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# **SERVICE QUALITY MEASUREMENT : AN EMPIRICAL STUDY OF BANK MANDIRI PADANG**

**THESIS**



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PADANG  
2011**

**LETTER OF THESIS APPROVAL**

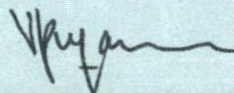
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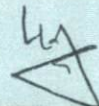
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## ACKNOWLEDGEMENT

In the name of Allah, the most gracious, the most merciful. Alhamdulillah, praise is to Allah SWT who has given the writer strength and chance to finish this thesis with the title "Service Quality Measurement : An Empirical Study of Bank Mandiri Padang".

The writer realizes that this thesis is still far from perfection. So, the writer is expecting guidance and suggestion to reach the perfection in this thesis. Then, writer also realizes that the successful cannot be separated from the favors and assistances of exceptional people to whom I am very grateful. On this occurrence, I would like to express my gratitude to those who have support and encourage me on my life, especially in academic life.

1. My beloved family especially for my parents, Mama Anita Nahar, SE and Alm. Papa Wiwiek Sanusi who always give me love, support and understand who I really am and trust me for everything I do. I love you more than anything in this world. For Mama, I wish you have long life and good health forever. For Papa, I will always pray for your serenity from here Dad. My beloved Sister Angela Melina Sanusi, the only one sister and friend I ever have in my life who really inspiring me to do all the best. I wish for your happiness and all the best things in your life.
2. Dr. H. Syafruddin Karimi, SE, MA, as the dean of Economic Faculty and Dr. Harif Amali Rivai, SE, M.Si as the head of Management Department.

3. Dr. Vera Pujani, SE, MM. Tech as my thesis supervisor. Thank you for the time you spare and every favor that you gave to guide me in finishing my thesis.
4. Dr. Yulia Hendri Yeni, SE, MT.Ak and Laela Susdiani, SE as my thesis examiners. Thank you for your suggestions and corrections for this thesis.
5. All lecturers of international program for giving the students valuable knowledge during our studies time in Andalas University.
6. For All my beloved relatives especially for my grandma Nenek Hj. Rosna, Om H. Ir. Sutarya, Ibu' Hj. dr. Lindawati and om H. Dermizal. All of my cousins especially Kak Ratna Delia, S,Ars M.A(UD), Fikri Ramadhan, Meutia Noerahmi and Indah Permatasari Thank you for all support and inspiring me to do my best in all the way.
7. For all my best friends especially for Winda who always believe in me thanks for your support, Vinda and Chayi who always be there when I needed and all of the funny moments that we have together , Farah and Yoka who saved me at the crucial situation and be the heroes of the day, Yudi who always makes me laugh, Yona Zola, Dynda and Mbah Indra, it's never enough without you, and D'soulmetz Meme, Uci, Finda, Riri, Siska, Aci', Egika, Kaput Thank you for your support and all happy moments we shared. I wish our friendship will be last forever
8. All of Management-International class 2006, Egy, Enad, Eka, Putra, Haris, Icing, Lani, Kiki, Jendri, Reren, Danang, Azmen, Amy, Wahyu, Ridwan, Gatot, and Chia too much memories that we've made. Thanks for all

support, care and help. It was a great time to spend my fabulous 4 years and 4 months with you all friends. I'll be missing you all guys.

9. Management International 2007 until 2010 especially Kiki, Haris, Ryan, Adrian, Della, Ai, Eka, Ela, Ana, Ata, Mel, Rido, Rendi, Putra, Eka, it was a great time to spend my lecture time with you all friends and thanks for accompany and support me to chase our dreams.

Last but not the least, many great thanks to other parties that can't be mentioned above, all of your helps are very meaningful to me. May God will reply better. Amien.

Padang, January 2011

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## Service Quality Measurement in Internet Banking : An Empirical study of Bank Mandiri Padang

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### ABSTRACT

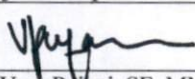
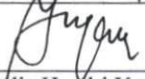
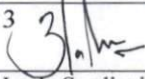
The banking industry is currently driven by technological advancements. Customers use internet banking to monitor their cash flow and account balances, execute electronic fund transfers between accounts, pay bills, and purchase online financial products. Internet banking allows banking from anywhere, anytime and is used for transactions, payments, etc. over the internet through a bank, a credit union or society's secure website. So, basically, in internet banking a client has one-to-one interaction with the bank's website, and in such a situation it is essential on the part of bank to provide high quality services over the internet. Providing internet banking is increasingly becoming a 'need to have' than a 'nice to have' service. The internet banking, thus, now is more of a norm rather than an exception in many developed countries due to the fact that it is the cheapest way of providing banking services

This research is a quantitative research to get statistical data to show factors affecting internet banking service quality. Data have been processed by using a factor analysis with SPSS 15.0 software tool as previous data processing. Based on the results of factor analysis, the variables are classified into six dimensions : Privacy, Fulfillment, Access, User-friendliness, Reliability and Efficiency.

**Key words:** *internet banking, E-service quality, customer's perspective*

Skripsi ini telah dipertahankan di depan sidang penguji dan dinyatakan lulus pada tanggal 24 Januari 2011.

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No. Alumni Universitas :		Nama	Tanda Tangan

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# CHAPTER I

## INTRODUCTION

### 1.1 Background of the research

In today's world of intense competition, a firm's ability to deliver high quality service those results in satisfied customers is the key to a sustainable competitive advantage (Shemwell et al. 1998). Muffato and Panizzolo (1995) also suggested that customer satisfaction is considered to be one of the most important competitive factors for the future, and will be the best indicator of a firm's profit ability. They further suggest that customer satisfaction will drive firms to improve their reputation and image, to reduce customer turnover, and to increase attention to customer needs. Such actions will help firms create barriers to switching, and improve business relationships with their customers.

Parasuraman et al. (1985) suggested that services differ from goods in terms of how they are produced, consumed, and evaluated. They further viewed that services are intangible since their performances and experiences rather than objects that can be precisely manufactured. Services are heterogeneous, that is, their performance often varies from producer to producer, customer to customer, and day to day. More importantly, production and consumption of services are inseparable. Unlike goods that can be engineered at a manufacturing plant and delivered intact to the customer, quality in services often occurs during service delivery, which is the interaction between a customer and a service provider. Given the differences between services and goods as previously mentioned, quality of service is more difficult for customers to evaluate than quality of goods. Customers evaluate service quality not only on the outcome of the service but also

on the process of service delivery, and from how well a service provider actually performs, given their expectations of service performance.

Banks are one of the most important financial institutions in all countries. Bank managers in order to increase the profitability of their organization, have focused on productivity so, today they act as bureaucratic service organizations. Some principles of these organizations aren't compatible with human inner. On the other hand, the basic differentiator in today's market is service quality. In general, service quality promotes customer satisfaction and stimulates intention to return.

The banking industry is currently driven by technological advancements. Customers use internet banking to monitor their cash flow and account balances, execute electronic fund transfers between accounts, pay bills, and purchase online financial products. Internet banking allows banking from anywhere, anytime and is used for transactions, payments, etc. over the internet through a bank, a credit union or society's secure website. So, basically, in internet banking a client has one-to-one interaction with the bank's website, and in such a situation it is essential on the part of bank to provide high quality services over the internet. So, in contrast to traditional banking, internet banking involves non-human interactions between customers and online bank information system. Customer satisfaction, customer retention and new customer acquisition are the key factors in internet banking system. This becomes more important since the acquisition costs in online banking exceed that of traditional offline business by 20%–40% (Reibstein, 2002). Providing internet banking is increasingly becoming a 'need to have' than a 'nice to have' service. The internet banking, thus, now is more of a

norm rather than an exception in many developed countries due to the fact that it is the cheapest way of providing banking services (Arunachalam and Sivasubramanian, 2007).

Bank Mandiri was formed on 2 October 1998, as part of the Government of Indonesia's bank restructuring program. In July 1999, four state-owned banks—Bank Bumi Daya, Bank Dagang Negara, Bank Exim and Bapindo—were amalgamated into Bank Mandiri. Each of their four legacy banks played an integral role in the development of the Indonesian economy. Today, Bank Mandiri continues this tradition of more than 140 years of delivering expertise in banking and financial services throughout Indonesia.

Mandiri Internet Banking is facility of distribution network through Internet that is designed to provide ease for customers to access their account through Internet and also Mandiri Internet Banking is protected by security tool in order to guarantee safety and secrecy of all transactions conducted by customers. Customers of Mandiri Internet Banking can enjoy all available services, including to transfer inter Bank Mandiri account, to pay bills, to check balance, Internet Banking transaction, to request check books and clearing books, Update profile, being more personal and to register for notification services from SMS Banking Mandiri. In 2009, internet banking transactions grew by 175.6% to 43.5 million transactions, while SMS banking transactions increased by 86.2% into 141.4 million transactions, including non financial transactions. This very significant growth in online transactions reflects the high level of trust and confidence from their retail customers In Bank Mandiri's online channels.

Based on the background of the study, I would like to conduct an elaborate research to investigate **“Service Quality Measurement : An Empirical Study of Bank Mandiri Padang”**.

## **1.2 Problem statement**

What are the factors that affecting the service quality of internet banking?

## **1.3 Research Objectives**

To investigate the factors that affecting the service quality of internet banking

## **1.4 Contribution of this research**

The result of this research is expected can give the contribution to:

- To gain a better understanding of factors affecting the service quality of internet banking
- To strengthen theory related to service quality of internet banking
- Improving the perception and knowledge of the researcher, also hopefully can be guidance to another researcher that interested in the same topic.

## **1.5 Writing Systematic**

The thesis will be presented in certain chapters, as follows :

### **Chapter 1 Introduction**

This chapter describes about background, problem definition, research objectives, research benefits and writing systematic.

### **Chapter 2 Theoretical Framework**

This chapter consist of the literature overview about the definition and concept of Service, service quality, E – service quality, E – service quality dimensions.

