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MIDDLE EAST UNIVERSITY

Effect of E-Banking Services on Customer Value and Customer Loyalty

An applied Study on Jordanian Commercial Banks

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AUTHORIZATION

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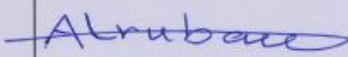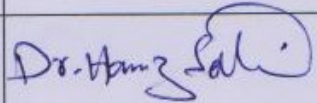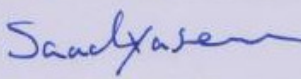
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This thesis has been discussed under the title *"Effect of E-banking services on Customer value and Customer Loyalty: An applied Study on Jordanian Commercial Banks"* and was approved on   18 / 1 / 2012

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DEDICATION

To my Country…IRAQ,

To my dearest Father and Mother,

To those my soul missing them… Brothers and Sisters,

To my beloved wife... Noora,

To my kids…Ghazwan, Ghaith and Rayhan…

I dedicate this effort.

Table of Contents

Contents	Page

LIST of TABLES

LIST of FIGURES

LIST of APPENDIX

Effect of E-Banking Services on Customer Value and Customer Loyalty

An applied Study on Jordanian Commercial Banks in Amman

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Abstract

In recent years, electronic banking (e-banking) services have begun to appear quite extensively as an electronic channel of conducting financial transactions. Jordanian commercial banks continue to offer most of their banking transactions using electronic means. More common e-banking services are the ATM, internet transactions, and transferring funds, whereby customers produce services for themselves without assistance from bank employees.

Little is known about why customers decide/ accept to use e-banking services and why others did not. The objective of this study is to investigate the effect of electronic banking services on Customer value and Customer loyalty. (13) Jordanian commercial banks were chosen and (260) questionnaires (consist of 40 statements) were distributed on banks customers those using e-banking services, (206) useable

questionnaires were analyzed; the results revealed that e-banking services have a positive effect on customer value and customer loyalty. In addition the research indicated that there is an indirect effect of E-Banking Services on Customer Loyalty through Customer Value as mediator.

تأثير الخدمات المصرفية الالكترونية على قيمة الزبون وولاء الزبون

دراسة تطبيقية على البنوك التجارية الاردنية في عمان

إعداد الطالب
عمار سعيد حامد

إشراف
الدكتور ليث سلمان الربيعي

الملخص

في السنوات الأخيرة، بدأت الخدمات المصرفية الالكترونية تظهر على نطاق واسع كوسيلة الكترونية لإجراء المعاملات المالية. ولا تزال البنوك التجارية الاردنية مستمرة في تقديم خدماتها المصرفية الى العملاء من خلال وسائل الكترونية . إن من أكثر الخدمات المصرفية الالكرونية شيوعاً هي الصرّاف الآلي ، إجراء المعاملات عبر الانترنيت وتحويل الاموال، وبالتالي فإن العملاء يحصلون على الخدمات المصرفية بأنفسهم دون الحاجة الى مساعدة من قبل موظف البنك.

لا يعرف الا القليل من المعلومات التي توضح الاسباب وراء قرار / قبول بعض العملاء استخدام الخدمات المصرفية الالكترونية ، بينما البعض الآخر لا يفضل ذلك.

تهدف هذه الدراسة الى اختبار تأثير الخدمات المصرفية الالكترونية على قيمة الزبون وولاء الزبون ضمن البنوك التجارية الاردنية والبالغة (13) بنك، تم توزيع (260) استبانة لجمع البيانات الاولية من عينة البحث وهم العملاء المستخدمين للخدمات المصرفية الإلكترونية، بلغ عدد الاستبانات الصالحة للتحليل (206) استبانة وتم تحليل بياناتها وقد أظهرت النتائج أن الخدمات المصرفية الإلكترونية لها تأثير إيجابي على قيمة الزبون وولاء الزبون ، بالإضافة الى ذلك أوضحت الدراسة أن هناك تأثير غير مباشر للخدمات المصرفية الإلكترونية على ولاء الزبون من خلال قيمة الزبون باعتباره متغيراً وسيطاً.

CHAPTER ONE

STUDY OF GENERAL FRAMEWORK

1-1: Introduction

1-2: Study Problem and Questions

1-3: Study Hypotheses

1-4: Study Significance

1-5: Study Objectives

1-6: Study Delimitations

1-7: Study Limitations

1-8: Study Model

1-9: Study Terminologies

1-1: Introduction

Electronic banking technologies greatly expanded in recent years (Anguelov and Hilgert, 2004),

E- Banking service is based on the use of new technologies to provide various banking services directly to customers around the clock. Banks offer a wide range of these services that can be used by electronic tools such as ATM, cell phone and Internet.

Banks are making adjustments in service to meet customer needs (Kolodinsky, Hogarth and Hilgert, 2004), where banks can provide an excellent service to customers (Siam, 2006), and can have a significant affect in supporting economic development through efficient financial services (Al Hajri, 2008). It is important for banks to offer services electronically to differentiate themselves from competitors. They need to provide information for customers on various competing services, which make it possible to compare them and then select the one that best meets customer requirements (Almazari and Siam, 2008). The electronic banking literature lacks empirical evidence about how a person's attitude affects their choice of financial service delivery channel (Karjaluoto, 2002). Although the value of a service depends on customer preferences and alternatives, value can be improved by decreasing costs or increasing benefits (Browning, 2003). Customer value is considered central to acquire competitive advantage and long-term success of the company through good service delivery system (Yan Ma and Ding 2010) also customer value regulates behavioral intentions of loyalty toward the service provider (Sirdeshmukh, Singh and Sabol, 2002). From another side, Customer loyalty has a powerful impact on firms' performance and is considered an important source of competitive advantage, customer loyalty has also been shown to be important in the online environment (Lam, Shankar, Murthy, 2004), In this study, the electronic banking services

will be limited to banking services via electronic tools such as internet banking and ATM service as well as financial transactions such as payments, and account transfers.

The dimensions of the main constructs were selected on the basis of reviews from previous researches, as well as questionnaire instrument was constructed mostly by adopting the measures from prior researches to be consistent with the purpose of study and suit with study population and sample.

Four characteristics of e- banking services (Ease of use, Usefulness, Cost saved and Self–control) measured by prior researchers, as well as Customer value has been determined by three dimensions (Functional value, Emotional value, and Epistemic value), while Customer loyalty has been determined by two dimensions (Attitudinal and Behavioral).

The purpose of this study is to investigate whether electronic banking services affect Customer value and Customer loyalty within the Jordanian commercial banks. Furthermore seeks to show how customers perceive values, and what underlying factors that affect their choice of banking services the most, as well as the researcher will strive to examine the mediating role of Customer value in the impact of e-banking services on customer loyalty.

This study first presents an extensive literature review, focusing on e-banking services, Customer value, and Customer loyalty, and then a conceptual model and derived hypotheses. The methodology, data analysis, and results are subsequently presented. Finally, discussion of the results and conclusions will be presented.

1-2: Study Problem and Questions

All banks compete with each other to attract their customers in different ways through providing convenient, accessible and acceptable services or/and products to their customers. One of the most important of these services is the electronic services that have contributed significantly to increase the distance between costumers and the bank. (Almazari and Siam, 2008). From the perspective of some customers, choosing to use electronic banking services can mean easier, lower-cost, around the clock availability, and time savings in managing of financial services, while for the perspective of other customers, the anxiety, complexity, risk and difficulties in accessibility might lead customers to refuse to continue using e-banking services (Ho, and Ko, 2008). Therefore e-banking services may not be a matter of choice to those customers (Anguelov and Hilgert, 2004).

Although the banks have recently taken much interest in generating value for the customer, they have experienced high levels of dissatisfaction on the part of users. Hence, no matter how much effort the banks put into their electronic services, if the customers do not understand the meaning or value of using them, the electronic service itself will be meaningless (Jonsson, and Hagg, 2009). The banks must provide distinctive services that give banks an opportunity to communicate with Customer value and loyalty, and thereby magnetize new customers in time. Customers are reluctant to adopt e-banking services due to security and privacy concerns and trust-related issues (Yousafzai, Pallister, and Foxall, 2005). Based on above, the Study Problem may be demonstrated via the questions below:

First Question: To what extent E- banking services affect Customer value?

Second Question: To what extent E- banking services affect Customer Loyalty?

Third Question: To what extend Customer value affects Customer Loyalty?

Fourth Question: To what extend that E-banking services indirectly affect Customer Loyalty through Customer value as a mediator?

1-3: Study Hypotheses

Based on the study problem and the literature review, this study aims to test the following hypotheses:

H1: There is positive effect of E- banking services on Customer value at the significant level ($\alpha \leq 0.05$)

H2: There is positive effect of E-banking services on Customer Loyalty at the significant level ($\alpha \leq 0.05$)

H3: There is positive effect of Customer value on Customer Loyalty at the significant level ($\alpha \leq 0.05$)

H4: There is indirect effect of E- banking services on Customer Loyalty through Customer value as a mediator variable at the significant level ($\alpha \leq 0.05$).

1-4: Study Significance

The way people use banks and their services has changed. A few years ago, almost all service encounters in Jordan were in the form of personal meetings between a service provider and a customer. Today E- banking services, with less interpersonal contact between the bank and the customer, have for many Jordanian people become the most important way to interact with their banks (Almazari, and Siam, 2008). This study is important for two reasons:

First: The importance of service sector that this study focuses on, where the banking sector ranked the first in the Jordanian economy, and the economies of the countries in the world (Siam, 2006).

Second: The scarcity of the researches in this scope, there are very few studies focused on the impact of electronic banking services on customer value and customer loyalty.

1-5: Study Objectives

The main objective of this study is to investigate the effect of E- banking services on Customer value and Customer Loyalty in the Banking sector in Amman by achieving the following objectives:

1. To determine the effect of E- banking services on Customer Value.

2. To examine the effect of E- banking services on Customer Loyalty.

3. To determine the effect of Customer value on Customer Loyalty.

4. To investigate the indirect effect of e-banking services on customer loyalty through customer value as a mediator factor.

1-6: Study Delimitations

The scope of study deals with the following:

Human delimitations: The scope of the study deals with customers of Jordanian commercial banks, using the electronic banking services.

Place delimitations: Jordanian commercial banks which offer electronic banking services.

Time delimitations: The time absorbed to study accomplishment.

1-7: Study Limitations

This study was implemented in the Jordanian commercial banking sector in Amman. The aim was to look into customers of banks using e-banking services within a certain range.

1-8: Study Model

The structural model describes the way in which it is linked to other constructs. The model describes e-banking services as an independent construct, includes four characteristics (Ease of Use, Usefulness, Cost saved, and Self-control) that suggested by (Ho, and Ko, 2008), (Davis, 1989), (Chau, and Lai, 2003), (Anguelov and Hilgert, 2004). Two dependent constructs taken in this study first is Customer value, which includes five dimensions (Functional value, Emotional value, Epistemic value, Social value, and Condition value) that suggested by (Baloglu, 2002), (Ho, and Ko, 2008), (Anguelov and Hilgert, 2004) and (Khan,Kadir and Wahab,2010), three dimensions only taken into consideration in this study (Functional value, Emotional value, and Epistemic value). The second dependent construct that this study applied is Customer loyalty, which includes two dimensions consisting of attitudinal and behavioral loyalty, that suggested by (Yang and Peterson, 2004), and (Luarn and Lin, 2003), As shown in Figure (1-2) Customer value is considered as a mediator construct for the relationship between e-banking services and Customer loyalty.
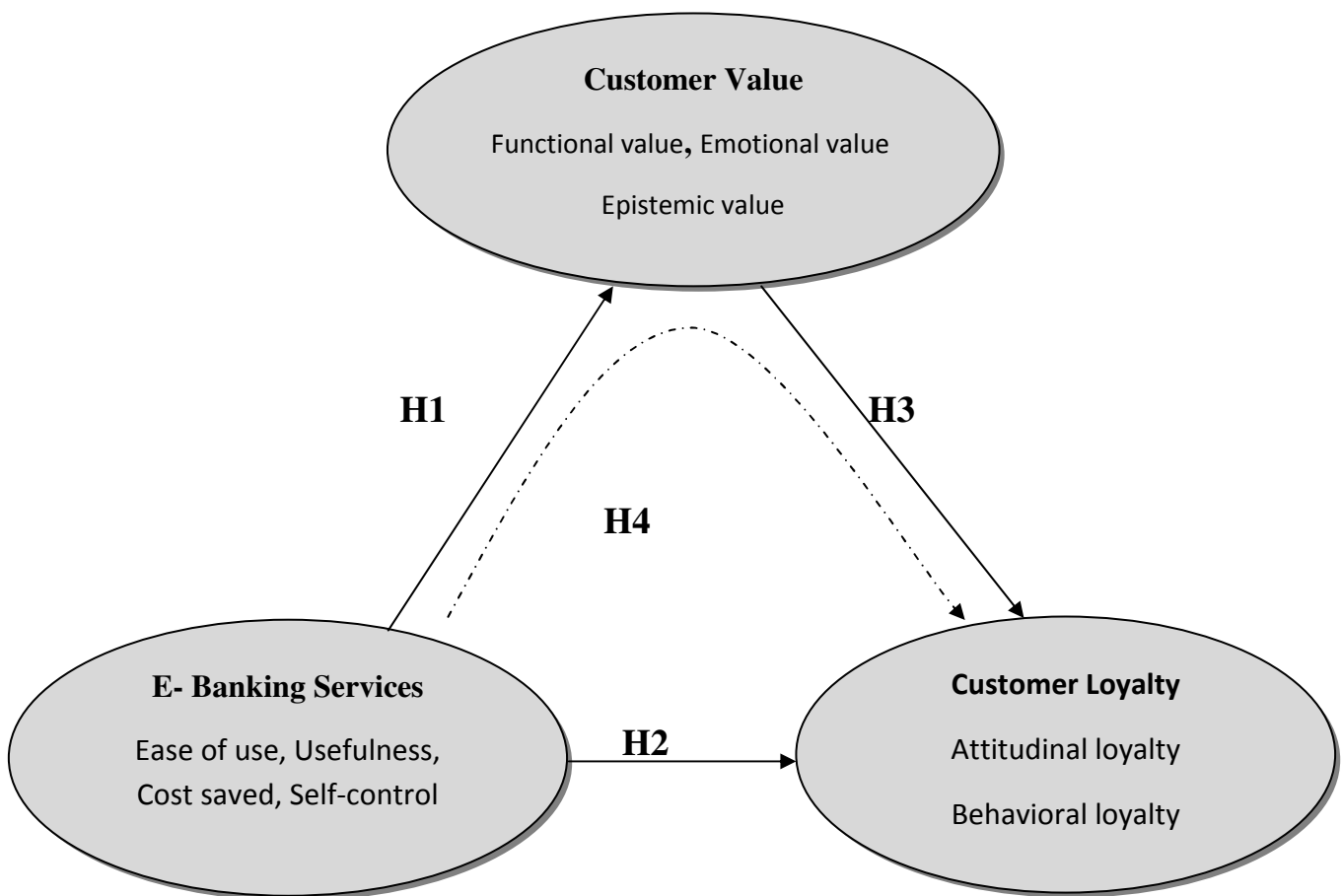
Figure (1-2)

Conceptual Model

The researcher therefore hypothesized that e-banking services positively influence both customer value and customer loyalty (**H1, H2**). Additionally, the researcher assumed a positive effect of Customer value on Customer loyalty (**H3**). Finally, Customer value can be seen as a mediator for the indirect positive influence of e-banking services on Customer loyalty (**H4**).

1-9: Study Terminologies

Electronic banking:

The definition of e-banking varies amongst researches partially because electronic banking refers to several types of services through which a bank's customers can request information and carry out most retail banking services via computer, television or mobile phone (Lustsik, 2004).

Electronic banking can be defined as the provision of information or services by a bank to its customers, describes it as an electronic connection between bank and customer in order to prepare, manage and control financial transactions (Karjaluoto, 2002). From another side, Daniel (1999) described electronic banking as the provision of banking services to customers through Internet technology. E-banking is also defined as the automated delivery of new and traditional banking products and services directly to customers through electronic, interactive communication channels (Gio, 2005).

Characteristics of Electronic Banking Services

According to (Ho, and Ko, 2008) four characteristics (**Ease of use, Usefulness, Cost saved and Self-control**) were suggested, determining the customer acceptance of e-banking services as follows:

Ease of use:

Ease of use can be defined in the current context as a factor in which the self-service activity provides a clear interface and simple process to ensure customers can use it effectively. Davis (1989) defined ease of use as the degree to which a person believes that using a particular system would be free of effort. Ease of use given that Internet-based transactions might seem complex and intimidating to many customers, it has often been termed usability in the online context (Zeithaml, Parasuraman and Malhotra, 2002).

Usefulness:

Davis (1989) defined the usefulness as "the degree to which a person believe that using a particular system would enhance his or her job performance".

Cost saved

Automated e-banking services offer a perfect opportunity for minimizing costs (Lustsik, 2004). Costs saved relates to the amount of time and money saved when using an innovative self-service. Costs in terms of money and time are negative factors when customers assess the value of the service (Ho and Ko, 2008).

Self-control

Gailliot, Baumeister, and DeWall, (2007) defined self-control as the ability to control or override one's thoughts, emotions, urges, and behavior. It provides the flexibility necessary for successful goal attainment. Self-control enables the service activity to be performed without depending on servers or releasing personal information. An individual with self-control has the power of predictability, controllability, and outcome desirability (Ho and Ko, 2008).

