 5 points on Likert Scale, it's close to the score 5, which score 5 indicates that customers are totally satisfied on the security of e-banking services, so the faculty members customers in LIMU are satisfied on the security of the e-banking services in BCD. So security dimension has an impact on customers' satisfaction.
- 5- The mean of Confidentiality dimension is 3.63 out of 5 points on Likert Scale, it's close to the score 5, which score 5 indicates that customers are totally satisfied on the confidentiality of e-banking service, so the faculty members customers in LIMU are satisfied on the confidentiality of the e-banking services in BCD. So confidentiality dimension has an impact on customers' satisfaction.

3-2-2 Hypothesis Test Results

- 1- There is relationship among all dimensions (Satisfaction, Ease Of Use, Saving Time, Security, Confidentiality, Customer Satisfaction) with each other.
- 2- Customers are satisfied with the quality of e-banking services in Bank of Commerce and Development.
- 3- There is no difference on customer satisfaction between females and males on the quality of e-banking services for LIMU's faculty members, because p value = 0.598, it's greater than 0.05 so we accept the Null hypothesis.
- 4- That there is no difference on the customer's satisfaction for LIMU's faculty members according to their qualification, because

$p = 0.421$, it's greater than 0.05, so we accept the null hypothesis.

- 5- There is no difference on the customer's satisfaction for LIMU's faculty members according to their age, because $p = 0.972$, it's greater than 0.05, so we accept the null hypothesis.
- 6- There is no difference on the customer's satisfaction for LIMU's faculty members according to their faculty, because $p = 0.205$, it's greater than 0.05, so we accept the null hypothesis.

3-3 Research Limitations

- 1- The study limited to faculty members of LIMU customers in BCD, so the results can't be generalized to all customers in BCD or in other banks.
- 2- There wasn't enough time for conducting , collecting data or auditing the study.
- 3- Some of participants were not cooperative.

3-4 Research Recommendation

- 1- The results of the study shows the level of impact (Ease Of Use, Saving Time, Confidentiality, Security) on customer satisfaction so banks must give more attention to them.
- 2- Conducting a comparative study between BCD and other banks about the quality of e-banking services and customer satisfaction to achieve competitive advantage.
- 3- Conducting a periodic studies to measure the effectiveness of quality of electronic banking services to maintain customers.
- 4- Continuously develop technology and communication systems.
- 5- To study the quality of e-banking services through other dimensions and variables not mentioned in this study.

3-5 Conclusion

The study aimed to measure the impact of quality of e-banking services on customer satisfaction in BCD in Benghazi Libya. This study showed that quality of e-banking services and its diminutions (Ease OF Use, Saving Time, Security and Confidentiality) have an impact on customer satisfaction. And that satisfaction not influenced by customers' gender, age, qualification and faculty. So banks must give more attention to improve the quality of their electronic banking services.

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Appendixes

Appendix 1.. The questionnaire

Dear Sir / Madam

The current study tries to assess the impact of electronic banking services quality on customer's satisfaction in Bank of Commerce and Development in Benghazi Libya.

This questionnaire consists of (40) items and Faculty members of Libyan International University are appreciatively requested to fill in the questionnaire.

Finally, it is worth assuring that all answers will be treated with care and confidentiality.

Demographics Data

Highest Qualification: PhD/Equivalent Master Bachelor/ Equivalent
 Others...

Gender: Male Female

Age: 25 < 35 35 < 45 45 and above

Faculty: Information Technology Dentistry Medicine Pharmacy
 Basic Medical science (BMS) Others..

Electronic Banking Service Quality and Customers Satisfaction

Domain / Items	Degree of Agreement				
Overall E-Banking Services Quality	Totally Agree	Agree	Neutral	Disagree	Strongly Disagree
1- Electronic banking services are available 24 hours 7 days a week.					
2- Electronic banking allows you to know all other banking services.					
3- Promotes the perceived benefit of e-banking services on the online service request.					
4- The bank offers many electronic banking services .					
5- The Bank has a special web page					
6- Bank employees understand and seek customer needs.					
7- The quality of the bank's electronic banking services is appropriate.					
Ease Of Use					
8- Using e-banking is easy.					
9- Using e-banking helps me accomplish all the tasks.					
10- Through its website, the bank provides immediate assistance to facilitate operations for customers.					
11- I can get useful information through the use of online banking.					
12- It is easy to register and access the bank's portal.					
13- Online banking provides quick help to guide customers to solve problems.					
14- The language used on the website is clear.					
Save time					
15-Using electronic online service in completing financial transactions saves time.					
16- Electronic services are obtained without delay.					
17- Inquiries are answered in a short time.					
18- The user can get the service from the first time.					

19- There is an immediate response to the customer's request.					
20- easy to access the bank webpage.					
Security					
21- I feel secure when dealing with this bank electronically.					
22- The use of e-banking provides permanent contact with the bank.					
Domain / Items		Degree of Agreement			
Overall E-Banking Services Quality	Totally Agree	Agree	Neutral	Disagree	Strongly Disagree
23- The e-banking service provides high protection for my information about my banking transactions.					
24- Feelings of satisfaction during transaction processing through online banking.					
25- The electronic banking service is secured in banking operations.					
Confidentiality					
26- The Bank deals with my confidential information when using the electronic service.					
27- Confidentiality of the information provided by the customer to the website is available.					
28- There is absolute confidentiality in my dealings with the bank.					
29- The e-banking service does not allow others to view my personal information.					
30- The Bank maintains accurate records and files and can be consulted quickly.					
31- The e-banking service does not allow the misuse of personal information.					
Customer satisfaction					
32- I will use e-banking on a regular basis.					
33- I have absolute satisfaction with the language used on the bank's website.					
34- The level of technical terms used on the Bank's website was appropriate.					

35- I would recommend others to use e-banking.					
36- Banking services provided to me is satisfactory.					
37- Online services are comprehensive.					
38- Using the website helps me get the services almost in no time.					
39- By using the website, I feel that my relationship to the bank is deeper than just getting the banking services.					
40- I think I did the right thing by using the bank's website.					