### **Chapter 3 Research Methodology**

This chapter will discuss about research methodology, that is consist of variable of research, data collection method, and methodology in analyzing data collection.

### **Chapter 4 Organizational Review**

This chapter will discuss about the background of the company, vision, mission, the company's organization structure, Mandiri Internet Banking terms and service, terms and condition, and registration steps.

### **Chapter 5 Research Result**

This chapter analyzes factors affecting the internet banking service quality of Bank Mandiri in Padang.

### **Chapter 6 Closing**

This chapter consists of conclusion from the analysis, and also advice to the company as one of many references in order to improving the organization itself.

## CHAPTER II

### LITERATURE REVIEW

#### 2.1 Service

Service is any act or performance that one party can offer to another that is essentially intangible and does not result in the ownership of anything. Its production may or may not be tied to a physical product (Kotler et al., 2005).

Edvardsson (1998) suggest service to be viewed from the customer perspective as it is them who determines of the quality of the service provided. Service is very important in today context as it is the key for attracting new customers and retaining of existing ones. Bad service experience forces customers to switch the brand or the service provider in search for the one who provides them with satisfaction. (Michel et al., 2009) Services often come with product but sometimes its purely only service. Whatever the case, Service excellence help improve the organization performance. Bates et al. (2003) identified that most of the organization strategic focus was on low prices thus reducing the service level and compared with the ones which strategic focus was on service. They found that the organization which strategy focuses on delivering service excellence was more successful. This era is the era of customers and for the success and survival in this competitive market, organizations should emphasize on quality service and this should be integrated into the strategy. (Chowdhary and Prakash, 2007)

There are four characteristic of service: Intangibility, Inseparability, Variability and Perishability. (Kotler and Keller, 2007)

1. **Intangibility** means that cannot be seen, tasted, felt, heard or smelled before they are bought thus the customer cannot evaluate it. This causes increase in the uncertainty level and to reduce this factor, customers look for signals of service quality. Customers draw the conclusion of the service from the marketing mix. So it is very important for the service provider to tangibilize the service in order for the service marketers to suggest the quality of their intangible service (Kotler et al., 2005). Santos (2002) argued that even though intangibility is an important characteristic of service, tangibility has more important role in the service sector. Zeithaml and Bitner (1996) said that intangibility determines if the offering is service or a product however Bowen (1990) argued that intangibility has been over emphasized and it is difficult to understand.
2. **Inseparability** character of service refers to the fact that services are produced and consumed at the same time and that they cannot be separated from their providers, whether the providers are people or machine. (Kotler et al., 2005) Inseparability is one of the characters that differentiate services with products because of the simultaneous production and consumption. (Sierra and McQuitty, 2005) Kotabe and Murray (2004) found that the inseparability of services performed by pure service providers was significantly higher than of the non pure service providers and argued ~~that~~ because of the technological advancement, some service activities could be made separable. Taher and Basha (2006) stated that the inseparability encouraged the service providers to drop the price on the core service so as to draw traffic into the facility and this created chances

for the observant marketers. Edvardsson et al. (2005) argued that inseparability could cause problems more than opportunities for the service providers because of the fact that it introduced uncertainty.

3. **Variability.** (Kotler et al., 2005) So the quality control becomes critical and to achieve that, service sector have to hire the right people, standardize the service and monitor the customer satisfaction. The service sector should be very careful while recruiting the service employee. After that, service firm should invest and provide training for the newly hired staff in order for staff to provide good service to their customers. Training helps staffs to develop skills necessary to do their job well in particular service area. Especially the front line staff who comes in direct contact with the customers.
4. **Perishability.** When the demand is steady, then service Perishability is not a problem but the service sector face a huge problem when the demand fluctuates. (Kotler et al., 2005) If a flight takes off then the airline cannot sell the tickets for that flight. In some cases the service value exists only at certain point and then disappears and the unused service cannot be stored. This is the reason why the service providers charge customers for missed appointments. Because of the problem arising from the demand fluctuation, capacity/demand management becomes critical. Service sector could use the demand side strategy and/or supply side strategy. On the demand side, service sector could charge different price for different period of time depending on the demand. This will help to attract some customers in the off peak time. Complementary services and discount also

comes in the demand side. On the supply side, service sector can hire part-time staffs in the peak hours or time period. To increase the peak time efficiency, the service sector can reschedule work. Not only that they could share the service when required or whenever possible and also plan ahead for future expansion. (Langford, 2009)

## **2.2 Service Quality**

Service quality is the difference between customers' expectation and perception of services delivered by service firms. Nittecki et al (2000) defined service quality in terms of "meeting or exceeding customer expectation or as the difference between customer perception and expectation of service"

Service quality has the high degree of variations that this is the result of the comparison that customers make between their expectations about a service and their perception of the way the service has been performed (Grönroos, 1984; Parasuraman et al., 1985, 1988). At a higher level, and essentially from a customer's perspective, they see quality as being two dimensional, consist of output and process quality.

Moreover, the model proposed by Grönroos (1984,1990) highlights the role of technical or output quality and functional or process quality as occurring prior to, and resulting in, outcome quality. This concern both psychological and behavioral aspects that include the accessibility to the provider, how service employees perform their task, what they say and how the service in done.

Nowadays, with the continuous competition increase, service quality has become a popular area of academic investigation, and has recognized as a key

factor in keeping competitive advantage and sustaining satisfying relationships with customers (Zeithmal et al., 2000). Grönroos (1982) described the total service quality as customer's perception of difference between the expected service and the perceived service. Then he defined the concept of perceived service quality as the outcome an evaluation process, where the consumer compares his expectations with the service he perceives or has received.

Similarly, Parasuraman et al. (1985) also defined service quality as the comparison between customer expectations and perceptions of service. In addition, they suggested three underlying themes after examination of the previous writing and literature on services:

1. Service quality is more difficult for the consumer to evaluate than goods quality,
2. Service quality perceptions result from a comparison of consumer expectations with actual service performance , and
3. Quality evaluations are not made solely on the outcome of service; they also involve evaluations of the process of service process of service delivery.

Further more, Parasuraman et al. (1985) suggested the "Service Quality Model" in order to serve as a framework for further research. Figure 2.1 schematically illustrated this model.

Five gaps are listed below:

- Gap 1, consumer expectation – management perception gap:

Management may have inaccurate perceptions of what consumers actually expect. It requires the appropriate management processes, market analysis tools and attitude.

- Gap 2, service quality specification gap:

There may be an inability on the part of the management to translate customer expectations into service quality specifications. This gap relates to aspects of service design.

- Gap 3, service delivery gap:

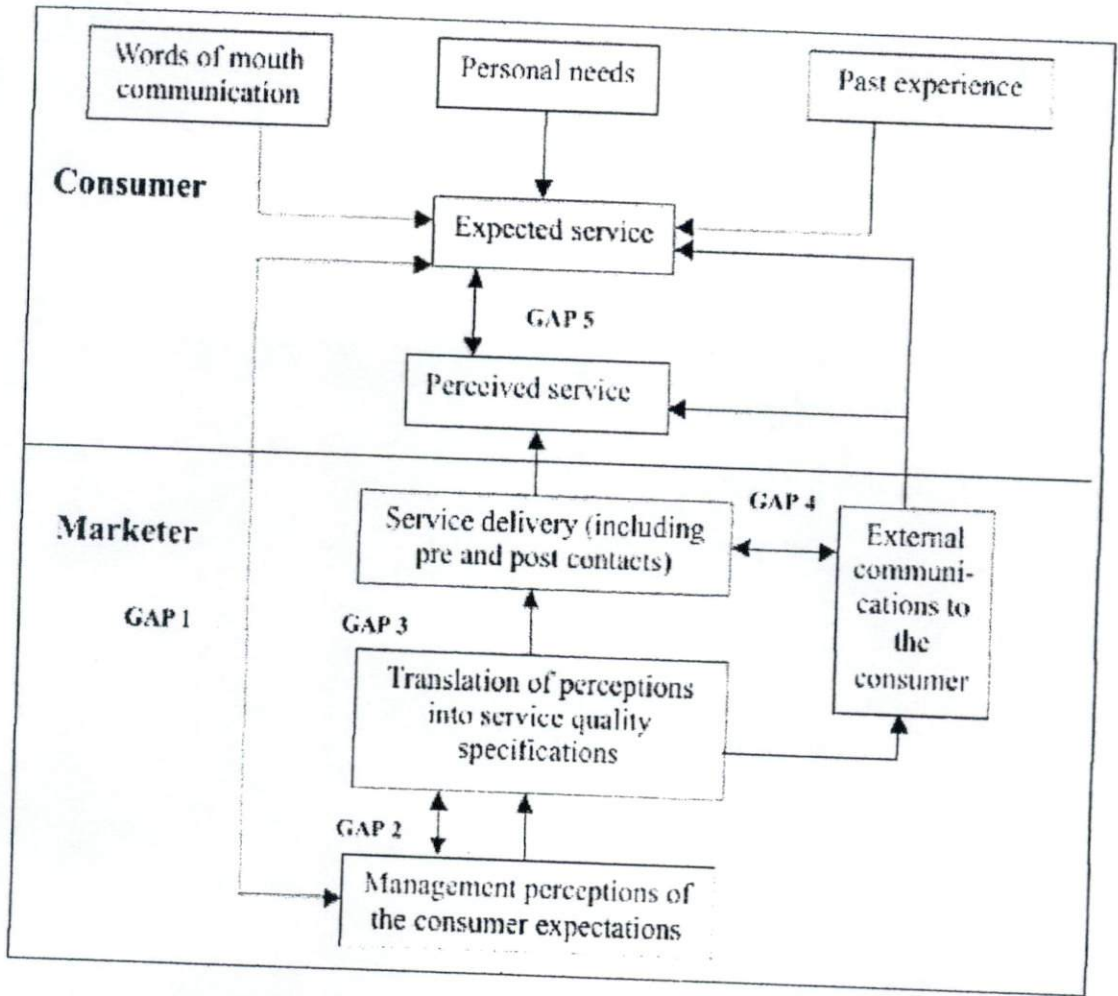
Guidelines for service delivery do not guarantee high-quality service delivery or performance. Reasons for this include lack of sufficient support for the frontline staff, process problems, or frontline/contact staff performance variability.