Customer value:

A customer's perceived preference for, and evaluation of, those product attributes, attribute performances, and consequences arising from use that facilitates (or blocks) achieving the customer's goals and purposes in use situations (Woodruff, 1997). It's reflecting customers' rational trade-off between the costs and benefits of using a product and service (Lam, Shankar and Murthy, 2004).

Dimensions of Customer value

According to (Chen et al, 2005), (Ho, and Ko, 2008), (Anguelov and Hilgert, 2004) and (Khan,Kadir, Wahab,2010), three dimensions suggested (**Functional value, Emotional value, and Epistemic value**) to determine customer value.

Functional value:

Woodruff (1997) defined functional value as the rational and economic valuations of individuals and the quality of the product and service form this dimensions. It is relate to functional performance, economic utility, and the benefits associated with possessing the service. A range of functional value attributes emerged from the extensive review; these are responsiveness, reliability, empathy, and price (Khan, Kadir and Wahab, 2010).

Emotional value:

It describes customers' feelings when they experience an organization's products or services (Ho and Ko, 2008).

Epistemic value:

It is the capacity of services or products to provide novelty or curiosity and satisfy a desire for knowledge. An organization can achieve a longer lasting business performance if creating superior customer value is the way to gain a sustainable competitive advantage (Chen and Quester, 2006).

Customer loyalty:

Customer loyalty is a buyer's overall attachment or deep commitment to a product, service, brand, or organization (Oliver 1999). Lam, Shankar and Murthy (2004)

also defined customer loyalty as the deep commitment to a product, service, brand, organization.

Dimensions of Customer loyalty

To measure customer loyalty, researcher used two dimensions (**Attitudinal loyalty and Behavioral loyalty**) which suggested by (Baloglu, 2002), (Chiou and Droge, 2006), (Yang and Peterson, 2004), (Curran and Meuter, 2005) and (Luarn and Lin, 2003) to determine Customer loyalty which are

Attitudinal loyalty:

Bennett and Sharyn (2002) defined attitudinal loyalty as a psychological predisposition towards a particular brand, while Seigyoung, Simon, Colin, and Eric(2007) mentioned that attitudinal loyalty refers to a measure of clients' intentions to stay with and level of commitment to the organization. The attititudinal loyalty is created first leading to behavioral loyalty (Marcel, Krish, & Katrin, 2001).

Behavioral loyalty

Early definitions of loyalty focused almost exclusively on its behavioral dimension. In particular, loyalty was interpreted as a form of customer behavior (such as repeat purchasing) directed toward a particular brand over time (Dwayne, Gremlera and Stephen, 1996). Traditionally, behavioral loyalty has been defined in terms of repeat buying behavior (Marcel, Krish, & Katrin, 2001).

CHAPTER TWO

THEORETICAL FRAMEWORK AND

PREVIOUS STUDIES

2-1: Introduction

2-2: Concept of E- banking services

2-3: Concept of Customer value

2-4: Concept of Customer loyalty

2-5: Previous Studies

2-6: Difference between Current Study & Previous Studies

2-1: Introduction

While there is a rich body of literature on electronic banking services, Customer value and Customer loyalty, little is known about the relation among them. This chapter will contain theories that cover the chosen subject. The theoretical frame will highlight the concepts of E-banking services, Customer value, and Customer loyalty that were deeply explained in previous researches and theories and these, in turn, will be the foundation for the empirical data collection. In addition, through a review the literature we will compare and identify the differences between this study and previous studies.

2-2: Concept of E- Banking Services

E-banking now becomes a virtual banking counter that the individual and corporate customer to carry out the regular activities (Gio, 2005). The term electronic banking is used to describe the provision of information or services by a bank to its customers, via a computer or television (Daniel, 1999), where E-banking includes the systems that enable financial institution customers, individuals or businesses, to access accounts, transact business, or obtain information on financial products and services through a public or private network, including the Internet (Gio, 2005).

E-banking uses the web browser for the user interface and the Internet for data transfer and download of software, and so has a potential for reducing maintenance costs. For users, e-banking provides current information, 24-hours-a-day access to banking services – in addition to the familiar browser interface (Hertzum, Jørgensen, Nørgaard, 2004). Customers access e-banking services using an intelligent electronic device, such as a personal computer (PC), personal digital assistant (PDA), automated teller machine

(ATM) (Gio, 2005). Dabholkar, Bobbitt and Lee (2003) referred that technology-based self-service options now include telephone banking, Internet banking, smartcard banking, and home banking via television, in addition to the ATM.

E-banking services are typically classified based on the type of customer they support (Gio, 2005).
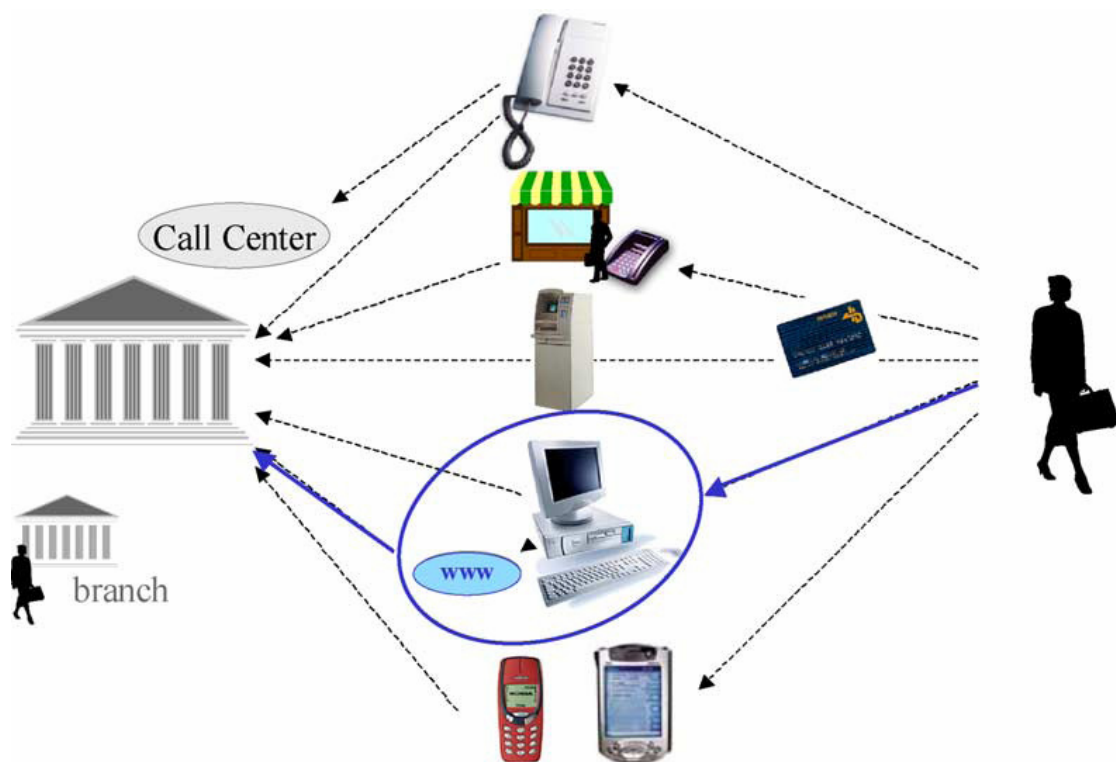
Resource Centeno, 2004   **Figure (2-1)**

Banking distribution channels

Furthermore, electronic services contribute in reducing costs, increasing profits, activating bank's management, increasing bank's effectiveness and its competitive degree. This reflects the direct relation between increasing client's needs to reduce time, costs and between electronic banking services. (Siam, 2006). Jordanian commercial banks need more than any other time to activate, develop, and innovate new techniques on

international level to enhance the relationship between themselves and their customers (Almazari and Siam, 2008). Since e-banking, is a high-risk area with a potential for substantial economic loss, therefore electronic banking must be secure and easy to use (Hertzum, Jorgensen, and Norgaard, 2007).

E – Banking services in Jordan

The adopting of electronic banking has been increased dramatically during the last few years by the banks in Jordan (Migdadi, 2008). The emergence of newer banking services which completely differ from the traditional services that people have been accustomed to, prompts people and organizations in Jordan to increase their banking activities; According to the official website of the Central Bank of Jordan, there are (13) local commercial banks. The majority of banks in Jordan have electronic sites for introducing services and branches agreed on the confidently and privacy necessity in electronic banking business (Siam, 2006). Jordanian commercial banks need to provide information for customers on various competing services, which make it possible to compare them and then select the one that best meets their requirements (Almazari and Siam, 2008).Although most banking services in Jordan were conducted by personal form through meetings between a service provider in the bank and customer, many Jordanian people now prefer to use e-services to conduct their finance transactions with banks by accessing to internal resources (Siam, 2006)

Benefits of Electronic Banking Services

There are arguments that the benefits of e-banking services on the fact that customers can access services when and where they want without some of the complications of inter-personal exchanges (Durkin, 2004).

Benefits from the bank point of view:

- The first benefits for the banks offering Internet banking services are better branding and better responsiveness to the market. Those banks that would offer such services would be perceived as leaders in technology implementation. Therefore, they would enjoy a better brand image (Lustsik, 2003).

- The second benefits to banks are cost savings, reaching new segments of the population, efficiency, enhancement of the bank's reputation and better customer service and satisfaction, the online banking strengthens the relationship between the service provider (e.g. bank) and the customer (Karjaluoto, 2002).

- The third benefits that online channel enables banks to offer are low-cost, high value-added financial services and also benefit from the promotional opportunity to cross-sell products such as credit cards and loans (Hawkins, 2001).

- The other benefits are possible to measure in monetary terms. The main goal of every company is to maximize profits for its owners and banks are not any exception. Automated e-banking services offer a perfect opportunity for maximizing profits (Lustsik, 2003).

Benefits from the customers' point of view

Lustsik (2003) and Gurau (2002) explained multiple benefits to customers by e-banking services:

- The main benefit from the bank customers' point of view is significant saving of time by the automation of banking services processing and introduction of an easy maintenance tools for managing customer's money.

- Reduced costs in accessing and using the banking services.

- Increased comfort and timesaving — transactions can be made 24 hours a day, without requiring the physical interaction with the bank.

- Quick and continuous access to information. Corporations will have easier access to information as, they can check on multiple accounts at the click of a button.

- Better cash management. E-banking facilities speed up cash cycle and increase efficiency of business processes as large variety of cash management instruments is available on Internet sites.

- Speed. The response of the medium is very fast; therefore customers can actually wait till the last minute before concluding a fund transfer.

- Funds management. Customers can download their history of different accounts and do a what-if analysis on their own PC before affecting any transaction on the web. This will lead to better funds management.

2-3: Concept of Customer Value

Although customer value has become the object of much investigation only during the last few years, the value concept has always been the fundamental basis for all marketing activity (Roig, et al. 2006). The study of customer value is becoming significantly more important, both in research and in practice and identifying and creating customer value is regarded as an essential prerequisite for future company success (Graf, and Maas, 2008). According to Yang (2004), Customer value is the fundamental basis for all marketing activity. It is considered central to competitive advantage and long-term

success of business organizations (Khalifa, 2004). It is important to emphasize that for many banks the term "customer value" is used solely to refer to the value that the customer generates for them, rather than the value that they can offer their users (Roig, et al. 2006).

Customer value research has been shaped and influenced by research in fields such as value chain, augmented product concept, value research, customer behavior, customer satisfaction, and quality (Graf and Maas, 2008). Thus customer value differs from personal or organizational values, those centrally held and enduring beliefs about right and wrong, good and bad that cut across situations and products or services (Woodruff, 1997). Generally there are two theoretical differentiable approaches that indicate to directions of company and customers toward customer value:

(Customer value) from a company perspective

The value of the customer is central for the provider. The goal is to evaluate how attractive individual customers or customer groups are from a company perspective. This approach became a popular research topic in the last few years (Graf, and Maas, 2008).

(Customer value) from a customer perspective

The focus here is on value generated by a company's product or service as perceived by the customer or the fulfillment of customer goals and desires by company products and/or services (Graf, and Maas, 2008).

Categories of Value

Relevant perspectives of value can be classified as dealing with values, desired value, and value judgments, where value is created by delivering benefits that help customers achieve their goals.

Value:

Value is central, enduring core beliefs, desired or higher order goals of the individual customer or customer organization that guide behavior (Flint, Woodruff, and Gardial, 1997). The concept of value, however , is one of the most overused and misused concepts in social science in general and in management literature in particular, it is used in diverse fields such as finance, economics, management, information systems, ethics, justice, social equity and fairness, etc. (Khalifa, 2004)

Desired Customer Value:

The customers' perception of what they want to have happen in a specific kind of use situation, with the help of a product or service offering, in order to accomplish a desired purpose or goal. This definition implies that value is created by products and services when the benefits they deliver help customers achieve their goals in various situations (Flint, Woodruff, and Gardial, 1997).

Value Judgment:

The customer's assessment of the value that has been created for them by a supplier given the trade-offs between all relevant benefits and sacrifices in a specific use situation, Table -1 show each of the three views of value that will make their distinctions, as well as their importance (Flint, Woodruff, and Gardial, 1997).

TABLE (2-1)

Three forms of value

	Value	Desired value	Value Judgment
Definition	Implicit beliefs that guide behavior	What customer wants to have happen (benefits sought)	Assessment of what has happened (benefits and sacrifices)
Level of abstraction	Abstract, centrally held, desired end-states, higher order goals	Less abstract, less centrally held, lower order goals, benefits sought to facilitate higher order goal achievement	Overall view of trade-offs between benefits and sacrifices actually received
Locus or source of value	Specific to customer (person or organization)	Conceptualized interaction of customer, product/service and anticipated use situations	Interaction of customer, product/service, and a specific use situation
Relationship to use permanence	Independent of use situations Enduring	Independent of use specific experience Moderately enduring	Dependent on specific use experience Transient over occasions

Source: Flint, Woodruff, and Gardial, 1997.

Elements of Customer value:

It is extremely important to fully understand the key elements of value in the eyes of the customer. (Kothari and Lackner, 2006).To make their value clear, leading companies group the value that customers receive from an offering under four broad categories:

1. **Product:** Product attributes is the category that enterprises relate to most easily, product design, engineering and operations.

2. **<u>Access:</u>** is defined by how accessible an enterprise's products and services are to the marketplace.

3. *<u>Experience:</u>* is defined by the overall experience that customers have as they use an enterprise's products and services

4. **<u>Cost:</u>** both the enterprise and the customer take a myopic view of cost by limiting the discussion to the purchase price.

2-4: Concept of Customer Loyalty

The loyalty concept is similar in meaning to relationship commitment, which is described by the relationship marketing literature as an enduring desire to be in a valued relationship (Lam, Shankar and Murthy, 2004). Experience indicates that defining and measuring brand loyalty is extremely difficult.

Researchers have used both attitudinal and behavioral measures to define and assess this variable (Oliver, 1999). From an attitudinal perspective, customer loyalty has been viewed by some researchers as a specific desire to continue a relationship with a service provider, while from a behavioral view, customer loyalty is defined as repeat patronage, that is, the proportion of times a purchaser chooses the same product or service in a specific category compared to the total number of purchases made by the purchaser in that category (Yang and Peterson, 2004).

Loyalty can be of substantial value to both customers and the firm. Customers are willing to invest their loyalty in business that can deliver superior value relative to the offerings of competitors (Yang and Peterson, 2004).

Loyalty and profits are strongly linked to value created for customers; customers are loyal to a company as long as it offers them superior value compared to its competitors (Kahalifa, 2004). When they are loyal to a firm, consumers may minimize time expended

in searching and in locating and evaluating purchase alternatives (Yang and Peterson, 2004). Therefore Customer loyalty is one major driver of success in e-commerce (Reichheld and Schefter, 2000).

Definition of Customer Loyalty:

Yang (2004) defined customer loyalty as repeat patronage, that is, the proportion of times a purchaser chooses the same product or service in a specific category, while Floh and Treiblmaier (2006) have been defined Loyalty as the repeat purchasing of a particular service or product. In particular, negative reputations have critical influences on the brand image of a company in the wireless communication industry that includes most of people as customers (Hwang, Jung, and Suh, 2004). For this reason, any organization must strive to keep loyal customers as long as possible (Chen and Quester, 2006). The marketing literature suggests that customer loyalty can be defined in two distinct ways, the first defines loyalty as an attitude, and different feelings create an individual's overall attachment to a product, service, or organization, the second definition of loyalty is behavioral include continuing to purchase services from the same supplier (Hallowell 1996). The loyalty concept is similar in meaning to relationship commitment, which is described by the relationship marketing literature as an enduring desire to be in a valued relationship (Lam, Shankar, Murthy, 2004).

Stages of Loyalty:

People become loyal through seven stages (Griffin, 1995).

Stage One: A suspect is anyone who might possibly buy your product or service.

Stage Two: A prospect is someone who has a need for your product or service and is able to buy.

Stage Three: Disqualified Prospect. These are those who don't need, or do not have the ability to buy your products.

Stage Four: This person can be a customer of yours and a customer of your competitor as well.

Stage Five: Repeat customers are people who have purchased from you two or more times.