- Gap 4, external communication gap:

Consumer expectations are fashioned by the external communications of an organization.

- Gap 5, expected service – perceived service gap:

Perceived quality of service depends on the size and direction of Gap 5, which in turn depends on the nature of the gaps associated with marketing, design and delivery of services.



**Figure 2.1: SERVQUAL Gap analysis Model (Parasuraman, 1985)**

This model is a diagnostic tool and externally focused. If used properly and correctly, it has the potential to assist the management to identify the relative service quality factors from customer perspective (Yang et al., 2004)

In 1988, Parasuraman et al. further explained that service quality is the overall evaluation of a firm's service by comparing the firm's performance with the customer's general expectations of how firms should perform. They then stated the perceived service quality as global judgment, or attitude, relating to the superiority of the service.

More recently, Page and Spreng (2002) argued that a performance-only measure is superior since it's more reliable and defensible. They further argued

that performance is a much stronger indicator of service quality than expectation. Although the conceptual discussion about service quality continues, it can be seen that service quality is a multi-level and multi-dimensional concept that might mean different things to different researchers in the literature (Cronin et al., 2000).

### **2.2.1 Service Quality Dimensions**

Numerous studies have sought to uncover the global attributes of services that contribute most significantly to relevant quality assessments in the traditional service environment (e.g., Grönroos, 1982, 1984; Parasuraman et al., 1985, 1988).

Grönroos (1982) argue that service quality should include three dimensions:

1. The technical quality of outcome. That is to say, the actual outcome of the service encounter. The service outcome can often be measured by the consumer in an objective manner.
2. The functional quality of the service encounter. This element of quality is concerned with the interaction between the provider and recipient of a service and is often perceived in a subjective manner.
3. The corporate image. This is concerned with consumers' perceptions of the service organization. The image depends on: technical and functional quality; price; external communications; physical location; appearance of the site and the competence and behavior of service firms' employees.

Similarly, Lehtinen and Lehtinen (1982) also state that service quality has three dimensions, however the differences can be seen below:

- 1) Physical quality. This includes items such as the condition of buildings and enabling equipment.
- 2) Corporate quality. This refers to the organization's image and profile.
- 3) Interactive quality. This derives from the interaction between service organizations' personnel and the customer as well as the interaction between customers.

In addition, they argue that in examining the determinants of quality it is necessary to differentiate between the quality associated with the process of service delivery and the quality associated with the outcome of the service.

Comparing the work between Grönroos (1982) and Lehtinen (1982), Swartz and Brown (1989) drew some distinctions concerning the dimensions of service quality. They stated that what the service delivers is evaluated after performance. This dimension is called technical quality by Grönroos (1983), physical quality by Lehtinen and Lehtinen (1982). They also stated that how the service is delivered is evaluated during delivery. This dimension is called functional quality by Grönroos (1983), interactive quality by Lehtinen and Lehtinen (1982).

According to Parasuraman et al.'s (1985), ten detailed dimensions of service quality through focus group studies are listed as: reliability, responsiveness, competence, access, courtesy, communication, credibility, security, competence, understanding the customer and tangibles. Among these ten service quality determinants, reliability is identified as the most important. Detailed explanation will be described below in Table 2.1.

**Table 2.1 : Determinants of Service Quality**

<b>Service Quality Dimensions</b>	<b>Measurement Criteria</b>
<b>Reliability</b>	It means that the firm performs the service right the first time and the firm honors its promises.
<b>Responsiveness</b>	It concerns the willingness or readiness of employees to provide service.
<b>Competence</b>	It means that possession of the required skills and knowledge to perform the service.
<b>Access</b>	It involves approachability and ease of contact.
<b>Courtesy</b>	It involves politeness, respect, consideration, and friendliness of contact personnel.
<b>Communication</b>	It means keeping customers informed in language they can understand and listening to them.
<b>Credibility</b>	It involves trustworthiness, believability, honesty.
<b>Security</b>	It is the freedom from danger, risk or doubt.
<b>Understanding</b>	Knowing the customer involves making effort to understand the customer's needs.
<b>Tangibles</b>	It includes the physical evidence of the services.

*Source: Parasuraman et al., 1985, p. 47*

Based on the determinants of service quality listed, Parasuraman et al. (1985) developed a model of Determinants of Perceived Service Quality. It indicated that perceived service quality is the result of the consumer's comparison of expected service with perceived service.

In their subsequent research (Parasuraman et al., 1988), they then purified and distilled the ten dimensions to five: tangibles, reliability, responsiveness, assurance, and empathy, which constitute the base of a global measurement for service quality. Based on these five dimensions listed above, the researchers developed 22-item

**Table 2.2 : 22-Item Service Quality**

Service Quality Dimensions	22-Item Scale
Reliability	Providing service as promised Dependability in handling customers' service problems. Performing services right first time Providing services at the promised time Maintaining error-free records
Responsiveness	Keeping customer informed as to when services will be performed Prompt service to customers Willingness to help customers Readiness to respond to customers' requests
Assurance	Employees who instill confidence in customers Making customers feel safe in their transactions Employees who are consistently courteous Employees who have the knowledge to answer customers questions
Empathy	Giving customers individual attention Employees who deal with customers in a caring fashion Having the customer's best interests at heart Employees who understand the needs of their customers Convenience business hours
Tangibles	Modern equipment Visually appealing facilities Employees who have a neat, professional appearance Visually appealing materials associated with the service

*Source: Parasuraman et al., (Referred to in Kotler and Keller, 2006, p.414)*

Another useful study is conducted by Johnston (1995), in which he provides 18 service dimensions and their definitions: access, aesthetics, attentiveness, availability, care, cleanliness/tidiness, comfort, commitment, communication, competence, courtesy, flexibility, friendliness, functionality, integrity, reliability, responsiveness, and security. In their study, reliability is considered as the most important. Yang et al. (2004) concluded that both studies of Parasuraman et al. (1988) and Johnston (1995) offer particularly robust service quality dimensions for measuring traditional services and could serve as a good starting point for further research (Yang et al., 2004).

### 2.3 E – Service

E-Services have two main characteristics:

- The service is accessible with electronic networks;
- The service is consumed by a person via the Internet;

Based on Sukasame (2005) about e-service:

1. E-services are intangible in their nature. They can't be seen and can't be palpable. The e-service is intangible, if the customer is only using e-services to select and pick-up the most interesting objects.
2. E-services contain various processes the users have to follow in order to get the service.
3. E-services are perishable. This is the characteristic of e-services that doesn't let us save, store, resale, or return them.
4. Inseparability refers to the use of e-services that derive from other. Hotel booking e-services, flight/train tickets booking e-services, vacation packages booking e-services and food delivery e-services are inseparable: customers have to go through a multi-step process that completes with e-payment or gets canceled and thus the e-service is produced and consumed simultaneously.
5. Interaction in e-services materializes in the interaction between customers and service providers. Many e-services have eliminated personal interaction and customers are interacting only with their computers.

Starting from and using the characteristics we are finally proposing another definition for e-services: a benefit providing object of transaction that can be characterized as an intangible and perishable process that is used inseparably in

a simultaneous interaction between new technologies, Internet and customer. A better service is offered through e-service to organizations and individuals and the main reason is the accessibility to the public administration operations anytime, anywhere.

E-service is offering a large number of benefits to their users:

- Familiarizes individuals with electronic information and educates them about the benefits of using advanced technology.
- Enables telecommuting.
- Provides integrated informative systems with social, cultural and economical aspects of the individuals.
- Transparency of information
- Removes time and location barriers
- Enhances data acquisition, transformation and retrieval, unlike the data chaos in a traditional service provider
- Promotes reuse of information
- Reduces operation time
- Reduces costs
- Improves information access for decision-making
- Cultivates better relationships with customers
- Reduces overhead costs such as benefits administration
- Speeds process turnover such as expense reimbursement
- Allows searches of large volumes of heterogeneous data (documents, pages, database, messages, multimedia)

- Involves the citizens in governmental activities providing easy access to information using Internet.

### **2.3.1 E-Service Quality**

According to Zeithaml, et al. (2000), e-service quality is comprehended both from pre-and post-Web site service perspectives. It can be understood as the evaluation of the efficiency and effectiveness of online shopping, purchasing, and delivery products and services. Similarly, Santos (2003) defined e-SQ as overall customer evaluations and judgments of excellence e-service delivery in the virtual marketplace.

#### **2.3.1.1 E-service quality dimensions**

A majority of studies view the dimensioned of e-service quality as antecedents of e-satisfaction. (Dina et al. 2004). High standard e-service quality is the means by which the potential benefits of the Internet can be realized (Yang et al., 2001).

Drawing upon the traditional service quality scale, Zeithaml et al. (2000) have developed e-service quality dimensions for measuring e-service quality. In a series of focus group interviews, they have identified eleven dimensions of online service quality: access, ease of navigation, efficiency, flexibility, reliability, personalization, security/privacy, responsiveness, trust/assurance, site aesthetics, and price knowledge.

In their research, they found the core dimensions of regular service quality like efficiency, fulfillment, reliability and privacy were the same as online. At the

same time, they stated that responsiveness, compensation and real time access to help as core dimensions of service recovery for online services. In addition, they noted that empathy was less important online unless there were service problems happened.

- *Efficiency* refers to the ability of the customers to get to the website, find their desire product and information associated with it, and check out with minimal effort.
- *Fulfillment* incorporates accuracy of service promises, having product in stock, and delivering the product in the promised time.
- *Reliability* is associated with the technical functioning of the site, particularly the extent to which it is available and functioning properly.
- The *privacy* dimension includes assurance that shopping behavior data are not shared and that credit card information is secure.
- *Responsiveness* measures the ability of e-tailers to provide appropriate information to customers when a problem occurs, have mechanisms for handling returns, and provide online guarantees.
- *Compensation* dimension includes receiving money back and returning shipping and handling costs.
- *Contact* dimension includes customers to be able to speak to a live customer service agent online or through the phone.

Wolfenbarger and Gilly (2002), through focus group interviews and an online survey, reduced the scale of online service quality into four key dimensions: Web site design, reliability, privacy/security, and customer service. In their research they suggested that the most basic building of outstanding online service quality is reliability and web site design including good functionality in

time savings, easy transactions, good selection, in-depth information and the right level of personalization.

Yang et al. (2004) have uncovered six key online service quality dimensions reliability, access, ease of use, attentiveness, security, and credibility- employed by Internet purchasers to evaluate e-tailers' service quality. Further more, they suggested that if online retailers want to achieve high level of customers' perceived service quality, four dimensions should be more focused on: reliability, attentiveness, ease of use and access.

- *Reliability*

It is included correctness of order fulfillment, prompt delivery, and billing accuracy.

- *Attentiveness*

It is included individualized attention, personal thank-you notes from online retailers and availability of a message area for customer questions or comments.

- *Easy of use*

It is related to easy-to-remember URL address, well-organized, well structured, and easy-to-follow catalogues, site navigability, and concise and understandable contents, terms and conditions.

- *Access*

It is included the list of the company's street and e-mail address, phone and fax number, accessibility of service representatives, availability of chat room, bulletin board and other communication channels.

- *Security*

It is included security of personal information and minimal online purchase risks.

- *Credibility*

It refers to the business history of online retailers, special rewards or discounts, and referral banners on other Website.

Jun & Cai (2001) identified ten service quality dimensions in Internet banking. These are reliability, responsiveness, competence, courtesy, credibility, access, communication, understanding the customer, collaboration and continuous improvement.

- *Reliability* refers correct service, keep service promise, accurate records and keep promise as advertised.
- *Responsiveness* refers prompt service quickly solve problems, convenient service.
- *Competence* means ability to solve problems, knowledge to answer questions, courtesy includes address complains friendly, consistently courteous.
- *Credibility* means confidence in the bank's service good reputation.
- *Access* includes availability for help, ATM access, phone access, E-mail access, and account access when abroad.
- *Communication* means clear answer, informing customer of important information and availability of status of transactions. Understanding of customer means personal attention.
- *Collaboration* includes external collaboration and internal collaboration.

- *Continuous improvement* includes continuous improvement on online systems, continuous improvement on banking products, continuous improvement on customer services.

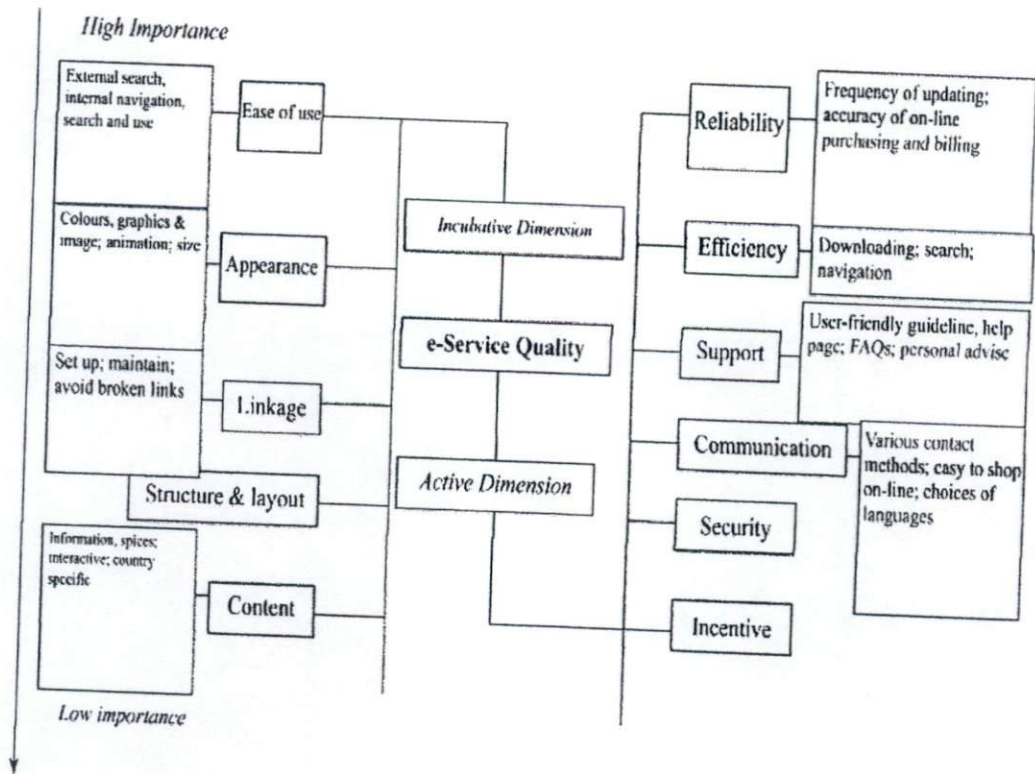
Berry et al. (1985) identified ten determinant of service quality. These are - reliability, responsiveness, competence, access, courtesy, communication, credibility, security, understanding and tangibles.

- *Reliability* involves consistency of performance and dependability. It means that the firm performs the service right the first time. It also means the firm honors its promises. Especially it involves: accuracy in billing, keeping records correctly, performing the service at the designated time.
- *Responsiveness* concerns the willingness or readiness of employees to provide service. It involves timeliness of services that means - mailing a transaction slip immediately, calling the customer back quickly and giving prompt service.
- *Competence* means possession of the required skills and knowledge to perform the services. It involves: knowledge and skill of the contact personnel, knowledge and skill of operational support personnel, research capability of the organization.
- *Access* involves approach, ability and ease of contact. It means: the service is easily accessible by telephone, waiting time to receive service is not extensive, hours of operation are convenient and location of service facility is convenient.
- *Courtesy* involves politeness, respect, consideration, and friendliness of contact personnel. It includes - consideration for the consumer's property, clean and neat appearance of public contact personnel.
- *Communication* means keeping customers informed in language they can understand. It also means listening to customers. It may mean that the company

has to adjust its language for different consumers- increasing the level of sophistication with a well- educated customer and speaking simply and plainly with a novice. It involves: explaining the service itself, explaining how much the service will cost and assuring the customer that a problem will be handled.

- *Credibility* involves trusts worthiness, believability, honesty, it involves having the customer's best interests at heart. Contributing to credibility are: company name, company reputation, personal characteristics of the contact personnel, the degree of hard sell involved in interaction with the customer. *Security* is the freedom from danger, risk or doubt. It involves: physical safety, financial security and confidentiality.
- *Understanding* the customer means making the effort to understand the customer's need. It includes: learning the customer's specific requirements, providing individualized attention and recognizing the regular custom.
- *Tangibles* includes the physical evidence of the service: physical facilities, appearance of personnel, tools or equipment used to provide the service, physical representations of the service, such as a plastic credit card or bank statement, other customers in the service facilities.

Based on the focus interviews and the insights of previous research, Santos (2003) develop a conceptual model of e-service quality. This model proposed that e-service quality consists of incubative and active dimensions, and each dimension composed by five or six determinants, as illustrated in Figure 2.2



**Figure 2.2 Model of E-service Quality(Santos, 2003)**

Santos (2003) further explains that e-service quality consists of incubative and active dimensions, and each dimension composed by five or six determinants, as illustrated in Figure 2.2. Before the launching of a Web site, the incubative dimension needs to be considered and to ensure that:

- The Web site is easy to use, search and navigates
- It has an appealing appearance to its target customers
- Links are set up and maintained, and the broken links are avoided
- The site has a well-organized structure and layout and
- There is an attractive presentation of factual contents.

When a Web site has been established, the active dimension needs to be maintained throughout the entire period of active e-commerce on the Web site.

The determinants of active dimensions are:

- Reliability
- Efficiency
- Support
- Communications
- Security and
- Incentive.

All determinants listed above are presented in descending order of importance from high importance to low importance.

#### **2.4 E - Service Quality and Customer Satisfaction**

Service quality has been found to be an important input to customer satisfaction (Caruana & Malta 2002). Cronin and Taylor (1992) originally hypothesized that satisfaction is an antecedent of service quality. Yang & Fang (2004) identified online service quality dimension and their relationship with satisfaction. These service quality dimensions are Reliability, responsiveness, ease of use, competence. Jayawardhena and Foley (2000) mentioned some service quality of Internet banking website are important to increase customer satisfaction. These are download speed, content, design, interactivity, navigation, security. A number of academics such as Parasuraman et al. (1985, 1988); Grönroos (1990); Johnston (1995) and others have tried to identify key determinants by which a customer assesses service quality and consequently results in satisfaction or not.

Yang & Fang (2004) identified five online service quality dimensions include responsiveness, reliability, competence, access and security and their

relationships with satisfaction. Several items within these dimensions are critical for customers to evaluate service quality and satisfaction. The first important attribute is prompt order execution and confirmation which requires adequate system capacity as well as staff support. The second important aspect is accuracy of the online trading system, including accurate order fulfillment, accurate record keeping. The third important aspect is the accessibility of the web site. The fourth important aspect is e-mail response, besides traditional communication means such as phone call, online customers are particularly longing for prompt response to their inquiries and prompt confirmation through e-mail. Finally, transaction security and personal information privacy are major concerns for online customers (Yang & Fang 2004).

Wolfenbarger and Gilly (2002) found that different dimensions of their measure of e service quality have varying affects on the consequences. They found that reliability and fulfillment are the strongest predictor of customer satisfaction. Griffith and Krampf referred by Zeithaml (2002) found that access and responsiveness of the website are the key indicators of service quality delivered through the web. In their study access was operationalized as the provision of a hotlink e-mail address and telephone number of customer service agents. Responsiveness was measured by the promptness of the e-tailer responded to e-mails.