Stage Six: A client buys everything you have to sell that he can possibly use. This person purchases regularly. You have a strong, ongoing relationship that makes him immune to the pull of the competition.

Stage Seven: Like a client, an Advocate encourages others to buy from you. He talks about you and does marketing for you.

Loyalty typology based on attitude and behavior:

Figure (2-2) shows four loyalty archetypes based on the cross-classification of attitudinal and behavioral loyalty levels (Baloglu, 2002):

(1) High (True) loyalty: Customers in this level are characterized by a strong attitudinal attachment and high repeat patronage; they almost always patronize a particular company or brand and are least vulnerable to competitive offerings.

(2) Latent loyalty: those customers with latent loyalty exhibit low patronage levels, although they hold a strong attitudinal commitment to the company.

(3) Spurious loyalty: Customers with spurious or artificial loyalty make frequent purchases, even though they are not emotionally attached to the brand, they may even dislike it even though they continue to make purchase.

(4) Low (or no) loyalty: the low loyalty group exhibits weak or low levels of both

altitudinal attachment and repeat patronage.

Attitude

	Low	High
High	Spurious Loyalty	True Loyalty
Low	Low Loyalty	Latent Loyalty
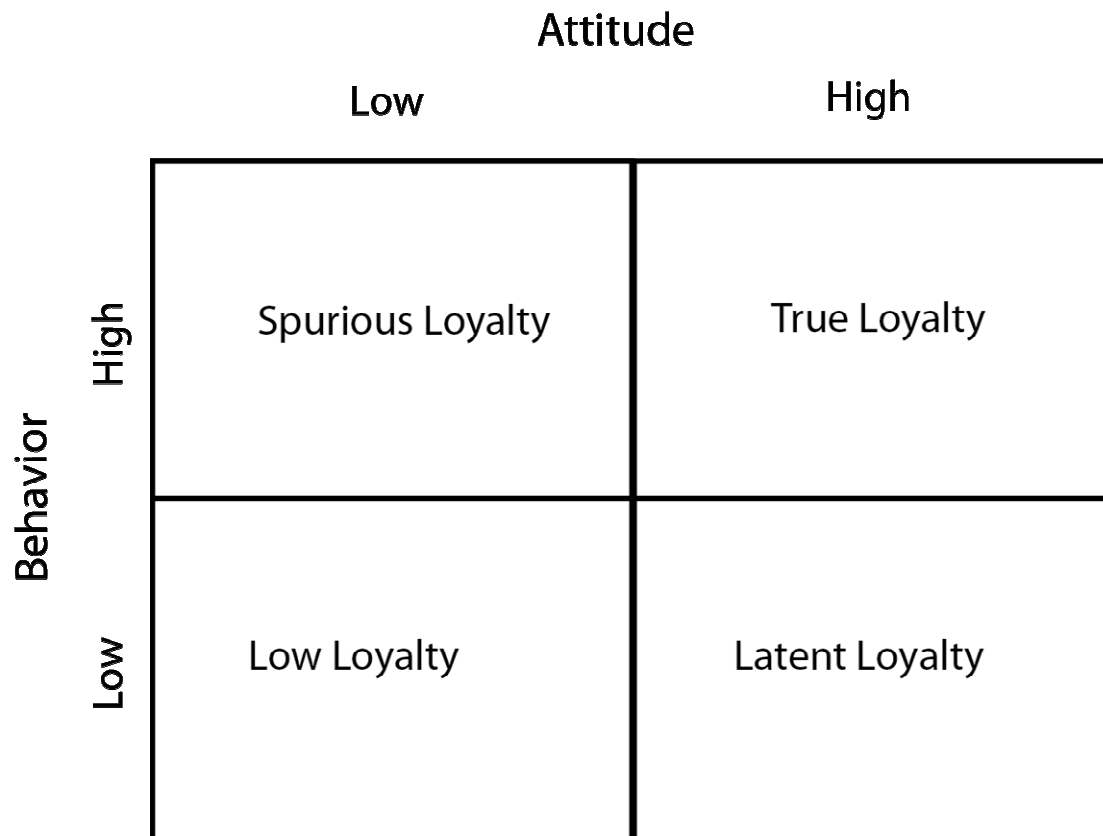
Behavior

Source Baloglu, 2002   **Figure (2-2)**

Four loyalty levels

Attitudinal and Behavioral Examination:

The rationale behind assessing loyalty on two dimensions (behavior and attitude) is both

conceptual and practical. Some studies have demonstrated that customer loyalty is a multi-

dimensional concept involving both behavioral elements (repeat purchases) and attitudinal

elements (commitment). Researchers who have studied the two dimensional approaches

suggested that focusing on behavior alone (repeat purchases) cannot capture the reasons

behind the purchase, the two dimensional loyalty can help to identify loyalty segments (Baloglu, 2002). More recently researchers have suggested that attitudinal loyalty can be measured by capturing the individual's propensity to be loyal (Bennett, and Sharyn 2002). The attitudinal loyalty helps to examine the factors of loyalty, to avoid switching behavior and to predict how long customers will remain loyal (Yu-Te, Mei-Lien, and Heng-Chi, 2011).

The value of customer loyalty

Yang (2004) mentioned that the customer loyalty can be generated through improving customer satisfaction and offering high product or service value, he suggested that the firms may focus on five key dimensions to identify the customer loyalty; (1) providing quality customer services, (2) performing the service correctly by executing transactions accurately, (3) providing an appropriate range and offering features to target customers, (4) ease of use and (5) security/privacy.

2-5: The Previous Studies

(Esman, Embi and Jusoh, 2010) under title **" Usage of Self-Service Technologies (SSTs): A Case Study of e-Debit System at Bursary UiTM Shah Alam ".**

This study examined the levels of intention to use the self-service technologies (SSTs), in particularly the ATMs and internet banking among the postgraduate students in the Universiti Teknologi Mara (UiTM), the Bursary of UiTM has introduced the e-debit system to the students as a new way to settle the tuition fees. The objectives of the e-debit system were to reduce the human interaction between the bursary's staffs and students, and the use of study. In essence, the e-debit system consists of automated teller machines (ATMs), internet banking and cash transaction, but this study focuses on the usage of

ATMs and online banking other than the cash transaction. Therefore, the research model proposed six variables, which are (a) perceived usefulness, (b) perceived ease of use, (c) perceived enjoyment (d) need for interaction, (e) security and privacy, and (f) demographic characteristics (such as gender, age, level of education, mode of study and faculty enrollment) for measuring the behavioral and intention to use the SSTs. This study showed that the majority of the postgraduate students'intention to use SSTs is at a moderate level. Statistical analysis revealed that perceived usefulness, perceived ease of use, perceived enjoyment, and security and privacy are the factors that affect students'intention to use the SSTs. Furthermore, the results from stepwise multiple regressions demonstrate that perceived enjoyment is the best variable to predict students'intention toward the usage of the SSTs.

(Khan, Kadir, and Wahab, 2010) under title **" Investigating Structure Relationship from Functional and Relational Value to Behavior Intention: The Role of Satisfaction and Relationship Commitment".**

This study was the first to consider customer value in terms of both functional and relational aspect. The main objective of the study is to investigate the most prominent predictor of customer behavior intention and also to examine the indirect factors (functional value and relational value) related to the respective direct factors (satisfaction and relationship commitment) and their ability to explain customer behavior intention. The results revealed that relationship commitment followed by satisfaction has a significant direct effect on behavior intention. Additionally, the relational value has indirect effect on behavior intention through satisfaction and relationship commitment. This study highlighted the role of relational value in building the relationship commitment. Strategic

guidelines are provided for managers in designing the value in stimulating the customer behavior intention.

(Ho and Ko, 2008) under title **"Effects of self-service technology on customer value and customer readiness, The case of Internet banking".**

The purpose of this study was to investigate whether self-service technology can enhance customer value and customer readiness. In addition, it is proposed to inspect the effects of customer value and Customer readiness in customers' continued use of Internet banking. The findings of this study showed that self-service technology characteristics such as ease of use, usefulness, costs saved, and self-control demonstrated positive effects on Customer value and Customer Readiness. Customers are willing to use Internet banking when Customer value and Customer Readiness are high. Even after customers try Internet banking services, they still have anxiety and doubt about whether they want to continue using Internet banking it is important to make customers aware of the information and relative advantages of Internet banking.

(Almazari and Siam, 2008), under title **"E-Banking: An Empirical Study on the Jordanian Commercial Banks"**

One of the objectives of this study was to determine the relation between the use of electronic services by the Jordanian commercial banks and the customers. This study proved that customers do not look for an emotional relationship with the banks but see the price, quality and performance as important factors when choosing banks.

(Roig, Garcia, Tena, and Monzonis, 2005) under title **"Customer perceived value in banking services"**

The purpose of this study was to analyze the dimensionality of the concept of Customer perceived value in the banking sector; this study proposed a scale of

measurement of the value perceived by consumers in the banking sector which incorporates valuations of functional aspects and of affective aspects, thus obtaining an overall quantification of the value perceived by the customer of the purchase made. The results of this study showed that Customer perceived value is found to be a multidimensional construct composed of six dimensions (functional value of the establishment, functional value of the personnel, functional value of the service, functional value price, emotional value, and social value.

(Suleiman, Lim, and Wee, 2005) under title **"Prospects and Challenges of E-Banking in Malaysia"**

The aim of this study was to provide an overview of e-banking adoption in Malaysia. The study examined the different types of e-banking products used by adopted before finally describing the characteristics of e-banking adopters. Most of the adopters took advantage of the service to carry out basic activities like viewing balance inquires, obtaining summary reports of their transactions and using savings when necessary, i.e. Many were encouraged by friends and family members to use e-banking. The study also illustrated that there were more adopters among the younger age groups, among those with higher salaries and those holding higher positions.

(Yousafzai, Pallister and Foxall, 2005) under title **"Strategies for Building and Communicating Trust in Electronic Banking: A Field Experiment"**

The goal of this study was to develop a deeper understanding of building and communicating trust in e-banking by studying the relative importance of Web-site attributes reflecting security and privacy. This study examined the effectiveness of potential trust-building strategies for e-banking and their impact on online customers'

perceptions of trustworthiness of the bank, by specifically focusing on the information clues presented on the bank's Web site. Structural assurance and situational normality mechanisms both had an impact on customers' trustworthiness perceptions, suggesting that banks need to use a portfolio of strategies to build the customer's trust. The results further referred that communication of meaningful and timely information has the potential to influence customers' trusting intentions.

(Hertzum, Jorgensen, and Norgaard, 2004) under title **" Usable Security and E-Banking: Ease of Use Vis –A-Vis Security**"

The researchers discussed the pros and cons of automation and understanding as alternative approaches to the design of web-based e-banking systems. They viewed that the conflict between ease of use and security in the context of usable security, a concept that is intended to match security principles and demands against user knowledge and motivation. Instruction is the main approach of the systems evaluated; automation relieves the user from involvement in security, as far as possible; and understanding goes beyond step-by-step instructions, to enable users to act competently and safely in situations that transcend preconceived instructions.

(Gurau, 2002) under title **"E-banking in transition economies: The case of Romania"**

This study has attempted to identify the main elements that influence the successful introduction and functioning of e-banking services. An important objective of the study was to identify the main factors considered by the banks' representatives and by the customers to influence the successful implementation and functioning of e-banking services. The results have shown that the process of online banking is influenced by many inter-related factors and institutions, including the quality and security of Internet network,

the level of Internet knowledge and skills of the population and government support, as well as the Internet strategy of the bank and the quality/reliability of online banking services.

(Karjaluoto, 2002) under title **" Electronic banking in Finland: consumer beliefs, attitudes, intentions, and behaviors".**

This study focuses on developing a theoretical model with a practical justification within the field of electronic banking. The purpose of this study was to determine the factors that influence the formation of consumer attitude toward electronic banking. Another important aspect of this study was to develop more insights into how attitude toward technology in general impacts on consumer behavior in an IT-environment. Another objective of this study was to identify the beliefs, attitudes, and intentions consumers have toward electronic banking.

The results of the study indicated the following: (1) beliefs and attitudes toward electronic banking varied between non-users and users of Internet banking. The results suggest that well educated and relatively wealthy segment uses Internet banking services. (2) Personal banking experience, and prior experience of computers and technology were the main factors underlying the formation of attitude toward Internet banking. Attitude toward using computers was found to be the most significant factor affecting intention to engage in Internet banking. Internet banking users had a more positive attitude toward technology, especially toward computers, than did nonusers. (3) A negative attitude toward technology, valuing personal service, and demographic characteristics were found to be most substantial barriers to the adoption of Internet banking in Finland.

(Joseph, McClure and Joseph, 1999) under title " **Service quality in the banking sector: the impact of technology on service delivery"**

This research investigated the role that technology plays in Australian banking and its impact on the delivery of perceived service quality. Results indicated that customers have perceptual problems with some aspects of electronic banking; the respondents do not believe that electronic banking services perform at the level that is consistent with the importance rating specified by customers. It is interesting to note that even though the performance of banking institutions is not perceived as being of a high standard, 52.9 per cent of the respondents reported they were satisfied with their overall electronic banking experience.

(Davis, 1989) under title **"Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology"**

This researcher developed and validated new scales for two specific variables, perceived usefulness and perceived ease of use, the scales are hypothesized to be fundamental determinants of user acceptance, perceived usefulness was significantly correlated with both self-reported current usage and self- predicted future usage. Perceived ease of use was also significantly correlated with current usage and future usage. Usefulness had a significantly greater correlation with usage behavior than did ease of use.

2-6: The Difference between Current Study & Previous Studies

This study does not differ greatly from other studies in this field; however it differs in some matters which make it a distinct study such as:

- Most studies in Jordan have discussed the advantages, characteristics and the benefits which the Jordanian banks obtain from their electronic services such as the study by (Siam, 2006), (Almazari, and Siam, 2008) and (Migdadi, 2008). While this study focused on determination of the effect of e-banking services from the point view of customers themselves.

- This study reveals the major reasons that explain the factors that drive customers to use e-banking services.

- Finally, this study is a unique one because it discusses the effects of electronic banking services through (4) characteristics that reflected their effect on customer value and customer loyalty.

CHAPTER THREE

METHODOLGY AND PROCEDURES

3-1: Introduction

3-2: Study Methodology

3-3: Study Population and Sample

3-4: Study Tools and Data Collection

3-5: Statistical Treatment

3-6: Reliability and Validity

3-1: Introduction

In this chapter we will go through the processes of the study, and outline the different methodological approaches we have chosen, and the tools that we have used to gain information about the subject. The researcher has stated the data collection method used and how data was presented and analyzed. Reliability and validity are considered as well.

The chapter is divided into six parts: Study Methodology, Study Population and Sample, Study Tools and Data Collection, Statistical Treatment, Reliability and Validity

3-2: Study Methodology

When selecting a method, it is an important to choose the method that best reflects the objective of the study. Method is the tool and technique used to collect and analyze research data, including for example questionnaires, observation, interviews, and statistical or non-statistical techniques. The most common method to collect data is by using a questionnaire which were distributed to (13) Jordanian commercial banks operating in Amman. The descriptive research is basically to describe characteristics of a population and samples. In addition, descriptive studies involve collecting data in order to test hypotheses and answer questions concerning the current status of the subject(s). Typical descriptive studies are concerned with the assessment of attitudes, opinions, demographic information, conditions, and procedures. Through the information used in this study with respect to analytical and descriptive methodology, the data will be introduced and analyzed in order to acquire indicators which will be evaluated and interpreted in accordance with this type of studies. Therefore the researcher chose the Analytical descriptive method using an applied manner.

3-3: Study Population and Sample

The study population is all commercial banks operating in Amman, According to the website of Central Jordan Banks (CBJ), the list of population is identified with (13) banks. The questionnaire items are developed based on the findings from related literature. The questionnaire distributed among a group of (260) bank customers experienced in electronic banking as a sample of study. The number of responses questionnaires was (206) which were received by hand; this means that approximately (79.2%) took in analysis.

Table (3-1): Questionnaires distribution according to target banks

No.	Bank	Distributed Ques.	Received Ques.	Invalid Ques.	Valid Ques.
1	Arab Bank Jordan	20	16	1	15
2	ABC Bank	20	18	5	13
3	Bank of Jordan	20	10	-	10
4	Cairo Amman Bank	20	20	4	16
5	Capital Bank	20	20	1	19
6	Jordan Commercial Bank	20	20	1	19
7	Jordan Kuwait Bank	20	19	3	16
8	Jordan Ahli Bank	20	16	1	15
9	The Housing Bank	20	16	1	15
10	Arab Jordan Investment Bank	20	20	2	18
11	Invest Bank	20	20	2	18
12	Soceite General Bank Jordan	20	18	-	18
13	Bank al Etihad	20	14	-	14
	Total valid Questionnaires	**260**			**206**

3-4: Study Tools and Data Collection

This study aimed to investigate customers' continued use of electronic banking services; therefore, respondents were required to have used e- banking services (ATM, Internet banking…) prior to completing the questionnaire. Taking into consideration that questionnaire should be easy, clear, short and open–ended questions as possible so that as few misunderstandings as possible will occur.

The current study consists of three theoretical and practical variables. In the theoretical variables, the researcher depended on the scientific studies/theories that are related to the current study. In the practical side the researcher depends on descriptive and analytical methods using the practical manner to collect analyze data and test hypotheses. Data collection, manners analysis and programs used in the current study are based on two sources:

1. Secondary sources: that included books, journals, articles and theses to write the theoretical framework of study.

2. Primary source: the questionnaire that was designed to reflect the study objectives and questions. Primary data were in the form of a questionnaire consisted of (29) questions. In this study, both primary and secondary data were used. Data for the model was collected via questionnaire. After conducting a thorough review of the literature frame related to electronic banking services, Customer value, and Customer loyalty, the researcher formulated the questionnaire instrument for this study depending on characteristics of e-banking services that suggested by (HO, and KO, 2008) (Anguelov and Hilgert, 2004), (Curran and Meuter, 2005), (Chen et al., 2005), (Sheth et al. 1991), and (Yang and

Peterson, 2004). While in case of Customer value, the researcher depended on dimensions that suggested by (Khan, Kadir and Wahab, 2010) and (Anguelov and Hilgert, 2004), regarding of Customer loyalty, the researcher depended on dimensions that suggested by (Chiou and Droge, 2006), (Yang and Peterson, 2004) , (Curran and Meuter, 2005) and (Luarn and Lin, 2003). The questionnaire instrument sections are as follows:

Demographic Variables: The demographic information was collected with closed-ended questions, through (8) items.

Cause and Effect constructs: This section measured the cause and effect characteristics and dimensions of three main constructs:

E-Banking Services: included (4) characteristics, **(Ease of use)** that included (7) items**, (Usefulness)** included (3) items**, (Cost saved)** included (5) items**,** and **(Self – Control)** included (5) items as scale measures respectively.

Customer Value: included (3) dimensions, **(Functional value)** that included (4) items**, (Emotional value)** included (5) items**, and (Epistemic value)** included (3) items as a scale measures respectively.

Customer Loyalty: included (2) dimensions, **(Attitudinal Loyalty)** that included (5) items**,** while **(Behavioral Loyalty)** included (3) items as a scale measures respectively. The original 40-item questionnaire was condensed to (29) questions. In addition, 7-point Likert scales, ranging from 1 (strongly disagree) to 7 (strongly agree) were adopted rather than 5-point Likert scales to increase variation for statistical analysis as well as add additional details.

Strongly	Disagree	Somewhat	Neither	Somewhat	Agree	Strongly

Disagree		disagree		Agree		Agree
1	2	3	4	5	6	7

3-5: Statistical Treatment

Data from the returned responses was collected for the analysis and conclusions of the study questions. The information from the questionnaire was decoded in Statistical Package for the Social Sciences (SPSS) and (AMOS) package. The data classified and labeled with the correct scale. A mean value, standard deviation and variance will be calculated to compare the different answers. This was classification will make it possible to analyze the data. The internal reliability tested with Cronbach's Alpha (α), which measures the correlation between the variables that attempt to determine a concept. The correlation within the different factors measured, in other words, how the different statements that treat a factor correlate with each other. Cronbach's Alpha test shows a value between (0) and (1), where (1) means a perfect correlation and (0) no correlation at all (Jonsson, and Hagg, 2009). Finally, the researcher used the suitable statistical methods moreover Cronbach's Alpha as follows:

- Cronbach's Alpha (α) to test Reliability.

- Percentage and Frequency.

- Arithmetic Mean and Standard Deviation to answer the study questions.

- Simple Liner Regression analysis to test first three hypotheses , with (F) test statistic from (ANOVA) table and (t) test statistic to inference the significance to both estimated regression and it's coefficient which mean the effect of cause and effect factors on Customer value Customer loyalty.

- Multiple regression and variance inflection factor as the assumption to apply path analysis to identify direct and indirect effect between study variables.

- Relative importance, that assigning due to:

$$\text{Importance Level} = \frac{\text{Upper limit of response} - \text{Lower limit of response}}{\text{Number of Levels}}$$

Three levels identified, High, Mid and Low. Table (3 – 2) illustrates the range of important level scale

Table (3 – 2)

Range of Important Level Scale

Mean Range	level
Less than 3	Low
From 3 to 5	Mid
More than 5	High

3-6: Reliability and Validity

(A) Validation

Validity refers to the issue of whether or not an indicator (or set of indicators) that is devised to evaluate a concept really measures that concept. The Construct validity refers to the researcher, and whether he is encouraged to deduce hypotheses from a theory that is relevant to the concept ((Jonsson, and Hagg, 2009)). The hypotheses in this study are based on previous theory and, in the analysis part; the findings will be compared and

analyzed in relation to earlier research and the resultant theories. This will strengthen the validity of the study. To test the questionnaire for clarity and to provide a coherent research questionnaire, a macro review covers all the research constructs was accurately performed by Academic Arbitrators from Jordanian universities/ Middle East University-MEU, specialists in e-business, management information systems, marketing, and Statistical science. Some items were added based on their valuable recommendations. Some others were reformulated to become more accurate which is expected to enhance the research instrument. The Academic Arbitrators number was (4), (see Appendix: 4).

B) Study Tool Reliability

Reliability is fundamentally concerned with issues of consistency of measures. The Internal reliability is concerned with whether or not the indicators that make up the scale of index are consistent, whether or not respondents´ scores on any one indicator tend to be related to their scores on the other indicators. The meaning of internal reliability applies to multiple-indicator measures. When you have a multiple-item measure in which each respondent's answers to each question are aggregated to form an overall score, the possibility is raised that the indicators do not relate to the same thing. We need to be sure that all indicators are related to each other. If they are not, some of the items may actually be unrelated to designerism and therefore indicative of something else. To test the internal reliability, most researchers use Cronbach's alpha, which calculates the average of all split-half reliability coefficients. We have used the Cronbach's alpha for calculating whether or not the hypotheses should be accepted or rejected, and, by using this data analysis method, we strengthen the internal reliability of the findings in the thesis (Jonsson, and Hagg, 2009).

Internal consistency: For ensuring a high internal consistency we have divided the translation of data. One of us typed in all the data, while the other one went through all the input data afterwards, to see that the correct figures had been used for each statement and question. By doing this, we have strengthened the reliability of having figures that are as correct as possible. The reliability analysis applied the level of Cronbach's Alpha (α) as the criteria of internal consistency, which were at a minimum acceptable level **(Alpha ≥ 0.60)** that suggested by **(Sekaran, 2003).** The coefficients after remove some items from each construct illustrated in Table (3 - 3).

Table (3 - 3)

Cronbach's Alpha (α) Coefficients for Main Constructs and dimensions

No.	Dimension	Number Of Items	Coefficient
1	Ease of use	4	*0.796*
2	Usefulness	3	*0.671*
3	Cost saved	3	*0.793*
4	Self – Control	3	*0.700*
E- Banking Services		13	*0.824*
5	Functional value	3	*0.648*
6	Emotional value	3	*0.720*
7	Epistemic value	3	*0.778*
Customer Value		9	*0.860*
8	Attitudinal loyalty	4	*0.735*
9	Behavioral loyalty	3	*0.820*
Customer Loyalty		7	*0.861*
All constructs		**29**	*0.919*

The Cronbach's Alpha coefficient of main constructs *"E- Banking Services"* including (13) statements as a scale to it was (82.4%), with all characteristics, the highest coefficient (79.6 %) was to " *Ease of use* " and the lowest (67.1 %) was to " *Usefulness* ". The other construct "*Customer Value*" including (9) statements as a scale to it was (86.0%), with all dimensions, the highest coefficient (77.8%) was to "*Epistemic value*" and the lowest (64.8%) was to "*Functional value*". The last construct "*Customer Loyalty* " including (7) statements as a scale to it was (86.1%), within its dimensions, the highest coefficient (86.1 %) was to "*Behavioral loyalty*" and the lowest (82.0%) was to "*Attitudinal loyalty*". Finally the overall Cronbach's Alpha coefficient equal to (91.9%). These results are an acceptable level suggested by **(Sekaran, 2003).**

CHAPTER FOUR

ANALYSIS RESULTS & HYPOTHESES TEST

4-1: Introduction

4-2: Study Questions Answers

4-3: Study Hypothesis Testing

4-1: Introduction

In this chapter we will present the empirical data gathered from the survey. The data will be presented with tables and diagrams to simplify the process of interpreting and comparing. The outline will be based on the hypotheses, which will be describing one-by-one, starting with e-banking services and ending with Customer loyalty. Simple and multiple regression analysis will be used to test the first three hypotheses, as well as Path analysis applied to identify direct and indirect effect between cause and effect factors. The

tests that have been used are Cronbach's alpha, AMOS and Path analysis will be described in association with each hypothesis. In addition, data analysis included a description of the means and standard deviations, ranking and level of importance for study questions.

4-2: Study Questions Answers

A. Demographic Variables of Sample

Eight demographic variables included in this study (1) Gender, (2) Age, (3) Educational Level, (4) Job title, (5) Number of banks that respondent deal with, (6) The extent that respondent uses e-banking services in finance transactions, (7) which type of e-banking services is used more than others, (8) and How long that respondent has use e-banking services?. The results in table (4–1) illustrate distribution of sample individuals according to demographic variables:

Table (4 -1)

Distribution of Sample individuals according to demographic variables

No.	Variable	Class	Frequency	Percentage
1	Gender	Male	141	68.4
		Female	65	31.6
Total			206	100.0
2	Age	Less than 30 years	76	36.9
		30 – 40 years	93	45.1
		41 – 50 years	28	13.6

		51- 60 years	6	2.9
		More than 61 years	3	1.5
Total			*206*	*100.0*
3	**Educational Level**	Secondary School or less	14	6.8
		Diploma (Society Collage)	21	10.2
		BS.C	135	65.5
		Master	28	13.6
		PhD	8	3.9
Total			*206*	*100.0*
4	**Job Title**	Government Employee	33	16.0
		Private Sector Employee	123	59.7
		Free Lance	36	17.5
		Firm owner / project	14	6.8
Total			206	100.0
5	**How many banks that you deal with?**	One	83	40.3
		More than one	123	59.7
Total			*206*	*100.0*
6	**To what extend you use e-banking services in your banking transactions?**	Low extent (Sometimes)	54	26.2
		Medium extent (Frequently)	105	51.0
		Great extent (Often)	26	12.6
		Always (Continuously)	21	10.2
Total			*206*	*100.0*
7	**Which E- Banking services you use than more others?**	ATM	128	62.1
		Internet Transactions	43	20.9
		funds Transferring	35	17.0
Total			*206*	*100.0*
8	**How long have you use e-banking services?**	Less than (1) year	25	12.1
		(1-3) years	87	42.2
		More than (3) years until (6)	65	31.6

		years		
		More than (6) to (9) years	29	14.1
Total			*206*	*100.0*

Results in table (4-1) indicate to the following outputs:

Age:

- The highest percentage was (68.4%) of sample from "Males" while (31.6%) was "Females".
- The highest number of respondents was (93) that gives (45.1%) from the total percentage of respondents those have ages between (30 – 40) years old, while the lowest was (1.5%) for the respondents that have more than (61) years old.

Educational Level:

- The highest percentage (65.5%) was for the respondents that have "BS.C", while percentage (3.9 %) was to those have "PhD" from the total respondents.

Job Title:

- The largest percentage of "Job Title" was (59.7%) for respondents those working in "Private Sector Employee" while the lowest percentage (6.8 %) was to respondents whose have "Firm owner / project".

How many banks that you deal with?

- (59.7%) of respondents answered that they are dealing with "more than one bank" while (40.3%) answered that they are dealing with" one bank" only.

To what extend you use e-banking services in your banking transactions?

- The results appear that more than half (51%) of sample individuals have "Medium extent (Frequently)" to use e-banking services, the number of them equal (105) individuals, while (21) respondents those using e-banking services "Always (Continuously)", this cover (10.2%) from the total respondents on this statement.

Which e-banking services you use more than others?

- (128) respondents (62.1%) answered that they use "ATM", while (43) individuals responded that they use e-banking services through "Internet Transaction" those cover (20.9%) from total percentage of this statement. The lowest percentage (17.0%) was to "Funds Transferring".

How long have you use e-banking service?

- The last demographic variable divided into (4) items as shown above in table, about (87) of respondents are using e-banking services those between (1- 3) years, percentage estimated at round (42.2%). For respondents whose using e-banking services "More than (3) years until (6) years", their percentage was (31.6%), while the last one "Less than (1) year", the respondents percentage was (12.1%).

B. Descriptive Constructs:

This section illustrates the descriptive statistics for each main constructs and its dimensions as Mean and Standard deviation, also the same measures to the item which followed to each of them and the rank beside the level of importance.

1. **E-Banking Services**:

   The main variable "E-Banking Services" was measured by (20) items divided to (4) characteristics:

   Ease to use: which measured by (7) statements within the original questionnaire, (3) statements removed from analysis because their loading in was weak.

   Usefulness: which measured by (3) statements within the original questionnaire, there are no statements removed from this item.

   Cost saved: measured with (5) statements within the original questionnaire, (2) statements removed from analysis.

Self-Control: measured with (5) statements within the original questionnaire, but (2) items was removed from analysis.

Table (4-2) illustrates the descriptive statistic of "Ease to use" statements.

Table (4 - 2)

Descriptive statistic of Ease to Use

Item	Statement	Mean	Standard Deviation	Rank	Level of Importance
1	I find that e – banking service is easy to use	6.3010	.71000	1	High
2	It is easy to apply financial services on Internet banking	5.8786	.98765	4	High
3	It is easy for me to learn how to make use of e- banking services	6.1553	.82352	2	High
4	It is easy for me to be skillful at using e- banking services.	5.9320	1.04309	3	High
5	It is difficult to use the e-banking services. (R)	5.3447	1.37314	5	High [*]
6	I have the opportunity to try various electronic banking services. (R)	5.2573	1.39575	6	High [*]
7	Mistakes are more likely to occur with electronic banking than with regular banking	3.4417	1.39126	7	Mid [*]
Grand Mean & Standard Deviation of Ease to Use Scale[**]		**6.0667**	**.70976**		High

R: Reverse

*: Removed from next analysis

**: The results for items which still in next analysis

The results within the table above illustrate the following:

1. "Ease to Use" scale has high level with Mean (6.0667) and standard deviation (.70976), whenever standard deviation value is lower indicates to the homogeneity in the responses of respondents.

2. All statements of "Ease of use" have "High" level except statement (7) which taken "Mid" level which refers to the heterogeneity in the responses of respondents like other responses.

3. Highest mean (6.3010) with standard deviation (.71) was for the statement number (1) "I find that e - banking service is easy to use" that put it in the first rank when compared with others statement in the table.

4. In the second rank, the statement number (3) "It is easy for me to learn how to make use of e- banking services" appears mean equal (6.1553) and standard deviation (.82352).

5. The lowest mean as appears in table is (5.8786) belongs to statement number (2) "It is easy to apply financial services on Internet banking" with standard deviation (.98765), that put this statement in the fourth rank.

Table (4-3) illustrates the descriptive statistic of "Usefulness" statements.

Table (4 - 3)

Descriptive statistic of Usefulness

Item	Statement	Mean	Standard Deviation	Rank	Level of Importance
8	I can deal with financial business more effectively through using e-banking services.	5.0291	1.38251	3	High
9	e-banking services have economic advantages for me	5.0583	1.34582	2	High
10	Through e- banking services , I can more effectively manage my	5.5000	1.27547	1	High

	money				
Grand Mean & Standard Deviation of Ease to Usefulness		**5.1958**	**1.03697**		High

The results within the table above illustrate the following:

1. "Usefulness" scale has high level with Mean (5.1958) and standard deviation (1.03697).

2. All statements of "Usefulness" have "High" level.

3. The highest mean (5.5000) with standard deviation (1.27547) was for the statement number (10) "Through e- banking services, I can more effectively manage my money" this put it in the first rank when compared with other statements in the table.

4. In the second rank, the statement number (9) "e-banking services have economic advantages for me" appears mean equal (5.0583) and standard deviation (1.34582).

5. The lowest mean as appears in table is (5.0291) belongs to statement number (8) "I can deal with financial business more effectively through using e-banking services" with standard deviation (1.38251), that put this statement in the third rank.

Table (4-4) illustrates the descriptive statistic of "Cost saved" statements.

Table (4 - 4)

Descriptive statistic of Cost Saved

Item	Statement	Mean	Standard Deviation	Rank	Level of Importance
11	Using Internet banking can save me on transportation costs	6.0728	1.14318	3	High
12	Using e-banking services can save me waiting time for service	6.2379	.85922	2	High

	completion.				
13	Using e-banking services can save me time spent in bank	6.3592	.77591	1	High
14	When I use electronic banking, my money is as safe as when I use other banking services. (R)	4.9757	1.56311	5	Mid [*]
15	I am NOT sure how to use the e-banking services properly.(R)	5.0534	1.63560	4	High [*]
Grand Mean & Standard Deviation of Ease to Cost Saved [**]		6.2233	.79140		High

R: Reverse

*: Removed from next analysis

**: The results for items which still in next analysis

The results within the table above illustrate the following:

1. "Cost Saved" scale has high level with Mean (6.2233) and standard deviation (.79140).

2. All statements of "Cost Saved" have "High" level of importance except one which has "Mid" level.

3. The highest mean (6.3592) with standard deviation (.77591) was for the statement number (13) "Using e-banking services can save me time spent in bank". This puts this statement in the first rank when compared with others statements in the table.