Liu and Arnett (2000) identified five key dimensions critical to web site success with customers. First, quality of information consists of relevant, accuracy, timely, customized and complete information presentation. Second important factor is the service includes quick response, assurance, empathy, and

follow-up. Third, system use includes security, correct transaction, customer control on transaction, order-tracking facilities and privacy.

Research by Johnston *et al.* (1990) involved some testing of the comprehensiveness of Parasuraman *et al.*'s (1988) service quality determinants in the light of empirical data gathered in ten UK service organizations. Their analysis, although generally supportive of the ten determinants, suggested a refined list of 12: access, appearance/aesthetics, availability, cleanliness/tidiness, comfort, communication, competence, courtesy, friendliness, reliability, responsiveness and security.

Johnston (1995) concluded that the causes of dissatisfaction are not necessarily the obverse of the causes of satisfaction. He identified attentiveness, responsiveness, care and friendliness as the main sources of satisfaction, and integrity, reliability, responsiveness, availability and functionality as the main sources of dissatisfaction.

The following table 2.3 describes the different dimensions depicted in the models and their sources of conceptualization by different authors.

**Table 2.3: E - Service Quality Dimensions Considered for This Study**

E - Service Quality dimensions	Supporting articles
Reliability	Khan, M. S., Mahapatra, S. S., & Sreekumar. (2009); Zeithaml et al., 2002; Yang & Fang (2004); Yang and Jun (2002); Liu & Arnett (2000); Parasuraman et al. (1985); Johnston (1995); Berry et al. , (1985)
Responsiveness	Khan, M. S., Mahapatra, S. S., & Sreekumar. (2009); Zeithaml et al., 2002; Yang & Fang (2004); Liu & Arnett (2000); Yang, Peterson and Huang (2001); Parasuraman et al. (1985); Johnston (1995); Berry et al. , (1985)
Fulfillment	Khan, M. S., Mahapatra, S. S., & Sreekumar. (2009); Zeithaml et al., 2002;
User - friendliness	Khan, M. S., Mahapatra, S. S., & Sreekumar. (2009); Johnston (1995), (Khan, Mahapatra, & Sreekumar, 2009)
Privacy	Khan, M. S., Mahapatra, S. S., & Sreekumar. (2009); Zeithaml et al., 2002; Wolfinbarger and Gilly, 2002; Yang and Jun (2002); Yang, Peterson and Huang (2001); Parasuraman et al. (1985)
Efficiency	Khan, M. S., Mahapatra, S. S., & Sreekumar. (2009); Zeithaml et al., 2002;
Access	Khan, M. S., Mahapatra, S. S., & Sreekumar. (2009); Berry et al. (1985) ; Joseph et al. (1999); Parasuraman et al. (1985) ; Jun and Cai (2001)

Source: Developed by this research

## 2.5 Previous empirical study

Khan, Mahapatra & Sreekumar (2009) found seven quality dimensions which are reliability, accessibility, user-friendliness, privacy/security, efficiency, responsiveness and fulfillment that identified based on principal component factor analysis. The results show that customers are satisfied with quality of service on four dimensions such as reliability, accessibility, privacy/security, responsiveness and fulfillment, but least satisfied with the 'user-friendliness' dimension.

Based on the research by Munhurrun. P and Naidoo. P indicate that reliability and security dimensions have significant effects on customer satisfaction. The finding of this study is supported by Wolfinbarger and Gilly (2003), who found that reliability rating was the strongest predictor of customer satisfaction to repurchase at a site. Reliability has also been cited as an important factor in electronic service quality (Palmer *et al.*, 2000). Security was noted as an internet service quality determinant by Yang (2001) and Yang *et al.* (2004). Since internet banking service dimensions were found to be a predictor of customer satisfaction, bankers need to provide a high level of service quality as this is likely to result in high levels of satisfaction.

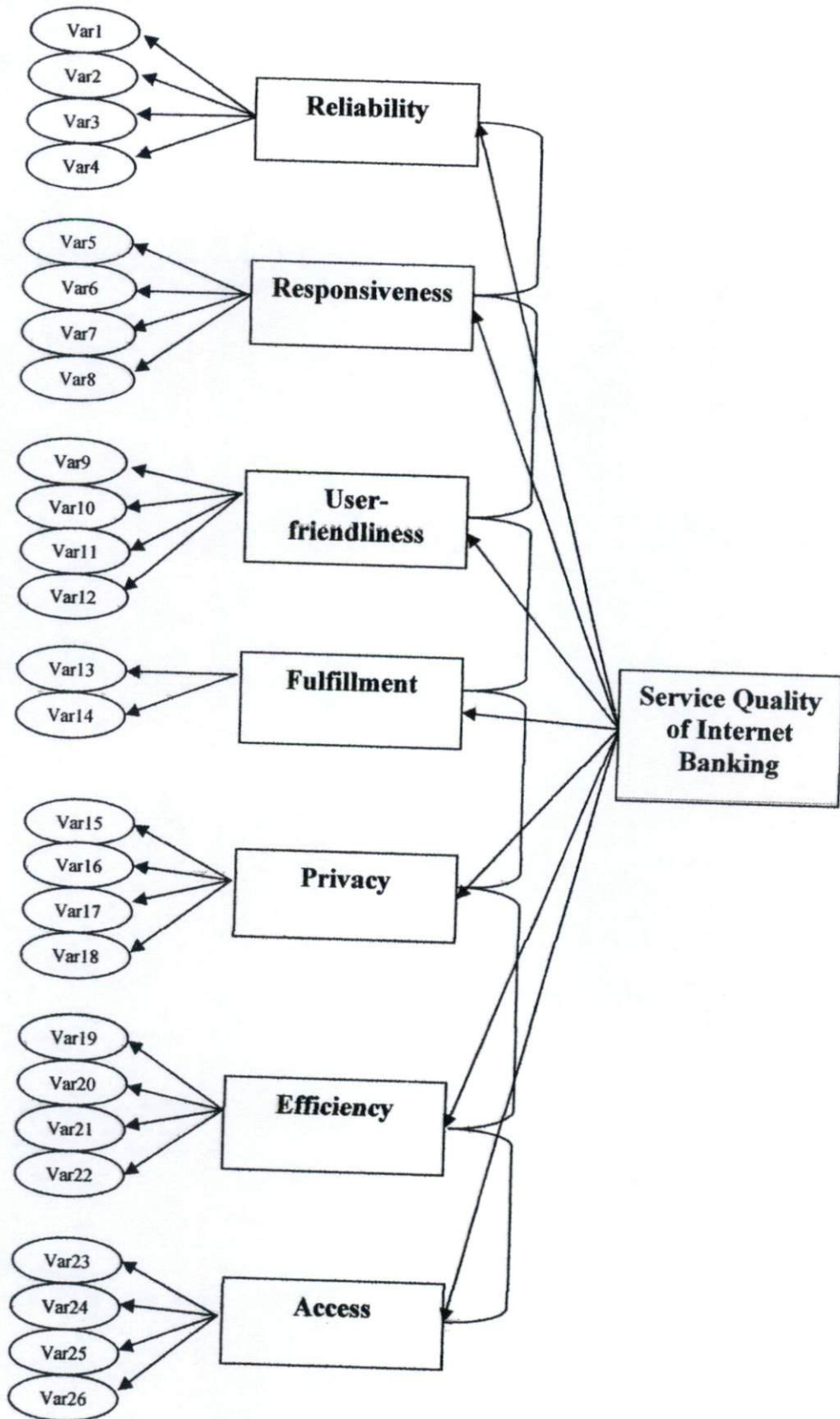
Saha and zhao (2005) found A total of nine service quality dimensions in Internet banking : Efficiency, Reliability, Responsiveness, Fulfillment, Privacy, Communication, Personalization, Technology update, Logistic/technical equipment

All these nine dimensions are significant criteria and factors to judge services that are provided by Internet banks, simultaneously to identify and measure customers' experiences and preference. However, considering limited

resources of Internet banks, first five key dimensions should be more significant and focused by the Internet banks.

All of the nine dimensions tend to have strong impacts on either customers' satisfaction or dissatisfaction, depending on the quality performance of those dimensions. More specially, communication can impact satisfaction on international customers. Moreover, personalization is the key driver to enhance customer satisfaction, attract and retain customers, even lead to trust and customer loyalty. In addition, in responsiveness dimension, when problems occur, quick response and personal contact are also significant for establishing good relationship and gaining trust and loyal customers. Finally, privacy is the utmost concern by customers and has strong impact on trust and satisfaction.

## 2.6 Theoretical Framework



## CHAPTER III

### RESEARCH METHODOLOGY

#### 3.1 Data collection method

This research is using factor analysis that used to obtain information concerning the current status of the phenomena to describe "what exists" with respect to variables or conditions in a situation. The methods involved range from the survey which describes the status quo and the correlation study which investigates the relationship between variables.

- Population

Sekaran (2003) conceptualized population as entire group of people, events, or things of interest that the researcher wishes to investigate. Population of the research is the entire internet banking user of Bank Mandiri in Padang.

- Sample

Sample is a part of research elements. Sekaran (2003) conceptualized sample as a subset of population. The advantages of taken sample are cheaper cost and quickly result.

The expected sample of this research is 150 respondents. The reason to choose the sample size is based on Roscoe (1975) and Sekaran (2003, p. 295) who conceptualized the rules of thumb for determining sample size:

- Sample sizes larger than 30 and less than 500 are appropriate for most research.

- Where samples are to be broken into sub samples; (male/females, juniors/seniors, etc.), a minimum sample size of 30 for each category is necessary.

Convenience sampling design of the research is refers to the collection of information from members of the population who are conveniently available to provide it. Sekaran (2003) said that convenience sampling is most often used during the exploratory phase of a research project and is perhaps the best way of getting some basic information quickly and efficiently. Sekaran (2003) says that “The sampling here—purposive sampling is confined to specific types of people who can provide the desired information, either because they are the only ones who have it, or conform to some criteria set by the researcher. In this research, the samples are 150 respondents’ internet banking users of Bank Mandiri in Padang.