4. In the second rank, the statement number (12) "Using e-banking services can save me waiting time for service completion" appears mean equal (6.2379) and standard deviation (.85922).

5. The lowest mean as appears in table is (6.0728) belong to statement number (11) "Using Internet banking can save me on transportation costs" with standard deviation (1.14318); That puts this statement in the third rank.

Table (4-5) illustrates the descriptive statistic of "Self-Control" statements.

Table (4 - 5)

Descriptive statistic of Self-Control

Item	Statement	Mean	Standard Deviation	Rank	Level of Importance
16	**I have more control over my account due to e-banking services. (R)**	**5.2476**	**1.32587**	4	High [*]
17	**Internet banking allows me to know all of the financial services banks provide.**	**5.4466**	**1.34511**	3	High
18	**I believe that I can gain more useful information by using Internet banking**	**5.6408**	**1.10303**	2	High
19	**It takes me a great deal of time and effort to get used to new e-banking services. (R)**	**4.6068**	**1.86776**	5	Mid [*]
20	**e -banking services help me to better manage finance transactions.**	**5.6893**	**1.14363**	1	High
Grand Mean & Standard Deviation of Ease to Self-Control [**]		**5.5922**	**.95018**		High

R: Reverse

*: Removed from next analysis

**: The results for items which still in next analysis

The results within the table above illustrate the following:

1. "Self-Control" scale has high level with Mean (5.5922) and standard deviation (.95018).

2. All statements of "Self-Control" have "High" level except one which has "Mid" level.

3. The highest mean (5.6893) with standard deviation (1.14363) was for the statement number (20) "E-banking services help me to better manage finance transactions" this put this statement in the first rank when compared with others statements in the table.

4. In the second rank, the statement number (18) "I believe that I can gain more useful information by using Internet banking" appears mean equal (5.6408) and standard deviation (1.10303).

5. The lowest mean as appears in table is (5.4466) belong to statement number (17) "Internet banking allows me to know all of the financial services banks provide" with standard deviation (1.34511); That puts this statement in the third rank.

The following table (4-6) summaries the construct descriptive results.

Table (4 - 6)

Descriptive statistics of E-Banking Services and its characteristics

Characteristics	Mean	Standard Deviation	Rank	Level of Importance
Cost saved	6.2233	.79140	1	High
Ease of Use	6.0667	.70976	2	High
Self – Control	5.5922	.95018	3	High
Usefulness	5.1958	1.03697	4	High
Grand Mean & Standard Deviation of E- Banking Services Scale	5.7924	.62014		High

The table above illustrates that the variable "E-Banking Services" has a "High" level of importance with mean (5.7924) and standard deviation (.62014). Therefore the ranking of e-banking services characteristics will be as follows:

- Cost Saved.

- Ease of Use.

- Self – Control.

- Usefulness.

One plausible reason which explains this ranking is that most customers tend to use e-banking services if these services enhance their cost, are user-friendly, are less effort to use, and when they have sufficient control over their financial transactions with the bank. This is aligned with previous study by (Esman, Embi, and Jusoh, 2010).

2. Customer Value

The other main variable is Customer Value that was measured by (12) statements divided into three dimensions as follows:

Functional value: which is measured by (4) statements within the original questionnaire, (1) statement has been removed from analysis because its loading was weak.

Emotional value: measured by (5) statements within the original questionnaire, (2) statements have been removed from analysis.

Epistemic value: measured by (3) statements within the original questionnaire, there were no statements removed from analysis.

Table (4-7) illustrates the descriptive statistic of "Functional value" statements

Table (4 - 7)

Descriptive statistics of Functional value

Item	Statement	Mean	Standard Deviation	Rank	Level of Importance
21	E-banking services offer me alternatives to solve my financial problem.	5.5971	1.29079	1	High
22	Using Internet banking offers me timely communication with my bank	5.4563	1.30123	2	High

23	**May be that electronic banking systems are not secure enough to protect my personal financial information. (R)**	**3.1359**	**1.61426**	4	Mid *
24	**The bank services locations (branches/ATMs) are at convenient places.**	**5.3883**	**1.42269**	3	High
Grand Mean & Standard Deviation of Ease to Functional Value**		**5.4806**	**1.02616**		High

R: Reverse

*: Removed from next analysis

**: The results for items which still in next analysis

The results within the table above illustrate the following:

1. "Functional value" scale has high level with Mean (5.4806) and standard deviation (1.02616). Whenever standard deviation value is lower, this indicates to the homogeneity in the responses of respondents.

2. All statements of "Functional value" have "High" level except one which has "Mid" level.

3. The highest mean (5.5971) with standard deviation (1.29079) was for the statement number (21) "E-banking services offer me alternatives to solve my financial problem". This puts this statement in the first rank when compared with others statements in the table.

4. In the second rank, the statement number (22) "Using Internet banking offers me timely communication with my bank" appears mean equal (5.4563) and standard deviation (.1.30123).

5. The lowest mean as appears in table is (5.3883) belongs to statement number (24) "The bank services locations (branches/ATMs) are at convenient places" with standard deviation (1.42269). That puts this statement in the third rank.

Table (4-8) illustrates the descriptive statistic of "Emotional value" statements

Table (4 - 8)

Descriptive statistics of Emotional value

Item	Statement	Mean	Standard Deviation	Rank	Level of Importance
25	Using e- banking services let me feel comfortable	5.7913	1.15193	1	High
26	Using e-t banking services can satisfy my desire for new services	5.6165	1.26241	2	High
27	I feel comfortable providing my personal information through electronic banking systems	4.9981	1.67457	3	Mid
28	It bothers me to use a machine for banking transactions when I could talk with a person instead.(R)	4.9369	1.62328	4	Mid[*]
29	Always e - banking services fulfill my expectations.(R)	4.6602	1.48195	5	Mid[*]
Grand Mean & Standard Deviation of Ease to Emotional Value [**]		**5.4353**	**1.10572**		High

R: Reverse

*: Removed from next analysis   **: The results for items which still in next analysis

The results within the table above illustrate the following:

1. "Emotional value" scale has high level with Mean (5.4353) and standard deviation (1.10572).

2. Two statements of "Emotional value" have "High" level and other statements have "Mid" level.

3. The highest mean (5.7913) with standard deviation (1.15193) was for the statement number (25) "Using e- banking services let me feel comfortable" this put this statement in the first rank when compared with others statements in the table.

4. In the second rank, the statement number (26) "Using e-t banking services can satisfy my desire for new services" appears mean equal (5.6165) and standard deviation (1.26241).

5. The lowest mean as appears in table is (4.9981) belong to statement number (27) "I feel comfortable providing my personal information through electronic banking systems" with standard deviation (1.67457). That puts this statement in the third rank.

Table (4-9) illustrates the descriptive statistic of "Epistemic value" statements

Table (4 - 9)

Descriptive statistics of Epistemic value

Item	Statement	Mean	Standard Deviation	Rank	Level of Importance
30	Using Internet banking can satisfy my desire to gather information	5.1068	1.30599	3	High
31	E- banking services provides clearness and transparency information	5.2816	1.26813	1	High
32	Constantly bank informs of new e-services that could be my interest.	5.1456	1.53913	2	High
Grand Mean & Standard Deviation of Ease to Epistemic Value		5.1780	1.14510		High

The results within the table above illustrate the following:

1. "Epistemic Value value" scale has high level with Mean (5.1780) and standard deviation (1.14510).

2. All statements of "Epistemic Value value" have "High" level.

3. The highest mean (5.2816) with standard deviation (1.26813) was for the statement number (31) "E- banking services provides clearness and transparency information". This puts this statement in the first rank when compared with others statements in the table.

4. In the second rank, the statement number (32) "Constantly bank informs of new e-services that could be my interest" appears mean equal (5.1456) and standard deviation (1.53913).

5. The lowest mean as appears in table is (5.1068) belongs to statement number (30) "Using Internet banking can satisfy my desire to gather information" with standard deviation (1.30599). That puts this statement in the third rank.

The following table (4-10) summaries the construct descriptive results.

Table (4 - 10)

Descriptive statistics of Customer value and its dimensions

Dimensions	Mean	Standard Deviation	Rank	Level of Importance
Functional value	5.4806	1.02616	1	High
Emotional value	5.4353	1.10572	2	High
Epistemic value	5.1780	1.14510	3	High
Grand Mean & Standard Deviation of Customer Value	5.3646	.93722		High

The table (4-10) illustrates that variable "Customer value" has a "High" level with mean (5.3646) and standard deviation (.93722). Therefore the ranking of Customer value's dimensions will be as follows:

- Functional value.

- Emotional value.

- Epistemic value.

3. **Customer Loyalty**

Main variable "Customer Loyalty" was measured by (8) statements divided into two dimensions as follows:

Attitudinal Loyalty: measured by (5) statements within the original questionnaire, one statement removed from analysis.

Behavioral Loyalty: measured with (3) statements within the original questionnaire without removing any item.

Table (4-11) illustrates the descriptive statistic of "Attitudinal loyalty" statements

Table (4 - 11)

Descriptive statistics of Attitudinal Loyalty

Item	Statement	Mean	Standard Deviation	Rank	Level of Importance
33	I try to use e - banking services because it is the best choice for me	5.8301	1.14136	1	High
34	I consider myself to be a loyal customer of bank.	5.3155	1.43219	3	High
35	To me, e- banking services is the same as other services.(R)	3.4417	1.68030	5	Mid [*]
36	I say positive things about using e-banking services to other people.	5.0583	1.31650	4	High
37	I will regularly use e- banking services in the future	5.7670	1.19106	2	High
Grand Mean & Standard Deviation of Ease to Attitudinal Loyalty [**]		5.4927	.95218		High

R: Reverse

*: Removed from next analysis

**: The results for items which still in next analysis

The results within the table above illustrate the following:

1. "Attitudinal Loyalty" scale has high level with Mean (5.4927) and standard deviation (.95218).

2. All statements of "Attitudinal Loyalty" have "High" level except one statement have "Mid" level.

3. The highest mean (5.8301) with standard deviation (1.14136) was for the statement number (33) "I try to use e - banking services because it is the best choice for me". This puts this statement in the first rank when compared with others statements in the table.

4. In the second rank, the statement number (37) "I will regularly use e- banking services in the future" appears mean equal (5.7670) and standard deviation (1.19106).

5. The lowest mean as appears in table is (5.0583) belongs to statement number (34) "I say positive things about using e-banking services to other people" with standard deviation (1.31650). That puts this statement in the fourth rank.

Table (4-12) illustrates the descriptive statistic of "Behavioral loyalty" statements

Table (4 - 12)

Descriptive statistics of Behavioral loyalty

Item	Statement	Mean	Standard Deviation	Rank	Level of Importance
38	I intend to continue to do business and banking transactions by e - services.	5.4563	1.37061	2	High
39	Even if close friends recommended another banking service, I will not change my preference for e- banking services.	5.4612	1.25171	1	High

40	I would encourage friends and relatives to use e - banking services banking service.	5.3592	1.33145	3	High
Grand Mean & Standard Deviation of Ease to Behavioral Loyalty [**]		5.4256	1.13080		High

The results within the table above illustrate the following:

1. "Behavioral loyalty" scale has high level with Mean (5.4256) and standard deviation (1.13080).

2. All statements of "Behavioral loyalty" have "High" level except one statement have "Mid" level.

3. The highest mean (5.4612) with standard deviation (1.25171) was for the statement number (39) "Even if close friends recommended another banking service, I will not change my preference for e- banking services". This puts this statement in the first rank when compared with others statements in the table.

4. In the second rank, the statement number (38) "I intend to continue to do business and banking transactions by e- services" appears mean equal (5.4563) and standard deviation (1.37061).

5. The lowest mean as appears in table is (5.3592) belong to statement number (40) "I would encourage friends and relatives to use e- banking services banking service" with standard deviation (1.33145). That puts this statement in the third rank

The following table (4-13) summaries the construct descriptive results.

Table (4 - 13)

Descriptive statistics of Customer Loyalty and its dimensions

Construct	Mean	Standard Deviation	Rank	Level of Importance
Attitudinal loyalty	5.4927	.95218	1	High
Behavioral loyalty	5.4256	1.13080	2	High
Grand Mean & Standard Deviation of Customer Loyalty	5.4639	.95620		High

The table (4-13) illustrates that variable "Customer loyalty" has a "High" level of importance with mean (**5.4639**) and standard deviation (**.95620**). Therefore the ranking of Customer Loyalty dimensions will be as follows:

- Attitudinal loyalty.

- Behavioral loyalty.

4-3: Study Hypothesis Testing

Study Hypotheses

Four hypotheses were tested in this study. The researcher used Statistical Package for Social Sciences (**SPSS**) to test the first three hypotheses, as well as use Analysis of Moment Structures (**AMOS**) to test the fourth hypothesis. Many statistical criteria have

been taken into analysis as simple and multiple regression, **F – test** for estimated equations significance, **t – test** for effect significance of independent variable (ID) on dependent variable (DV) and coefficient of determination (R^2) to assess how well a model explains and predicts future outcomes, herein we need to know how the independent variable (IV) will explain the variation in dependent variable (DV). The following are the main research hypotheses examined:

First Hypothesis

The first hypothesis covered effect of e-banking services on Customer value, the hypothesis was formulated as follows:

H1: There is positive effect of E- banking services on Customer value at the significant level (α ≤ 0.05).

To test this hypothesis, multi branch hypotheses have been derived, since each construct has many dimensions, the researcher attempts to test the effect of E-banking Services through its characteristics on the dimensions of Customer value separately by simple regression, and then the next step multiple regression will be conducted to test the effects of E-banking services characteristics on each Customer value dimensions:

H1 (1): The effects of E-banking Services characteristics on Functional value.

Table (4–14) illustrates the results of testing for e-banking service characteristics on Functional value (First dimension of Customer value) using simple regression analysis.

Table (4-14): Simple Regression - Effect of E-Banking Services characteristics on Functional value

DV	R^2	F	D.F	Sig[*]	Regression Coefficient					Decision
					ID	β	SE	t		
Functional Value	.108	24.596	1 204 205	.000	**Ease of use**	.328	.096	4.959		*Support*
Functional Value	.135	31.757	1 204 205	.000	**Usefulness**	.367	.064	5.635		*Support*
Functional Value	.060	13.099	1 204 205	.000	**Cost saved**	.246	.088	3.619		*Support*
Functional Value	.191	48.030	1 204 205	.000	**Self – Control**	.437	.068	6.930		*Support*
Functional Value	.234	62.353	1 **204** **205**	.000	**E- Banking Services**	.484	.101	7.896		*Support*

*significant if sig ≤ 0.05

Each simple regression is good for fitting to the relationship between independent variables (characteristics of E-banking Services) and dependent variable (Functional value), where all (**F- test**) values are significant when comparing with level (sig =0.000 < 0.05) , Self-Control has more explanation in the differences on Functional value , it explains about (19.1 %), while Cost Saved explains only (6%) in the differences on Functional value; These results are reflected on the effects of each E-banking Services characteristics on Functional value in spite of significance effects. According to associated

(**t- test**) with (sig = 0.000<0.05), some of independent variables has a high effect than others, increasing on degree of Self-Control, Usefulness, Ease of Use, Cost Saved separately will increase Functional value by (0.437), (0.367), (0.328), (0.246) respectively. Herein we can conclude that all characteristics of E-Banking services have an effect on Functional value separately as a simple regression.

The last row in above table illustrates that (E-banking Services) as a factor explains (23.4%) in the differences on Functional value, E-banking services has an effect of Functional value by (0.484) which is a significance effect since (**t-test**) equal (7.896) with (sig= 0.000<0.05).

Table (4-15) illustrates how the characteristics of E-Banking services will affect on the Functional value in same model by fitting multiple regression:

Table (4-15): Stepwise multiple regression- effect of E-banking services characteristics Functional value

DV	R^2	F	D.F	Sig*	Regression Coefficient				
					ID	β	SE	t	Sig*
Functional Value	.275	25.516	3	0.000	Self - Control	.335	.069	5.259	.000
			202		Usefulness	.220	.065	3.332	.001
					Ease of use	.146	.096	2.202	.029

* Significant if sig ≤ 0.05.

As results shown in table (4-15), multiple regression is significant. **F- test** = (25.516), and (sig = 0.000) less than the level of significance (0.05); The coefficient of determination is ($R2$ = 0.275) which means that ID (self-control, usefulness, and ease of use) explain (27.5 %) of the variation in DV (Functional value), each independent variable has a significance effect on dependent variable; We can note that Cost saved has been removed from the

model, since the **t- test** values has a (sig < 0.05); These effects decline than their opposite in table (4-14), but no changing in ranking.

H1 (2): The effects of E-banking Services characteristics on Emotional value.

Table (4–16) illustrates the results of testing for e-banking service characteristics on Emotional value (Second dimension of Customer value) using simple regression analysis.