In the questionnaire, Data collected from 150 respondents and there are a section concerning respondents’ profile to get a general idea about the respondents’ age, education and working status as various factors might also influence their perception.

Data collection is do via a survey where an instrument (questionnaire) that used to record opinions of respondents. The questionnaire comprised of questions related to opinions of respondents when experiencing the services of internet banking.

### 3.2 Questionnaire design

Questionnaire is form to fit with the objectives of the study and conceptual model. A short questionnaire with conceptually clear and concise statements is judged to be desirable for both the respondents and the researcher. The questionnaire is designed to examine service quality of internet banking that affect to customer satisfaction that mentioned in the conceptual model.

The questionnaire included a section on customer's profiles, as various demographic factors (particularly the gender) were likely to influence the degree of customer satisfaction of internet banking. Information on demographic features is also useful in formulating the bank's marketing strategy.

Each item of questionnaire are contents 7 dimensions of internet banking service quality to measure internet banking service quality such as reliability, responsiveness, user-friendliness, fulfillment, privacy, efficiency and access. The respondents were asked to respond on a scale as to their agreement or disagreement and important or not important with each statement by use of the five point Likert scale (Uma Sekaran, 2003). Questionnaires with 5 point rating scale that classified from:

- 1- Very Dissatisfied
- 2- Dissatisfied
- 3- Neutral
- 4- Satisfied
- 5- Very Satisfied

### 3.3 Operational of Variables

The following table 3.3 describes the measurement criteria used in this research for service quality dimensions and their sources of conceptualizations.

**Table 3.1 : The Conceptual and Operational Definitions of the Research Variables**

Research variables	Conceptual definition	Indicators
Reliability	The reliability and consistency of performance of service facilities, goods and staff. This includes punctual service delivery and an ability to keep to agreements made with the customer.	Var1: Accurate information Var2: Properly web pages Var3: Easy to understand Var4: Problem free
Responsiveness	Speed and timeliness of service delivery. This includes the speed of throughput and the ability of the service providers to respond promptly to customer requests, with minimal waiting and queuing time.	Var5: Quickly solve problems Var6: Knowledge and skill of the contact personnel Var7: customer service quick response Var8: prompt service
User – friendliness	The warmth and personal approachability (rather than physical approachability) of the service, particularly of contact staff, including cheerful attitude, and the ability to make the customer feel welcome.	Var9: available in the language you can understand Var10: availability of transaction status Var11: Personal attention Var12: knowledge to answer question
Fulfillment	Accuracy of service promises, delivering the product in the promised time	Var13: keep service promise Var14: a confirmation of the service ordered quickly
Privacy	Personal information are not shared, credit card information is secure.	Var15: information safety Var16: privacy Var17: financial security and confidentiality Var18: credit card information security
Efficiency	The ability of the customers to get to a website, find their desired product and information associated with it.	Var19: easy to navigate and simple to use Var20: easy login Var21: easy logout Var22: easy to find policy and notice statement
Access	<i>Access involves approach, ability and ease of contact. It means: the service is easily accessible by telephone, waiting time to receive service is not extensive, hours of operation are convenient and location of service facility is convenient.</i>	Var23: unrestricted access to all financial information Var24: updated technology Var25: The web pages do not freeze Var26: easy to approach and contact

Source: Developed by this research

### **3.4 Type of Data**

**Primary data** is data or other information such as the perceptions and attitudes of employees are best obtained by talking to them; by observing events, people, and objects; or by administering questionnaires to individuals. Such data gathered for research from the actual size of occurrence (Sekaran, 2003). Primary data of the research is the internet banking user of Bank Mandiri through questionnaires observation.

### **3.5 Data Analysis Methodology**

A series of statistical techniques are required before the quantification of service quality. These statistical analyses are conducted using SPSS; a widely used statistical software package.

Collected data from questionnaires are processed by SPSS program. Factor analysis will used to calculate and analysis data.

#### **3.5.1 Factor analysis**

A statistical approach that can be used to analyze interrelationships among a large number of variables and to explain these variables in terms of their common underlying dimensions (factors). The statistical approach involving finding a way of condensing the information contained in a number of original variables into a smaller set of dimensions (factors) with a minimum loss of information (Hair et al., 1992).

Exploratory factor analysis (EFA) seeks to uncover the underlying structure of a relatively large set of variables. This is the most common form of factor analysis. There is no prior theory and one uses factor loadings to intuit the factor structure of the data. The primary objectives of an EFA are to determine the number of common

factors influencing a set of measures and the strength of the relationship between each factor and each observed measure.

*Principal component analysis (PCA)*: The most common form of factor analysis, PCA seeks a linear combination of variables such that the maximum variance is extracted from the variables. It then removes this variance and seeks a second linear combination which explains the maximum proportion of the remaining variance, and so on. This is called the principal axis method and results in orthogonal (uncorrelated) factors.

Rotation serves to make the output more understandable and is usually necessary to facilitate the interpretation of factors.

*Varimax rotation* is an orthogonal rotation of the factor axes to maximize the variance of the squared loadings of a factor (column) on all the variables (rows) in a factor matrix, which has the effect of differentiating the original variables by extracted factor. Each factor will tend to have either large or small loadings of any particular variable. A varimax solution yields results which make it as easy as possible to identify each variable with a single factor. This is the most common rotation option.

### **3.5.2 Reliability testing**

According to Holmes-Smith (2001), reliability test is important to standardize the measurement scales, and to demonstrate whether they truly measure what they are supposed to measure.

Based on Uma Sekaran which cited in *Research methods for Business* (2003), Cronbach alpha is a reliability coefficient that indicates how well the items in a set

## CHAPTER IV

### ORGANIZATIONAL REVIEW

#### 4.1 Company profile

Bank Mandiri was formed on October 2nd, 1998, as a part of the Government of Indonesia's bank restructuring program. In July 1999, four state-owned banks- Bank Bumi Daya, Bank Dagang Negara, Bank Exim and Bapindo- were amalgamated into Bank Mandiri. The history of these four banks can be traced back over 140 years, and together they encapsulate the development of the Indonesian banking sector.

Bank Bumi Daya (BBD) originated in 1959 with the nationalization of a Dutch company, De Nationale Handelsbank NV, operating under the name of Bank Umum Negara, which took over the banking business of recently nationalized Chartered Bank (formerly a British Bank). In 1965 Bank Umum Negara was brought under the umbrella of Bank Negara Indonesia (BNI) and became known as BNI Unit IV. BNI Unit IV was spun off from BNI as Bank Bumi Daya in 1968.

Bank Dagang Negara (BDN) was one of the oldest banks in Indonesia. It was originally known as *Nederlandsch Indische Escompto Maatschappij* when it was founded in Batavia (Jakarta) in 1857. The name was changed in 1949 to *Escomptobank NV*, and in 1960 the bank was nationalized and again renamed, to Bank Dagang Negara. BDN focused on lending to industry and the mining sector.

Bank Ekspor Impor Indonesia's (Bank Exim) roots can be traced back to the Dutch trading company *N.V. Nederlansche Handels Maatschappij* which was established in

1824 and expanded into the banking sector in 1870. The Government of Indonesia nationalized this company in 1960, and in 1965 it was merged into Bank Negara Indonesia as BNI Unit II. In 1968, BNI Unit II was divided in two, with the division then known as BNI Unit II Export-Import ultimately becoming Bank Exim and specializing in the finance of exports and imports.

Bank Pembangunan Indonesia's (Bapindo) predecessor, Bank Industri Negara (BIN), was established in 1951. BIN's mission was to support the development of selected economic sectors, specifically plantations, industry and mining. Bapindo was established as a state-owned bank in 1960 and BIN was then merged into it. In 1970, Bapindo was assigned by the government to support national development through offering medium and long-term financing to the manufacturing, transportation and tourism sectors.

Each of these four legacy banks played an integral role in the development of the Indonesian economy for generations. Today, Bank Mandiri continues this tradition of more than 140 years of delivering expertise in banking and financial services throughout Indonesia.

#### CONSOLIDATION AND INTEGRATION

Immediately following the merger, Bank Mandiri embarked on a comprehensive process of consolidation. Most visibly, Bank Mandiri closed overlapping branches and reduced Bank Mandiri's combined workforce. Bank Mandiri's single brand was rolled out throughout Bank Mandiri's network and across all of Bank Mandiri's advertising and promotional activities.

One of Bank Mandiri's most significant achievements has been the complete replacement of Bank Mandiri's technology platform. Bank Mandiri inherited a total of nine different core banking systems from Bank Mandiri's four legacy banks. After an initial investment to immediately consolidate Bank Mandiri's systems around the strongest inherited platform, Bank Mandiri undertook a three-year, program to replace Bank Mandiri's core banking platform with one specifically geared toward retail banking.

Today, Bank Mandiri's IT infrastructure provides e-channel & retail product development with better time to market.

Bank Mandiri's customers still represent the core of the Indonesian economy. By sector it is well diversified. As part of Bank Mandiri's implementation of prudential banking & best-practices risk management, Bank Mandiri has made several recent enhancements. Credit approvals and monitoring are subject to a highly structured 'four-eyes' approval process, in which credit approval decisions are separated from the marketing activities of Bank Mandiri's business units. In diversify risk and income, Bank Mandiri has made significant progress in serving Small and Micro (SME) and retail customers. At the end of 1999, lending to corporate customers accounted for 87% of total loans.

As of 31 December 2009, loans to Commercial, Small and Micro (SME) customers comprised 42.22% of total loans; individual consumers were 13.92% of the total, while loans to corporate customers accounted for just 43.86% of total loans.

From its founding, Bank Mandiri has worked diligently to create a strong, professional management team operating under internationally recognized principles of corporate governance, control and compliance. In the last three years, Bank Mandiri has consistently been rated as the most trusted bank, as an acknowledgement of Bank Mandiri's efforts to uphold good governance.