Table (4-16): Simple Regression - Effect of E-Banking Services characteristics on Emotional value

DV	R^2	F	D.F	Sig*	Regression Coefficient				Decision
					ID	β	SE	t	
Emotional value	.102	23.222	1	.000	Ease of use	.320	.103	4.819	*Support*
			204						
			205						
Emotional value	.082	18.236	1	.000	Usefulness	.286	.072	4.270	*Support*
			204						
			205						
Emotional value	.129	30.204	1	.000	Cost saved	.359	.091	5.496	*Support*
			204						
			205						
Emotional value	.204	52.215	1	.000	Self – Control	.451	.073	7.226	*Support*
			204						
			205						
Emotional value	.239	63.940	1	.000	E- Banking Services	.489	.109	7.996	*Support*
			204						
			205						

*significant if sig ≤ 0.05

Each simple regression is good for fitting to the relationship between independent variables (characteristics of E-banking Services) and dependent variable (Emotional value), where (**F- test**) values are significant when comparing with level (sig =0.000 < 0.05) , Self-Control has more explanation in the differences on Emotional value , it explains about (20.4%), while Usefulness explains only (8.2%) in the differences on Emotional value, these results are reflected on the effects of each E-Banking Services characteristics on Emotional value in spite of significance effects. According to associated (**t- test**) with (sig = 0.000<0.05), some of independent variables have a high effect than others, increasing on degree of Self-Control, Usefulness, Ease of Use, Cost Saved separately will increase Emotional value by (0.451), (0.286), (0.320), (0.359) respectively. Herein we can conclude that all characteristics of E-Banking services have an effect on Emotional value separately as a simple regression.

The last row in above table illustrates that E-banking Services as a factor explains (23.9%) in the differences on Emotional value. E-banking services has an effect (0.489) on Emotional value, which is a significance effect since **t- test** equal (7.996) with (sig = 0.000<0.05).

Table (4-17) illustrates how the characteristics of E-Banking services will affect the Emotional value in same model by fitting multiple regression:

Table (4-17): Stepwise multiple regression- Effect of E-Banking Services characteristics on Emotional value

DV	R^2	F	D.F	Sig*	Regression Coefficient				
					ID	β	SE	t	Sig*
Emotional value	.260	23.694	3	0.000	Self – Control	.339	.079	5.001	.000

| | | | 202 | | Ease of use | .164 | .103 | 2.484 | .014 |
| | | | | | Cost saved | .153 | .098 | 2.187 | .030 |

*Significant if sig ≤ 0.05

As results shown in table (4-17), multiple regression is significant, where **(F-test** = 23.694), and (sig = 0.000) less than the level of significance (0.05), the Usefulness removed from the model. The coefficient of determination is ($R2 = 0.275$) which means that ID (self-control, usefulness, and ease of use) explain (26.0%) of the variation in DV (Functional value), each independent variable has a significance effect on dependent variable, since the t**- test** values has a (sig < 0.05), these effects decline than their opposite in table (4-16), but no changing in ranking of Self control but there is change in Ease of use and Cost saved.

H1 (3): The effects of E-banking Service characteristics on Epistemic value.

Table (4–18) illustrates the results of testing for e-banking service characteristics on Epistemic value (the last construct of Customer value) using simple regression analysis.

Table (4-18): Simple Regression - Effect of E-Banking Services characteristics on Epistemic value

DV	R^2	F	D.F	Sig*	Regression Coefficient				Decision
					ID	β	SE	t	
Epistemic Value	.064	13.998	1	.000	Ease of use	.253	.109	3.741	*Support*
			204						
			205						
Epistemic Value	.142	33.841	1	.000	Usefulness	.377	.072	5.817	*Support*
			204						
			205						
Epistemic	.135	31.956	1	.000	Cost saved	.368	.094	5.653	*Support*

Value			204						
			205						
Epistemic Value	.290	83.220	1	.000	**Self – Control**	.538	.071	9.123	*Support*
			204						
			205						
Epistemic Value	.285	81.165	1	.000	**E- Banking Services**	.534	.109	9.009	*Support*
			204						
			205						

*significant if sig ≤ 0.05

Each simple regression has a good fitting to the relationship between independent variables (E-banking Services characteristics) and dependent variable (Epistemic value), where all **F- test** values are significant when compared with level (sig= 0.000< 0.05), Self-Control has more explanation in the differences on Epistemic value, it explain about (29.0%), while Ease to Use explains only (6.4%) in the differences on Epistemic value; These results will be reflected on the effects of each E-Banking Service characteristics on Epistemic value; In spite of significance effects, according to associated **t- test** (sig=0.000<0.05), some of independent variables have higher effect than others, increasing on degree in Self-Control, Usefulness, Ease of Use, and Cost Saved separately will increase Epistemic value by (0.538), (0.337), (0.253), (0.368) respectively; The conclusion here is that all E-Banking characteristics have an effect on Epistemic value separately as a simple regression.

The last row in above table illustrates that E-banking Services as a factor explains (28.5%) in the differences on Epistemic value with a goodness simple regression fitting with the relationship between E-banking Services and Epistemic value, E-banking Services has an

effect (0.534) on Epistemic value , which is a significance effect since t test equal (9.009) with (sig = 0.000<0.05).

Table (4-19) illustrates how the characteristics of E-Banking services will affect the Epistemic value in same model by fitting multiple regression:

Table (4-19): Stepwise multiple regression- Effect of E-Banking Services characteristics on Epistemic value

DV	R^2	F	D.F	Sig*	Regression Coefficient				
					ID	β	SE	t	Sig*
Epistemic Value	.348	54.075	2	0.000	Self - Control	.471	.071	7.992	.000
			203		Usefulness	.250	.065	4.242	.000

*Significant if sig ≤ 0.05

As shown in the results in table (4-17), multiple regression is significant, where (**F- test** = 23.694) with (sig = 0.000) is less than the level of significance (0.05), two independent characteristics removed (Ease to Use and Cost Saved) from the model, and the remaining characteristics explain (34.8%) the differences in Epistemic value, each independent variable has a significance effect on dependent variable , since the **t- test** values has a (sig < 0.05); These effects decline less than their opposite in table (4-18), no changing in ranking .

In order to take decision about first main hypothesis, simple regression used to test if there is effect for E-Banking Services as an independent variable on Customer value as dependent variable, Table (4-20) illustrates the results:

Table (4-20): Effect of E-Banking Services on Customer Value

DV	R^2	F	D.F	Sig*	Regression Coefficient				Decision
					ID	β	SE	t	
Customer Value	.343	106.673	1	.000	E- Banking Services	.586	.086	10.328	*Support*
			204						
			205						

According to the results in the above table (4 – 20) , the simple regression is good for fitting the relation between E-banking services and Customer value , the regression equation is significant since (F- test = 106.673) with (sig = 0.000) is less than 0.05 the level of significance. The coefficient of determination (R^2 =0.343) which means that ID (E-banking services) explains (34.3 %) of the variation in DV (Customer value) , while the effect of ID variable (β = 0.586) on DV which mean that increasing one unit in E-banking services variable will increase (0.586) unit in Customer value; So it is a positive effect , and its standard error is (SE = 0.086) ; This direct effect is significant according to associated (t = 10.328) with opposite (sig = 0.000). All these results confirm the first hypothesis, so we accept it, thus,

"***There is positive effect of E- banking services on Customer value at the significant level ($\alpha \leq 0.05$).***"

Second Hypothesis

The second hypothesis covered e-banking services on Customer loyalty, the hypothesis was formulated as follows:

H2: There is positive effect of E- banking services on Customer loyalty at the significant level ($\alpha \leq 0.05$).

To test this hypothesis, multi branch hypotheses have been derived, since each construct has many dimensions, the researcher attempts to test the effect of E-banking Services through its characteristics on the dimensions of Customer loyalty separately by simple regression; The next step of multiple regression will be conducted to test the effects of E-banking Service characteristics on each dimension of Customer loyalty:

H2 (1): The effects of E-banking Services characteristics on Attitudinal loyalty.

Table (4–21) illustrates the results of testing for e-banking service characteristics on Attitudinal loyalty (the first dimension of Customer loyalty) using simple regression analysis.

Table (4-21): Simple Regression - Effect of E-Banking Services characteristics on Attitudinal loyalty

DV	R^2	F	D.F	Sig*	Regression Coefficient				Decision
					ID	β	SE	t	
Attitudinal loyalty	.232	61.461	1 / 204 / 205	.000	Ease of use	.481	.082	7.840	*Support*
Attitudinal loyalty	.074	16.237	1 / 204 / 205	.000	Usefulness	.272	.062	4.030	*Support*
Attitudinal loyalty	.095	21.469	1 / 204 / 205	.000	Cost saved	.309	.080	4.633	*Support*
Attitudinal loyalty	.193	48.651	1 / 204 / 205	.000	Self – Control	.439	.063	6.975	*Support*
Attitudinal loyalty	.271	75.709	1 / 204 / 205	.000	E- Banking Services	.520	.092	8.701	*. Support*

*significant if sig ≤ 0.05

Each simple regression has good fitting to the relationship between independent variables (E-banking Services characteristics) and dependent variable (Attitudinal loyalty), where all **F- test** values are significant when compared with level (sig =0.000 < 0.05), Ease of use has more explanation in the differences on Attitudinal loyalty, it explains

about (23.2%), while Usefulness explains only (7.4%) in the differences on Attitudinal loyalty; these results reflected the effects of each E-banking Services characteristics on Attitudinal loyalty, in spite of significance effects, according to associated **t- test** (sig = 0.000<0.05), some of independents variables have high effect than others , increasing on degree in Self- Control, Usefulness , Ease of Use, and Cost Saved separately will increase Attitudinal loyalty by (0.439), (0.272), (0.481), and (0.309) respectively. The conclusion here is that all characteristics of E-banking services have an effect on Attitudinal loyalty separately as a simple regression.

The last row in above table also indicates that E-banking services as a factor explains (27.1%) in the differences on Attitudinal loyalty, E-banking services has an effect on Attitudinal loyalty by (0.520) which is a significance effect since **t- test** equal (8.701) with(sig = 0.000<0.05) .

Table (4-22) illustrates how the characteristics of E-Banking services will affect the Attitudinal loyalty in same model by fitting multiple regression:

Table (4-22): Stepwise multiple regression- Effect of E-Banking Services characteristics on Attitudinal loyalty

DV	R^2	F	D.F	Sig*	Regression Coefficient				
					ID	β	SE	t	Sig*
Attitudinal loyalty	.329	49.867	3	0.000	Ease of use	.387	.081	6.437	.000
			202		Self - Control	.327	.060	5.445	.001

*Significant if sig ≤ 0.05

As shown in the results in table (4-22), multiple regression is significant, where (**F- test** = 49.867), and (sig = 0.000) is less than the level of significance (0.05), the Cost saved and Usefulness removed from the model, and remaining characteristics explained

(32.9%) of the differences in Attitudinal loyalty. Each independent variable has a significance effect on dependent variable, since the t- **test** values has a (sig < 0.05), these effects decline more than their opposite in table (4-21), but no changing in ranking.

H2 (2): The effects of E-banking Services characteristics on Behavioral Loyalty.

Table (4–23) illustrates the results of testing for e-banking service characteristics on Behavioral Loyalty (the second dimension of Customer loyalty) using simple regression analysis.

Table (4-23): Simple Regression - Effect of E-Banking Service characteristics on Behavioral Loyalty

DV	R^2	F	D.F	Sig*	Regression Coefficient				Decision
					ID	β	SE	t	
Behavioral loyalty	.195	49.264	1 / 204 / 205	.000	Ease of use	.441	.100	7.019	*Support*
Behavioral loyalty	.128	29.900	1 / 204 / 205	.000	Usefulness	.358	.071	5.468	*Support*
Behavioral loyalty	.111	25.442	1 / 204 / 205	.000	Cost saved	.333	.094	5.044	*Support*
Behavioral loyalty	.281	79.702	1 / 204 / 205	.000	Self – Control	.530	.071	8.928	*Support*
Behavioral loyalty	.335	102.753	1 / 204 / 205	.000	E- Banking Services	.579	.104	10.137	*. Support*

*significant if sig ≤ 0.05

Each simple regression has good fitting to the relationship between independent variables (E-banking Services characteristics) and dependent variable (Behavioral loyalty), where all values of **F- test** are significant when compared with level (sig =0.000 < 0.05); Self-Control has more explanation in the differences on Behavioral loyalty , it explains about (28.1%), while Cost Saved explains only (11.1%) in the differences on Behavioral loyalty, these results reflected the effects of each E-banking Service characteristics on Behavioral loyalty, in spite of significance effects. According to associated **t- test** (sig = 0.000<0.05), some of independent variables have high effect than others, increasing on degree in Self-Control, Usefulness , Ease of Use , and Cost Saved separately will increase Behavioral loyalty by (0.530), (0.358), (0.441), (0.333) respectively. The conclusion here is that all characteristics of E-Banking have an effect on Behavioral loyalty separately as a simple regression. The last row in above table also indicates that E-banking services as a factor explains (33.5%) in the differences on Behavioral loyalty, E-banking services has an effect on Behavioral loyalty by (0.579) which is a significance effect since **t- test** equal (102.753) with(sig = 0.000<0.05).

Table (4-24) illustrates how the characteristics of E-Banking services will affect the Behavioral loyalty in same model by fitting multiple regression:

Table (4-24): Stepwise multiple regression- Effect of E-Banking Services characteristics on Behavioral loyalty

DV	R^2	F	D.F	Sig*	Regression Coefficient				
					ID	β	SE	t	Sig*
Behavioral loyalty	.388	42.687	3	0.000	**Self - Control**	.414	.070	7.089	.000
			202		**Ease of use**	.266	.097	4.360	.000

					Usefulness	.143	.066	2.353	.020

*Significant if sig ≤ 0.05

As results shown in table (4-24), multiple regression is significant, where **(F-test = 42.687)**, and (sig = 0.000) less than the level of significance (0.05), the Cost saved removed from the model, and remaining characteristics explained (38.8%) of the differences in Behavioral loyalty. Each independent variable has a significance effect on dependent variable, since the **t- test** values has a (sig < 0.05), these effects decline less than their opposite in table (4-23), but no changing in ranking occurred. In order to take decision about second main hypothesis, simple regression used to test if there is effect for E-Banking Services as an independent variable on Customer loyalty as dependent variable, Table (4-25) illustrates the results:

Table (4-25): Effect of E-Banking Services on Customer loyalty

DV	R^2	F	D.F	Sig*	Regression Coefficient				Decision
					ID	β	SE	t	
Customer loyalty	.347	108.579	1 204 205	.000	**E- Banking Services**	.589	.087	10.420	*Support*

According to the results in the above table (4-25) , the simple regression is good for fitting the relation between E-banking services and Customer loyalty, the regression equation is significant since (F- test = 108.579) with (sig = 0.000) is less than 0.05 the level of significance. The coefficient of determination (R2 =0.347) which means that ID (E-banking services) explains (34.7 %) of the variation in DV (Customer loyalty), while the effect of ID variable (β = 0.589) on DV which means that increasing one unit in E-banking service variables will increase (0.589) unit in Customer loyalty, so it is a positive effect , and its standard error (SE = 0.087); This direct effect is significant according to

associated (t = 10.420) with opposite (sig = 0.000). All these results confirm the second hypothesis, so we accept it, thus,

"***There is positive effect of E- banking services on Customer loyalty at the significant level (α ≤ 0.05)***"

Third Hypothesis

The third hypothesis covered Customer value on Customer loyalty, the hypothesis was formulated as follows:

H3: There is positive effect of Customer value on Customer loyalty at the significant level (α ≤ 0.05).

To test this hypothesis, multi branch hypotheses have been derived, since each construct has many dimensions, the researcher attempts to test the effect of Customer value through its dimensions on the dimensions of Customer loyalty separately by simple regression; Then the next step multiple regression will be conducted to test the effects of Customer value dimensions on each dimension of Customer loyalty:

H3 (1): The effects of Customer value dimensions on Attitudinal loyalty.

Table (4–26) illustrates the results of testing for Customer value dimensions on Attitudinal loyalty (the first dimension of Customer loyalty) using simple regression analysis.

Table (4-26): Simple Regression - Effect of Customer value dimension on Attitudinal loyalty

DV	R^2	F	D.F	Sig*	Regression Coefficient				Decision
					ID	β	SE	t	
Attitudinal loyalty	.168	41.237	1 204	.000	**Functional value**	.410	.059	6.422	*Support*

			205						
Attitudinal loyalty	.226	59.511	1	.000	Emotional value	.475	.053	7.714	*Support*
			204						
			205						
Attitudinal loyalty	.228	60.181	1	.000	Epistemic Value	.477	.051	7.758	*Support*
			204						
			205						
			204						
			205						
Attitudinal loyalty	.282	80.077	1	.000	Customer Value	.531	.060	8.949	*Support*
			204						
			205						

*significant if sig ≤ 0.05

Each simple regression has good fitting to the relationship between independent variables (Customer Value dimensions) and dependent variable (Attitudinal loyalty), where all **F- test** values are significant when compared with level (sig =0.000 < 0.05), Epistemic Value has more explanation in the differences on Attitudinal loyalty , it explained about (22.8 %) , while Functional value explained only (16.8%) in the differences on Attitudinal loyalty; These results reflected the effects of each Customer Value dimensions on Attitudinal loyalty, in spite of significance effects. According to associated **t- test** (sig = 0.000<0.05), some of independent variables has a high effect than others, increasing on degree in Epistemic value, Emotional value, and Functional value separately will increase Attitudinal loyalty by (0.477), (0.475), and (0.410) respectively .So there are very close results between Epistemic Value and Emotional value in coefficient of determination and their effects. The conclusion here is that all Customer value dimensions have an effect on Attitudinal loyalty separately as a simple regression.