Today, Bank Mandiri offers comprehensive financial solutions to both private and state-owned corporate entities, commercial, small, and micro businesses as well as retail customers through the efforts of Bank Mandiri's 22,909 employees in 1,095 domestic and 5 overseas branches, including representatives offices, supported by subsidiaries specialized in providing investment banking, syariah banking, bancassurance, micro credit and multi finance products and services. In each of the last three years, Bank Mandiri has been ranked as the best bank for customer service in a nationwide third-party evaluation.

Following the completion of Bank Mandiri's transformation program from 2005 until 2009, Bank Mandiri is prepared to undertake the next transformation stage by revitalizing Bank Mandiri's vision and mission to become the most admired and progressive Financial Institution in Indonesia.

#### **4.2 Core Values and Behavior of Bank Mandiri**

The management of Bank Mandiri is committed to advancing the following core values:

1. **Trust:** To instill confidence among stakeholders through open and sincere relationships.
2. **Integrity:** To think, speak and act truthfully, with dignity and upholding a professional code of ethics.
3. **Professionalism:** Committed to completing work accurately, based on a high level of competence and with a full sense of responsibility.
4. **Customer focus:** To position customers as primary partners in mutually beneficial relationships that sustains growth.
5. **Excellence:** To develop and improve in all areas to achieve optimum value added and best results.

#### 4.2.1 Ten key behaviors of Bank Mandiri:

- Cooperate with and appreciate each other
- Honest, sincere and open
- Disciplined and consistent
- Think, speak and act truthfully
- Competent and accountable
- Deliver the best solutions and results
- Be innovative, proactive and responsive
- Prioritize customer satisfaction
- Orientation to value-added and continuous improvement
- Environmentally aware

### **4.3 Mandiri Internet Banking**

Mandiri Internet is a facility delivered to Bank Mandiri customer for conducting banking transactions through internet network, anytime, anywhere, 24 hours a day 7 days a week.

#### **4.3.1 The Benefit of Mandiri Internet Banking:**

- Doing banking activities just from work desk, using personal computer/laptop, Modem + Line Telephone or GPRS
- Customers can access their account 24 hours a day 7 days a week
- Able to conduct any transaction from whichever hemisphere (as long as within the internet access coverage)
- Transaction menu is clear and easy to use
- Able to conduct various banking transactions such as: Transferring, Bill payment, mobile phone reload, etc.
- Equipped with multi-layered security system
- Able to access products, including Savings, Current Account, and Deposits, either in Rupiah or other foreign currencies with one single user ID. The future development will include Credit Card and Personal Loan

### **4.4 Products and Services of Mandiri Internet Banking**

- Time Deposit
- Planned Savings
- a. **Fund Transfer**
  - Inter-Mandiri account Transferring

- Inter-domestic Banks Transferring
  - By Using National Clearing System (SKN)
  - By Using Real Time Gross Settlement (RTGS)
- Scheduled Transfer List
- b. Scheduled Transfer List**
  - Telkom & CDMA phones
  - GSM mobile phones
  - Internet
  - Cable TV
  - Credit Cards
  - Electricity (PLN)
  - Taxes of Land and Building (PBB)
  - Credit Installment
  - Water (PAM)
  - Insurance
  - Education
  - Public Train
  - Airlines
  - Autodebit
  - Multi Payment
  - Others
- c. Mandiri Prepaid Card**
  - Transaction History

- Reload
- Card List
- d. Purchasing**
  - CDMA phones reload voucher
  - GSM mobile phones reload voucher
- e. Placement**
- f. Account & Credit Card Information**
  - Savings Account & GIRO
    - Current Balance Position
    - Transaction History
    - Account List
  - Deposit Account
  - Loan Account
  - Mandiri Credit Card Information
- g. Service Facilities**
  - Checking Status
  - SMS Notification Service
  - Interest Rate Information
  - Currencies Information
- h. Internet Activities Information**
- i. Internet Banking Activities**

driving license, Temporary Stay Permit Card (KIMS)) and account ownership evidence (saving book, Mandiri Debit Card)

## **2 Registration steps:**

### **Step 1 : Register for Mandiri Internet**

Register using either following way, for obtaining Access ID number and access code:

- **Through Mandiri ATM**

Select main menu and choose e-banking registration, then follow the guidelines on ATM screen for making Access Code. Meanwhile, for the purpose of making Access ID number, use 16-digit numbers of your Mandiri Debit Card (please refer to: how to register through ATM machine). Make sure to immediately have the Token in Mandiri branch office after registering through Mandiri ATM by filling Token usage application form and follow the instruction listed in user's manual included in Token box.

- **Through Mandiri branch office**

Fill e-banking registration application form (Mandiri Internet) available in branch offices. Next, the bank will deliver Access ID to your e-mail address and you then have to get your Access Code again in the branch office several days after registration process (Access Code is handed in sealed envelope). Also, get one Token by filling Token usage application form and follow the guidelines listed in user's manual included in Token box.

- j. Administration Functions** (e.g. Registration of Mandiri SMS banking destination and Mandiri Call, E-mail address changing, password modification, Authorized Payment)
- k. Personalization** (e.g. favorite transaction, language)

The equipments needed for accessing Mandiri Internet are as follow:

- 1) Hardware:**
  - PC Pentium 133 Mhz, or higher.
  - Modem 28.8 kbps (56 kbps is recommended).
- 2) Software:**
  - Windows 98, Windows 2000 or Windows NT Operating System
  - Microsoft Internet Explorer 5.00 or Netscape Navigator 4.5 Internet browser
- 3) Internet Connection**
  - Internet Account in one Internet Service Provider such as Radnet, CBN, Indosatnet, etc.
  - Instant Access : ( Telkomnet Instant or other ISP's)

#### **4.5 Terms of Service of Mandiri Internet Banking**

##### **4.5.1 Registration terms:**

- 1. Owning saving account, current in rupiah currency and or other foreign currencies (as secondary account, not the primary one).
- 2. For registration through ATM, Mandiri Debit card is necessary whereas for registration in branch office, self-identity evidence must be revealed (ID card,

## **Step 2 : Activate Mandiri Internet and Token**

- Click **activation** on [www.bankmandiri.co.id](http://www.bankmandiri.co.id), website and enter **Access ID** and **Access Code** received from the bank after completing registration through ATM or in Mandiri branch office.
- Next, make your own Mandiri Internet **User ID** and **PIN** so you can login to Mandiri Internet service.
- Click **Login** button on [www.bankmandiri.co.id](http://www.bankmandiri.co.id)
- Go into **Administration** menu and select **Mandiri Token PIN activation**.

## **4.6 Terms and Conditions of Mandiri Internet Banking**

### **Terminology**

1. Mandiri Internet is Mandiri's distribution channel for accessing account owned by customer through internet network using browser software on computer.
2. Mandiri is PT THE BANK MANDIRI (PERSERO) Tbk which includes Main Office and branch offices as well as any other offices as inseparable part of PT THE BANK MANDIRI (PERSERO) Tbk.
3. Customer is individual owner of saving account in Rupiah currency in the forms of Rupiah Giro and Mandiri Saving.
4. User customer is customer who is listed as Mandiri Internet Service user.

5. Account List is Rupiah account number in whole branches owned by Customer in Mandiri that has been registered and therefore can be accessed by User Customer.
6. User ID is identity owned by each Customer to be entered every time Mandiri Internet service is used.
7. Mandiri Internet PIN (Personal Identification Number) is a classified personal identification number and is thus known only by User Customer and must be entered by User Customer every time Mandiri Internet service is used. Together with User ID, PIN is used to verify that relevant customer is customer eligible to access Mandiri Internet service.

#### **4.6.1 Mandiri Internet Banking Registration Terms**

1. Customer fills and signs Mandiri Internet and Mandiri SMS application forms available in Branch offices and Mandiri Mandiri website ([www.thebankmandiri.co.id](http://www.thebankmandiri.co.id)).
2. To reveal verified genuine self-identity card (ID card, driving license, passport, Temporary Stay Permit Card (KIMS)) and account holder ownership evidence.
3. Each individual as joint account holder should respectively fill Mandiri Internet and Mandiri SMS application forms and thereby owns different User ID and PIN.
4. Customer should possess E-mail address.
5. User Customer has owned Access ID and Access PIN delivered by Mandiri for the purpose of activation in Mandiri Internet website.

6. Customer has both read and understood Mandiri Internet Terms and Conditions.
7. Customer can also apply for Mandiri Internet registration through Mandiri ATM using Mandiri card.

#### **4.6.2 Mandiri Internet Banking Usage Conditions**

1. User Customer can use Mandiri Internet service to access informations and or conduct the Banking transaction determined already by the Mandiri.
2. By the first time Mandiri Internet service is used, the User Customer is encouraged to activate on Mandiri Internet website by entering access ID and access PIN delivered by the Bank to be modified into Mandiri Internet User ID and PIN.
3. For each transaction commitment:
  - o User Customer is obliged to ensure the transaction order accuracy and completeness (including ensuring that all needed data for transaction has been filled completely and correctly). Mandiri is irresponsible for any impact that may emerge due to neglecton, incompleteness, unclearness, or inaccuracy of order/data entered by the User Customer.
  - o The User Customer is entitled for opportunity to re-check and or cancel data that is entered already on confirmation phase automatically conducted by system before approval sign appears as regulated below:
    - If the entered data has been ensured its correctness and completeness, then the User Customer is obliged to enter PIN on available column on Mandiri Internet transaction page.