The last row in above table also indicates that the Customer Value as a factor explains (28.2%) in the differences on Attitudinal loyalty and effects on Attitudinal loyalty by (0.531) which is a significance effect since **t- test** equal (8.949) with (sig = 0.000<0.05). Table (4-27) illustrates how the dimensions of Customer value will affect the Attitudinal loyalty in same model by fitting multiple regression:

Table (4-27): Stepwise multiple regression- Effect of Customer value dimensions on Attitudinal loyalty

DV	R^2	F	D.F	Sig*	Regression Coefficient				
					ID	β	SE	t	Sig*
Attitudinal loyalty	.228	40.549	2	0.000	Epistemic value	.302	.061	4.116	.000
			203		Emotional value	.297	.063	4.047	.001

*Significant if sig ≤ 0.05.

The multiple regression fitting model in table (4-27) is significant, where (F- test = 40.549) and (sig=0.000<0.05), the Functional Value removed from the model , and the remaining dimensions explain (22.8%) the differences in Attitudinal loyalty , each independent variables has a significance effect on dependent variable , since the **t- test** values has a (sig < 0.05) , these effects decline less than their opposite in table (4-26), but no changing in ranking.

H3 (2): The Effects of Customer value dimensions on Behavioral loyalty

Table (4–28) illustrates the results of testing for Customer value dimensions on Behavioral loyalty (the first dimension of Customer loyalty) using simple regression analysis.

Table (4-28): Simple Regression - Effect of Customer value dimension on Behavioral loyalty

DV	R^2	F	D.F	Sig*	Regression Coefficient				Decision
					ID	β	SE	t	
Behavioral loyalty	.148	35.355	1	.000	Functional value	.384	.071	5.946	*Support*
			204						
			205						
Behavioral loyalty	.274	76.995	1	.000	Emotional value	.523	.061	8.775	*Support*
			204						
			205						
Behavioral loyalty	.260	71.736	1	.000	Epistemic Value	.510	.059	8.470	*Support*
			204						
			205						
Behavioral loyalty	.307	90.268	1	.000	Customer value	.554	.070	9.501	*Support*
			204						
			205						
			204						
			205						

*significant if sig ≤ 0.05

Each simple regression has good fitting to the relationship between independent variables (Customer Value dimensions) and dependent variable (Behavioral loyalty), where all **F- test** values are significant when compared with level (sig =0.000 < 0.05) ; Emotional Value has more explanation in the differences on Behavioral loyalty, it explain about (27.4%), while Functional value explained only (14.8%) in the differences on Behavioral loyalty , these results reflected on the effects of each Customer Value dimensions on Behavioral loyalty, in spite of significance effects. According to associated **t- test** (sig = 0.000<0.05), some of independent variables has a high effect than others, increasing on degree in Emotional value, Epistemic value, and Functional value separately will increase Behavioral loyalty by (0.523), (0.510), (0.384) respectively. The

conclusion here is that all dimensions of Customer value have an effect on Behavioral loyalty separately as a simple regression.

The last row in above table, Customer value as a factor explains taken (30.7%) in the differences on Behavioral loyalty with a goodness simple regression fitting to the relationship between Customer value and Behavioral loyalty, Customer value has an effect (0.554) on Behavioral loyalty, which is a significance effect since **t- test** equal (9.501) with (sig = 0.000<0.05) . Table (4-29) illustrates how the dimensions of Customer value will affect the Behavioral loyalty in same model by fitting multiple regression:

Table (4-29): Stepwise multiple regression- Effect of Customer value dimensions on Behavioral loyalty

DV	R^2	F	D.F	Sig*	Regression Coefficient				
					ID	β	SE	t	Sig*
Behavioral loyalty	.336	51.429	2	0.000	Emotional value	.341	.072	4.825	.000
			203		Epistemic value	.309	.070	4.365	.000

*Significant if sig ≤ 0.05

The multiple regression fitting model in table (4-29) is significant, where (**F- test** = 51.429) and (sig=0.000<0.05), the Functional value removed from the model , and the remaining dimensions explained (33.6%) of the differences in Behavioral loyalty, each independent variable has a significance effect on dependent variable , since the **t- test** values has a (sig < 0.05) , these effects decline than their opposite in table (4-16), no changing in ranking. In order to take decision about third main hypothesis, simple regression used to test if there is effect for Customer value as an independent variable on Customer loyalty as dependent variable, Table (4-30) illustrates the results:

Table (4-30): Effect of Customer value on Customer loyalty

DV	R^2	F	D.F	Sig*	Regression Coefficient				Decision
					ID	β	SE	t	
Customer loyalty	.340	104.941	1	.000	Customer Value	.583	.058	10.244	*Support*
			204						
			205						

According to the results in the above table (4-30) , the simple regression is good for fitting the relation between Customer Value and Customer loyalty, the regression equation is significant since (F- test = 104.941) with (sig = 0.000) is less than 0.05 the level of significance. The coefficient of determination (R2 =0.340) which means that ID (E-banking services) explains (34.0 %) of the variation in DV (Customer loyalty), while the effect of ID variable (β = 0.583) on DV which means that increasing one unit in Customer value variables will increase (0.583) unit in Customer loyalty, so it is a positive effect , and its standard error (SE = 0.058); This direct effect is significant according to associated (t = 10.244) with opposite (sig = 0.000). All these results confirm the second hypothesis, so we accept it, thus,

"*There is positive effect of Customer value on Customer loyalty at the significant level (α ≤ 0.05)*"

Fourth Hypothesis

The fourth hypothesis covered the indirect effect of E-banking services on Customer loyalty, through Customer value as mediator factor, the hypothesis was formulated as follows:

H₄: There is indirect effect of E- banking services on Customer Loyalty through Customer value as a mediator factor at the significant level (α ≤ 0.05).

The first step to test fourth hypothesis is to verify if the assumption of no "Multicollinearity", which means there is no higher correlation between independent and mediator variables before using path analysis as a tool to test hypothesis. It is clear that independent variable "E-banking services" and mediator variable "Customer Value" while "Customer Loyalty" is a dependent variable.

Table (4-31) illustrates the usage of stepwise regression to test both e-banking services and Customer loyalty on Customer value.

Table (4 - 31): Stepwise Regression Analysis -Effects of E- banking services and Customer Value on Customer Loyalty

DV	R^2	F	D.F	Sig*	Regression Coefficient				
					ID	β	SE	t	Sig*
Customer Loyalty	.433	77.588	2	0.000	E- Banking Services	.377	.101	5.789	0.000
			203		Customer Value	.362	.067	5.546	0.000

*significant if sig ≤ 0.05

First of all, the multiple regression is a good fit for the relationship among three study's variables. Since **F- test** (77.588), this indicates a significance model to represent the relationship. E-banking services and Customer value explain (43.3%) of the differences in Customer loyalty values. Increasing one degree in the E-banking services will increase Customer loyalty (0.377); This is a direct effect and **t- test** (5.789) associated with its significant because (sig < 0.05), while increasing one degree in the Customer value will increase Customer loyalty (0.362); This is a direct effect significant ,where **t-**

test (5.546) at associate (sig < 0.05), for the multicollinearity, the indicator Tolerance equal to (0.657) which is greater than (0.1) the value that may be a problem between independent variables.

After satisfying the assumptions of path analysis, Researcher used Amos (7) software to test the fourth hypothesis. Figure (4-1) presents the study paths model.

Figure (4 - 1)

Study Path Model
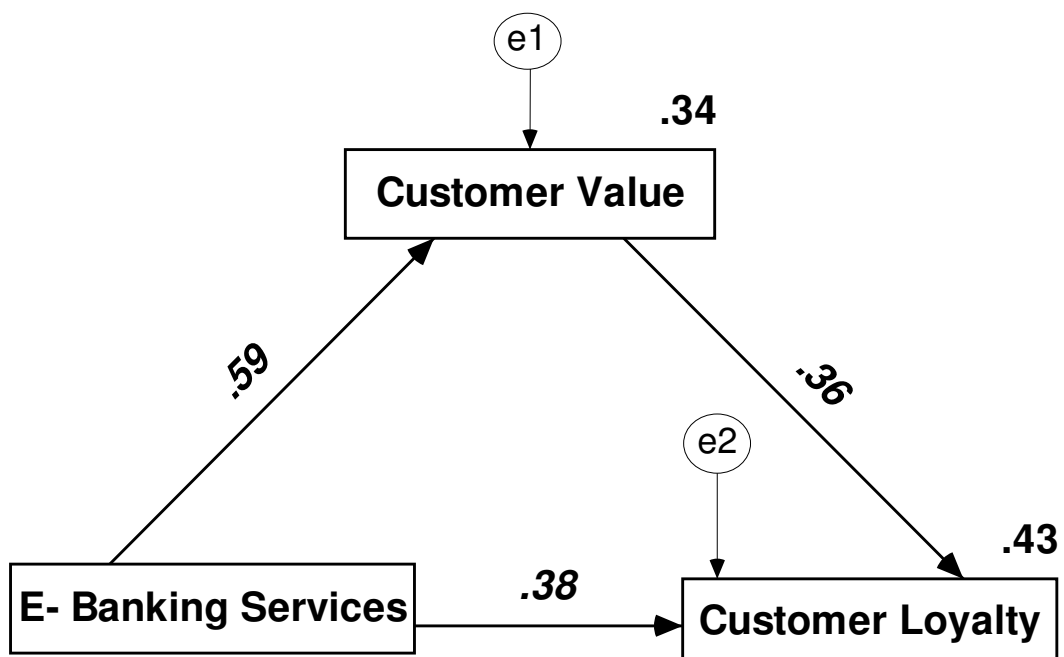
The numbers on path arrow are the direct effects from independents on dependent variable, while the numbers in above rectangular are the coefficient of variation so the E-banking services has a direct effect on Customer value equal to (0.59), and also has a direct effect on Customer loyalty equal to (0.38), while Customer value has direct effect on Customer loyalty is equal to (0.36); All these direct effects are significant as we found from previous hypotheses. E-banking Services explained (34%) in the differences Customer value, while (43%) of the differences in Customer loyalty explained by independent variable E-banking services and mediator variable Customer value.

Table (4-32) summarizes the direct, indirect and total effects of study variables for fourth hypothesis.

Table (4 - 32): Direct, indirect, and total effects in path analysis

From To	Direct Effect		Indirect Effect		Total Effect	
	E- Banking Services	Customer Value	E- Banking Services	Customer Value	E- Banking Services	Customer Value
Customer Value	.586	.000	.000	.000	.586	.000
Customer Loyalty	.377	.362	*.212*	.000	.589	.362

Only one indirect effect appears in above table (4-32); That is indirect effect (0.212) with belongs to E- banking Services on Customer loyalty through Customer value; This result increases the total effect E- banking services on Customer loyalty to reach (0.589). Finally, some goodness of fitting indicators to study model are computed as the following table (4-33).

Table (4 - 33)

Indicators Goodness of Fit for Study Model

χ^2 Chi Square	D.F	Chi Square / D.F	Sig	NFI	CFI	GFI	RAMSA
50.505	21	2.405	0.000	.936	.961	.953	0.083

GFI: Goodness of fit index must Proximity to one

NFI: The Bentler-Bonett normed fit index

CFI:The comparative fit index

RMSEA: Root Mean Square Error of Approximation must Proximity to zero

Table (4–33) illustrates that there is a significant impact of optimizing the E- banking services on Customer loyalty through Customer value .The Chi^2 is (50.505) at level ($\alpha \leq$ 0.05)., and after dividing it on degree of freedom , the result equal (2.405) which is less than (3) as an indicator in many literature, whereas the Goodness of fit index(GFI) equal to (0.953) is more than (0.95) as a lower bound in GFI according to many researches. The comparative fit index (CFI) equal to (0.961) is more than (0.95) the lower bound for consideration a great fit, Root Mean Square Error of Approximation, RAMSA equal to (0.083) failed in moderate category in goodness fit based on this indicator. In the same side the NFI equal (0.936) is more than (0.90). According to all results in path analysis, and goodness of fit indicators our conclusion is that the fourth main hypothesis is true, thus,

"E-banking Services has an indirect effect on Customer Loyalty through Customer Value a mediator variable ".

CHAPTER FIVE

RESULTS & RECOMMENDATION

5-1: Results and Conclusions

5-2: Recommendation

5-1: Results and Discussion

The purpose of this study was the examining of the effect of electronic banking services on both Customer value and Customer loyalty within the Jordanian commercial banks in Amman. This study produced many questions, and constructed many hypotheses which reflected the relation of the positive effects between study factors. Several findings emerged that contributed to solve the study problem, gave logical answers to the study questions, and interpreted the hypotheses.

The applied study found evidence that supported all hypotheses. Therefore the results of the study can be summarized as follows:

1. Characteristics of e-banking services (Ease of use, Usefulness, Cost saved, and Self-control) demonstrated a positive effect on Customer value; This result is consistent with findings by (Ho,and Ko, 2008).

2. Dimensions of Customer value (Functional value, Emotional value, and Epistemic value) demonstrated a positive effect on Customer loyalty dimensions.

3. Characteristics of e-banking services (Ease of use, Usefulness, Cost saved, and Self-control) demonstrated a positive effect on Customer Loyalty, This result is consistent with findings by (Ho,and Ko, 2008).

4. The level of **E-Banking Services** in Jordanian Commercial Banks working in Amman was high.

5. E-banking services characteristics **Cost saved**, **Ease of Use**, **and Self–control and Usefulness**) have high levels.

6. The level of **Customer Value** was high. This means that it is important to mention that the Customer value has an influential role in the banking sector in Jordan. This result is consistent with what (Roig, Garcia,and Tena, 2006).

7. The levels of Customer value dimensions (**Functional value**, **Emotional value and Epistemic value**) were high. That is consistent with findings by (Roig, Garcia,and Tena, 2006) their study incorporated functional and emotional value affective aspects represented by customer.

8. The level of **Customer Loyalty** in Jordanian Commercial Banks working in Amman was high. According to (Al-Hajri, 2008) the results were contrary, where he mentioned that respondents saw the Internet as an obstacle to customer loyalty because they believed that people could do better than machines.

9. Customer Loyalty dimensions (**Attitudinal loyalty and Behavioral loyalty**) in Jordanian Commercial Banks in Amman had high levels.

10. There was a significant positive effect of **E-Banking Services** on **Customer value** and **Customer loyalty** at level ($\alpha \leq$ **0.05).** This indicates that e-banking services meet with customer's attitudes, behaviors, desires, and preferences.

11. Each of **E-Banking Services** construct and its characteristics has a significant positive effect separately on **Functional Value** in Jordanian Commercial Banks in Amman at level ($\alpha \leq$ **0.05).**

12. There were significant positive effects of **Self-Control**, **Usefulness** and **Ease of Use** together on **Functional Value** in Jordanian Commercial Banks in Amman at level ($\alpha \leq$ **0.05).**

13. Each of **E-Banking Services construct** and its characteristics has a significant positive effect separately on **Emotional Value** in Jordanian Commercial Banks in Amman at level ($\alpha \leq$ **0.05).**

14. There were significant positive effects of **Self-Control, Ease of Use** and **Cost Saved** together on **Emotional Value** in Jordanian Commercial Banks in Amman at level ($\alpha \leq$ **0.05).**

15. Each of **E-Banking Services** construct and its characteristics has a significant positive effect separately on **Epistemic Value** in Jordanian Commercial Banks in Amman at level ($\alpha \leq$ **0.05).**

16. There were significant positive effects of **Self-Control** and **Usefulness** together on **Epistemic Value** in Jordanian Commercial Banks in Amman at level ($\alpha \leq$ **0.05).**

17. Each of **E-Banking Services** construct and its characteristics has significant positive effect separately on **Attitudinal Loyalty** and **Behavioral Loyalty** at level ($\alpha \leq$ **0.05).** This indicates if customers can access and utilize e-banking services without effort, they can build up self- esteem and self-efficacy and enhance their loyalty toward banks that they deal with. This is completely consistent with (Ho,and Ko. 2008).

18. Both **Ease of use and Self- control** have significant positive effects together on **Attitudinal Loyalty and Behavioral loyalty** at level ($\alpha \leq$ **0.05)**; this indicates that customers with ease of use and self-control have enhanced flexibility when they are empowered with the abilities to use e-banking services.

19. There was a significant positive effect of **Customer Value** on **Customer Loyalty** in Jordanian Commercial Banks in Amman at level (α ≤ **0.05).** This result is consistent with findings by (Sirdeshmukh et al. 2002)

20. Each of **Customer Value** factor and its dimensions has significant positive effect separately on **Attitudinal Loyalty** and **Behavioral Loyalty** at level (α ≤ **0.05).** This indicates that increasing emotional value**,** raising functional experience and in enhancing Epistemic ability for customers will increase their loyalty.

21. There were significant positive effects of **Epistemic Value** and **Emotional Value** together on **Attitudinal Loyalty** and Behavioral loyalty at level (α ≤ **0.05).**

22. There was an indirect effect of **E-Banking Services** on **Customer Loyalty** through **Customer Value** as mediator variable.

Conclusions:

From above results, the important conclusions can be formulated as follows:

1. This study reported that about (36.9%) of respondents aged of less than 30 years, while (45.1%) of respondents aged between (30-40) years. This indicates that adults with young adults are highly willing to try use e-banking services.

2. The study confirmed the positive effect of e-banking services on Customer value and Customer loyalty.

3. Customer value has an influence on Customer loyalty through its dimensions (Attitudinal and Behavioral loyalty).

4. Customers who are ready to use new technology to experience the advantages of e-banking service have a positive attitudinal value.

5. According to table (4-3) usefulness was the rank among the other characteristics of e-banking services; this is contrary to what was mentioned by (Ho, and Ko, 2008) where their study confirmed that Usefulness is a vital element in encouraging customers to switch from traditional services to Internet banking services.

6. Although the three constructs (E-banking services, Customer value, and Customer loyalty) have a high level, Customer value and Customer loyalty were close to mid level.

7. The Total effect of E-banking Services on Customer loyalty is close to its total effect on Customer value while the total effect of customer value on Customer Loyalty is smallest.

8. The direct effect of E-banking Services on Customer loyalty is close to the direct effect of Customer value on Customer loyalty.

9. The biggest effects on Functional Value return to self-Control characteristic.

10. The biggest effects on Emotional Value return to self-Control characteristic.

11. The biggest effects on Epistemic Value return to self-Control characteristic.

12. The biggest effects on Attitudinal Loyalty return to Ease of Use characteristic.

13. The biggest effects on Behavioral Value return to self-Control characteristic.

5-2: Recommendation

Due to the results, the researcher suggests some of recommendation as:

1. Jordanian commercial banks need more than any other time to activate, develop, and innovate new techniques to encourage their customers using e-banking services.

2. It is important for these banks offering services electronically to differentiate themselves from competitors. They need to provide information for customers on various competing services.

3. It is important to highlight for banks to focus on the value that the customer generates, rather than the value that banks can offer to their customers.

4. It is important to make customers aware of the information and relative advantages of e-banking services.

5. The Banks must maintain long term relationships with their customers in order to obtain the advantages of a customer base loyal to the Bank, it is necessary to develop strategies that prevent loss of customers.

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APPENDIXES

Appendix (1)

Questionnaire of the study

English form

MEU جامعة الشرق الأوسط
MIDDLE EAST UNIVERSITY

Questionnaire to study

The Effect of E-Banking Services on the Customer Value and Customer Loyalty

A Field Study on Jordanian Commercial Banks working in Amman

As a part of Thesis Submitted in Partial Fulfillment of the Requirements

for the Master Degree of E- Business

The Researcher

Ammar Sa'eed Al-Mashhadani

Supervisor

Dr. Laith Al-rubaee

Dear Mr / Mrs …………. Greetings

The researcher seeks to study entitled "*Effect of E- Banking Services on Customer Value and Customer Loyalty*" where this study aims to investigate whether E –banking services can enhance customer value and customer loyalty, as well as to examine the indirect e-banking services effect on the customer loyalty through customer value as a mediator factor.

Given for your high experience and knowledge in the field of scientific research, the researcher hope to arbitrate the questionnaire and state your sound opinions and valued suggestions for the validity of its items to measure effect of variables. If the item is valid for measuring, I hope that you tick (√) in the space of validity.

From the other hand, I would like to express on my high gratitude for your cooperation and supporting in questionnaire arbitration.

The researcher

Ammar Sa'eed Al-Mashhadani

Dear Respondent,

Thank you for taking time to respond on this questionnaire which is an academic research dedicated for acquiring Master's degree in the E-business department within the Middle East University. The purpose of the questionnaire is to investigate the effect of **e-banking services on Customer value and Customer loyalty**. The results of this study will provide important information to Jordanian commercial Banks that working in Amman, which will help them to improve their services to customers and push them to develop successful strategies and improve their performance in order to capture their satisfaction and loyalty.

Your participation and opinion will contribute by valued information whether for researcher or targeted Jordanian Banks.

In addition, we would like to confirm that all information you provide will be kept confidential and will not use out the research's purposes.

Your completed answers will be high appreciated.

   The researcher   Supervisor

Ammar Sa'eed Al-Mashhadani   Dr. Laith Al-rubaee

*For more information please call 0786019022

Research Questions

Part (1): Demographic Information

(1) Gender

☐ Male   ☐ Female

(2) Age

☐ Less than 30 years   ☐ 30 – 40 years

☐ 41 – 50 years   ☐ 51- 60 years   ☐ More than 61 years

(3) Educational Level

☐ Secondary School or less   ☐ Diploma (Society Collage)

☐ BSc   ☐ Master   ☐ PhD

(4) Job Title

☐ Government Employee   ☐ Private Sector Employee

☐ Free Lance   ☐ Firm owner / project

(5) How many banks that you deal with?

☐ One only   ☐ More than one

(6) To what extend you use e-banking services in your banking transactions?

☐ Low extent (Sometimes)   ☐ Medium extent (Frequently)

☐ Great extent (Often)   ☐ Always (Continuously)

(7) Which E- Banking services you use than more others?

☐ ATM   ☐ Transactions by internet

☐ Transferring funds

(8) How long have you use e-banking services?

☐ Less than (1) year   ☐ (1-3) years

☐ More than (3) years until (6) years   ☐ More than (6) to (9) years

Part two:

Please indicate the extent to which you agree or disagree with each statement below:

#	Questions	Strongly Agree	Agree	Somewhat Agree	Neither	Somewhat disagree	disagree	Strongly Disagree
E- Banking Services								
Ease of use								
1	I find that e – banking service is easy to use							
2	It is easy to apply financial services on Internet banking							
3	It is easy for me to learn how to make use of e-banking services							
4	It is easy for me to be skillful at using e- banking services.							
5	It is difficult to use the e-banking services.							
6	I have the opportunity to try various electronic banking services							
7	Mistakes are more likely to occur with electronic banking than with regular banking							
Usefulness								
8	I can deal with financial business more effectively through using e-banking services.							

9	e-banking services have economic advantages for me							
10	Through e- banking services , I can more effectively manage my money							
Cost saved								
11	Using Internet banking can save me on transportation costs							
12	Using e-banking services can save me waiting time for service completion.							
13	Using e-banking services can save me time spent in bank							
14	When I use electronic banking, my money is as safe as when I use other banking services							
15	I am NOT sure how to use the e-banking services properly.							
Self – Control								
16	I have more control over my account due to e-banking services.							
17	Internet banking allows me to know all of the financial services banks provide.							
18	I believe that I can gain more useful information by using Internet banking							
19	It takes me a great deal of time and effort to get used to new e- banking services.							
20	e -banking services help me to better manage finance transactions.							
**Customer Value**								
Functional value								
21	E-banking services offer me alternatives to solve my financial problem.							
22	Using Internet banking offers me timely communication with my bank							

23	May be that electronic banking systems are not secure enough to protect my personal financial information							
24	The bank services locations (branches/ATMs) are at convenient places.							

Emotional value

25	Using e- banking services let me feel comfortable							
26	Using e-t banking services can satisfy my desire for new services							
27	I feel comfortable providing my personal information through electronic banking systems							
28	It bothers me to use a machine for banking transactions when I could talk with a person instead							
29	Always e – banking services fulfill my expectations							

Epistemic value

30	Using Internet banking can satisfy my desire to gather information							
31	E- banking services provides clearness and transparency information							
32	Constantly bank informs of new e-services that could be my interest.							

Loyalty value

Attitudinal loyalty

33	I try to use e – banking services because it is the best choice for me							
34	I consider myself to be a loyal customer of bank.							
35	To me, e- banking services is the same as other services.							

36	I say positive things about using e-banking services to other people.							
37	I will regularly use e-banking services in the future							
Behavioral loyalty								
38	I intend to continue to do business and banking transactions by e – services.							
39	Even if close friends recommended another banking service, I will not change my preference for e-banking services.							
40	I would encourage friends and relatives to use e – banking services banking service.							

Appendix (2)

Questionnaire of the study

Arabic form

MEU جامعة الشرق الأوسط
MIDDLE EAST UNIVERSITY

<u>إستبانة بحث علمي</u>

الاخ المستجيب / الاخت المستجيبة .... تحية طيبة

شكراً لإستقطاع جزء من وقتكم للمشاركة في هذا المسح والذي هو جزء من بحث أكاديمي مخصص لنيل درجة الماجستير في الاعمال الالكترونية من جامعة الشرق الاوسط .

إن الغرض من هذا البحث هو اكتشاف أثر الخدمات المصرفية الالكترونية على كل من قيمة الزبون وولاء الزبون تجاه البنوك التي يتعاملون معها .

نتائج البحث ستوفر معلومات مهمة للبنوك العاملة في الاردن في مجال الخدمات المصرفية الالكترونية لتساعدها في تطوير السياسات والاستراتيجيات المصرفية وتحسين الاداء لتوفير افضل الخدمات للزبائن .

إن مشاركتكم في هذا البحث سيوفر معلوماتذات اهمية عالية للباحث وسيتم التعامل مع هذه المعلومات بسرية تامة ولن تستخدم لأغراض غير أغراض هذا البحث.

المشرف   الباحث

د. ليث الربيعي   عمار سعيد حامد

* للمزيد من المعلومات الرجاء الاتصال على الجوال 0786019022

أسئلة البحث

الجزء الاول : الخصائص الديمغرافية

(1) الجنس

□ ذكر   □ انثى

(2) العمر

□ أقل من 30 سنة   □ 30 – 40 سنة   □ 41 -50 سنة

□ 51 – 60 سنة   □ 61 سنة فأكثر

(3) المستوى الدراسي

□ ثانوية فما دون   □ دبلوم (كلية مجتمع)   □ بكالوريوس

□ ماجستير   □ دكتوراه وما يعادلها

(4) عنوان الوظيفة

□ موظف حكومي   □ موظف قطاع خاص

□ اعمال حرة   □ مالك شركة / مشروع

(5) كم عدد البنوك التي تتعامل معها ؟

□ واحد فقط   □ اكثر من ذلك

(6) الى أي مدى تستخدم الخدمات المصرفية الالكترونية في معاملاتك المصرفية؟

□ بمعدل قليل (بعض الاحيان)   □ بمعدل متوسط (بشكل متكرر)

□ بمعدل كبير (غالباً)   □ دائماً (بشكل مستمر)

(7) أي من الخدمات المصرفية الالكترونية التالية اكثر استخداماً من غيرها في تعاملاتك مع البنك ؟

□ الصرّاف الالي   □ إجراء المعاملات المصرفية عبر الانترنت (دفع فواتير ، قروض ...)

□ تحويل الاموال

(8) منذ متى وأنت تستخدم الخدمات المصرفية الالكترونية الواردة في الفقرة السابقة ؟

□ أقل من سنة   □ 1- 3 سنوات

□ اكثر من 3 سنوات لغاية 6 سنوات   □ اكثر من 6 سنوات لغاية 9 سنوات

الرجاء بيان الرأي بالعبارات التالية لتحديد مدى الاتفاق بما يرد في كل عبارة من عبارات التالية:

لا اتفق إطلاقاً	لا اتفق	لا اتفق بعض الشيء	محايد	اتفق بعض الشي	اتفق	اتفق كلياً	الاسئلة	ت
							الخدمات المصرفية الالكترونية – E- Banking Services	
							إن استخدام الخدمة المصرفية الالكترونية سهل وبسيط	1
							من السهل تطبيق المعاملات المالية من خلال الخدمة المصرفية الالكترونية	2

							من السهل تعلّم استخدام الخدمات المصرفية الالكترونية .	3
							من السهل امتلاك المهارة في استخدام الخدمات المصرفية الالكترونية	4
							من الصعب استعمال الخدمات المصرفية الالكترونية	5
							لديّ فرصة لتجربة مختلف الخدمات المصرفية الالكترونية .	6
							احتمالية حصول الاخطاء عند استعمال الخدمة المصرفية الالكترونية اكثر منه عند استعمال الخدمات المصرفية الاخرى.	7
							استطيع التعامل مع الاعمال المالية بفاعلية اكبر من خلال الخدمات المصرفية الالكترونية .	8
							من خلال الخدمات المصرفية يمكن الحصول على فوائد اقتصادية لعملاء المصرف.	9
							من خلال الخدمات المصرفية الالكترونية ، استطيع إدارة أموالي بفاعلية اكبر من الخدمات المصرفية العادية.	10
							إن استخدام الخدمة الالكترونية المصرفية عبر النت يوفر تكاليف النقل .	11
							إن استخدام الخدمة الالكترونية المصرفية عبر النت يوفر الوقت في انجاز المعاملات المالية .	12
							إن استخدام الخدمة الالكترونية المصرفية عبر النت يوفر الوقت الذي اقضيه في ازدحام البنك	13
							إن استعمال الخدمة المصرفية الالكترونية يجعل الاموال في حماية اكبر من الخدمات العادية	14
							لستُ متأكداً من كيفية استعمال الخدمات المصرفية الالكترونية .	15
							لدي قدرة على التحكم الكامل في حسابي المصرفي عند استخدام الخدمة المصرفية عبر النت	16
							الخدمات المصرفية الالكترونية تسمح بمعرفة كل الخدمات المصرفية التي يوفرها البنك.	17
							اعتقد أنني استطيع الحصول على معلومات مفيدة من خلال استعمال الخدمة المصرفية عبر النت .	18
							لكي اعتاد على استعمال الخدمات المصرفية فإن ذلك يستغرق مني وقت وجهد كبيرين .	19
							إن الخدمات المصرفية الالكترونية تساعدني على ادارة المعاملات المالية بشكل افضل	20

قيمة الزبون Customer Value

							الخدمات المصرفية توفر بدائل لحل المشاكل المالية	21

							العبارة	
							استعمال الخدمات المصرفية الالكترونية يوفر اتصال دائم مع البنك .	22
							انا قلق كون نظام الخدمة المصرفية الالكترونية قد يكون غير كافٍ لحماية المعلومات المالية الشخصية	23
							إن موقع الخدمات المصرفية (الصرَاف الآلي وفرع البنك) ملائم .	24
							اجراء المعاملات عبر الخدمات الالكترونية المصرفية مريح وممتع .	25
							إستعمال الخدمات المصرفية الالكترونية يرضي رغبتي الحصول على خدمات جديدة .	26
							اشعر بالراحة عند تقديم معلوماتي الشخصية للبنك من خلال الانترنت .	27
							إن استعمال الآلة الالكترونية عند اجراء المعاملات أمر مزعج بالنسبة لي .	28
							دائما يحقق البنك توقعاتي من خلال الخدمة المصرفية الالكترونية.	29
							إستعمال الخدمات المصرفية الالكترونية يرضي رغبتي في جمع المعلومات .	30
							الخدمات المصرفية عبر النت يوفر معلومات واضحة وشفافة .	31
							دائماً مايقوم البنك بتزويد العميل بالخدمات الالكترونية الجديدة .	32

ولاء الزبون – Customer Loyalty

							العبارة	
							احاول استعمال الخدمات المصرفية الالكترونية لانها الخيار المناسب لي.	33
							اعتبر نفسي ذو ولاء للبنك الذي اتعامل معه	34
							بالنسبة لي فإن الخدمات المصرفية الالكترونية مشابهة للخدمات التقليدية	35
							اقول اشياء جيدة لأصدقائي حول استعمال الخدمات المصرفية الالكترونية .	36
							سأقوم باستعمال الخدمة الالكترونية المصرفية في المستقبل .	37
							انا أميل الى استخدام الخدمات المصرفية الالكترونية في الاعمال و المعاملات المالية .	38
							حتى لو نصحني اصدقائي باستعمال خدمات اخرى فسوف ابقى استخدم الخدمات المصرفية الالكترونية	39
							ساقوم بتشجيع اصدقائي واقربائي باستعمال الخدمات المصرفية الالكترونية	40

Appendix (3)

List of Commercial Jordanian Banks that operating in Amman

No.	Name of Bank
1	Arab Bank Jordan
2	Arab Bank Corporation (ABC)
3	Bank of Jordan
4	Cairo Amman Bank
5	Capital Bank of Jordan
6	Jordan Commercial Bank
7	Invest Bank
8	Jordan Kuwait Bank
9	Jordan Ahli Bank
10	Soceite General Bank Jordan
11	The Housing Bank for Trade & Finance
12	Arab Jordan Investment Bank
13	Bank al Etihad

Appendix (4)

List of the Academic Arbitrators

1	Dr. Mohammed al-Neiamee
2	Dr. Amjad al-Towaqat
3	Dr. Ali Abbas
4	Dr. Hamid al Sheebi

Appendix (5)

Task Facilitate

MEU جامعـة الشـرق الأوسـط
MIDDLE EAST UNIVERSITY

Date:	كلية الأعمال – مكتب العميد	التاريخ:2011/11/01
Number:	**Deans Office - Faculty of Business**	الرقم:

لمن يهمه الأمر

السادة البنوك التجارية في الأردن

أرجو التكرم بالتلطف لتسهيل مهمة الطالب / الطالبة :

عمار سعيد حامد

الرقم : 400910131   التخصص: الأعمال الإلكترونية

في توزيع إستبانة للحصول على المعلومات الخاصة حول موضوع :

"The Effect of E- Banking Services on the Customer Value and Customer Loyalty"

A Filed Study on Jordanian Commercial Banks Working in Amman

وذلك استكمالاً للحصول على درجة الماجستير، علماً بأن المعلومات ستكون سرية ولغايات البحث العلمي.

مع فائق الاحترام،،،

عميد كلية الأعمال

أ.د عبدالناصر نور