4. Any transaction ordered to Mandiri and approved by the User Customer can not be cancelled.
5. Every order approved by the User Customer kept in the Bank's data center is correct data received as order evidence instructed by User customer to Mandiri for committing transaction in question.
6. Mandiri receives and runs every order entered by Customer as valid order based on user ID and PIN usage and the Bank thereby has no obligation to investigate or observe both originality and validity or the authorization of User ID and PIN user or to judge or prove both accuracy and correctness of the order in question, and the order therefore is approved to bind User customer as it should be, unless the User customer can instead prove the contrary.
7. Mandiri is entitled to neglect the order entered by the User Customer, if:
  - o User Customer's balance position in the Bank is insufficient.
  - o Mandiri recognizes or acknowledges the reasons to presumably consider the potential fraud or criminal commitment to have or be committed.
8. As the evidence that transaction ordered by User Customer has been successfully committed by Mandiri, User Customer will own transaction evidence in the form of transaction number on Mandiri Internet transaction page and the evidence will be kept in transaction activity page for 3 (three) months since the date of transaction.
9. User Customer approves and acknowledges that:

- o By committing transaction through Mandiri Internet, all orders and communications entered by User Customer which is received by Mandiri will be treated as valid evidence although no written document is made or signed document is issued.
  - o Evidence for order entered by User Customer to Mandiri and every communication means between Mandiri and the User Customer sent electronically that is kept in Mandiri's data center and or kept in the forms of information keeping and any other data in the Bank, such as written document, notes, tape/cartridge, computer print out and or copy, are valid evidence that is undeniable for their validity, correctness or originality.
10. With its own consideration, Mandiri is entitled to modify transaction limit.
11. All communications through secured and standard-complied e-mail are regarded valid, authentic, original, and correct and deliver the same effects as if conducted through written form and or through written documents.
12. Mandiri is not obliged to conduct every order either both signed and unsigned or answer any question received through unsecured e-mail. The customer is recommended not to send their classified informations through unsecured e-mail.
13. Mandiri is entitled to discontinue Mandiri Internet service either for temporary or termed period determined by Mandiri for the purpose of updating, maintaining, or for other purposes with any reason considered good by Mandiri, and Mandiri therefore is not obliged to be accountable to anyone.

#### 4.6.3 Mandiri Internet Banking User ID and PIN:

1. User ID and PIN are classified codes and its authorized usage lies upon User Customer. User ID is fixed and unchangeable.
2. The Customer is obliged to secure Mandiri Internet User ID and PIN by:
  - Telling none the Mandiri Internet User ID and PIN.
  - Avoiding writing down the Mandiri Internet PIN on paper or keeping it in the written forms or any keeping means allowing to reveal.
  - Erasing as quickly the Mandiri Internet Access ID and PIN Mailer after receiving it as possible.
  - Carefully using Mandiri Internet User ID and PIN, thus preventing it to be revealed.
  - Regularly modifying Mandiri Internet PIN periodically.
3. In the case the Customer acknowledges or presumes User ID and PIN has been revealed by unauthorized people, then the user customer is obliged to immediately secure it by modifying PIN.

If due to one cause the User Customer is unable to modify PIN, then the User customer is obliged to let the Bank know it. Before the written notification is received by authorized the Bank official, then any order, transaction, and communication through User ID and PIN usage by unauthorized parties are fully under User Customer's responsibility.

1. User ID and PIN usage holds the law force similar to written order signed by User Customer, so the User Customer thereby acknowledges that User ID and PIN usage in every transaction is also authority assignment from the User

Customer to Mandiri for conducting transaction including, but not limited to, debiting customer account in order to commit both ordered transaction and transaction cost payment already and or to be determined subsequently by Mandiri.

2. Any misuse of Mandiri Internet Access ID/User ID and Access PIN/PIN is adherent to User customer's responsibility. User/Customer thereby releases the Bank from any prosecution that may emerge, both from other parties and User Customer itself as the result of Mandiri Internet Access ID/User ID and Access PIN/PIN misuse.

#### **4.6.4 Mandiri Internet Service Access Ceasing**

1. Mandiri Internet Service access will be ceased by the Bank if:
  - o User/Customer require the Bank to cease Mandiri Internet service access permanently which among others are caused by:
    - User/Customer has missed their Mandiri Internet Access ID/User ID and or Access PIN/PIN.
    - User/Customer closes all accounts accessible through Mandiri Internet service.
  - o Entering incorrect Access PIN/PIN Mandiri Internet for consecutive 3 (three) times.
  - o Written notification is received from the user customer concerning assumption or User ID and PIN have been revealed by unauthorized other parties.
  - o Mandiri conducts a necessity required by regulation in force.

2. To re-activate due to aforementioned Service access ceasing, the user customer must contact Mandiri Bank Customer Care or re-register in the branch in which the account is managed.

## CHAPTER V

### RESULTS AND DISCUSSION

#### 5.1 Respondent characteristics

The questionnaire is distributed on October 2010 to the customer of Bank Mandiri in Padang. Sampling method was done by using *convenience sampling*. According to Roscoe (1975), the sample size of more than 30 and less than 500 is right in doing research. The amount of sample size is 150 respondents. This sample is as representative from customer which would draw conclusions about the entire population that would generalize the interest of population (Sekaran, 2003). The following questionnaire result is presented based on each item of respondent characteristic.

##### 5.1.1 Description of research sample

###### 1. Respondent characteristics based on gender

Table 5.1 is presented respondent characteristics based on gender.

Table 5.1

##### Respondent's gender

Item	F	%
<b>GENDER</b>		
Male	85	56,7%
Female	65	43,3%

Source : Developed by this research

The result indicates that mostly the respondents are male with 56,7% from the total of respondents. And the rest 43,3% are female.

## 2. Respondent characteristics based on age

Table 5.2 is presented respondent characteristic based on age.

**Table 5.2**  
**Respondent's Age**

Item	F	%
<b>AGE</b>		
<20 years	2	1,3%
20 – 29 years	48	32%
30- 39 years	65	43,3%
40 – 49 years	23	15,3%
>50 years	12	8%

Source : Developed by this research

The amount of respondent majority is 30 – 39 years old which is 65 respondents (43,3%), 20 - 29 years old is 48 respondents (32%), 40 – 49 years old is 23 respondents (15,3%), above 50 years old is 12 respondents (8%) and the smallest is below 20 years old which is 2 respondents (1,3%).

### 3. Respondent characteristics based on occupation

Table 5.3 is presented respondent characteristics based on occupation

**Table 5.3**

#### **Occupation**

<b>Item</b>	<b>F</b>	<b>%</b>
<b>OCCUPATION</b>		
Civil servants	29	19,3%
State-owned enterprises employee	26	17,3%
Police / Military	15	10%
Entrepreneur	37	24,6%
Private company employee	23	15,3%
Retired	3	2%
Student	16	10,6%
Others (architect)	1	0,6%

Source : Developed by this research

The amount of respondent majority is entrepreneur which is 37 respondents (24,6%), civil servants is 29 respondents (19,3%), state-owned enterprises employee is 26 respondents (17,3%), private company employee is 23 respondents (15,3%), student is 16 respondents (10,6%), police/military is 15 respondents (10%), retired is 3 respondents (2%) and the smallest is others (architect) which is 1 respondent (0,6%).

#### 4. Respondent characteristics based on educational background

Table 5.4 presented respondent characteristics based on educational background

**Table 5.4**

##### **Educational background**

<b>Item</b>	<b>F</b>	<b>%</b>
<b>Educational background</b>		
Junior high school	2	1,3%
Senior high school	24	16%
Diploma degree	24	16%
Bachelor degree	81	54%
Master degree	19	12,6%

Source : Developed by this research

The amount of respondent majority is bachelor degree which is 81 respondents (54%), diploma degree is 24 respondents (16%), senior high school is 24 respondents (16%), master degree is 19 respondents (12,6%) and the smallest is junior high school which is 2 respondents (1,3%).

**5. Respondent characteristics based on frequency of using internet banking ( times per week )**

Table 5.5 presented respondent characteristics based on frequency of using internet banking ( times per week )

**Table 5.5**

**Frequency of using internet banking ( times per week )**

<b>Item</b>	<b>F</b>	<b>%</b>
<b>Frequency of using internet banking</b>		
<1	33	22%
1 – 3	45	30%
4 – 6	42	28%
7 – 9	14	9,3%
>10	16	10,6%

Source : Developed by this research

The amount of respondent majority is 1 – 3 times per week is 45 respondents (30%), 4 – 6 times per week is 42 respondents (28%), below 1 time per week is 33 respondents (22%), above 10 times per week is 16 respondents (10,6%) and the smallest is 7 – 9 times per week which is 14 respondents (9,3%).

**6. Respondent characteristics based on time spent online per week**

Table 5.6 presented respondent characteristics based on time spent online per week

**Table 5.6**  
**Time spent online per week**

<b>Item</b>	<b>F</b>	<b>%</b>
<b>Time spent online</b>		
<1 hour	56	37,3%
1 – 5 hours	46	30,6%
6 – 10 hours	25	16,6%
11 – 15 hours	10	6,6%
16 – 20 hours	9	6%
21 – 24 hours	3	2%
>24 hours	1	0,6%

Source : Developed by this research

The amount of respondent majority is below 1 hour is 56 respondents (37,3%), 1 – 5 hours per week is 46 respondents (30,6%), 6 – 10 hours per week is 25 respondents (16,6%), 11 – 15 hours per week is 10 respondents (6,6%), 16 – 20 hours per week is 9 respondents (6%), 21 – 24 hours per week is 3 respondents (2%) and the smallest is above 24 hours per week which is 1 respondents (0,6%).

## 7. Respondent characteristics based on income

Table 5.7 presented respondent characteristics based on income

**Table 5.7**

### **Income**

<b>Item</b>	<b>F</b>	<b>%</b>
<b>Income</b>		
< Rp. 1.000.000	13	8,6%
Rp. 1.000.000 – Rp. 3.000.000	54	36%
Rp. 3.000.000 – Rp. 5.000.000	32	21,3%
Rp. 5.000.000 – Rp. 10.000.000	42	28,6%
> Rp. 10.000.000	9	6%

Source : Developed by this research

The amount of respondent majority is Rp. 1.000.000 – Rp. 3.000.000 which is 54 respondents (36%), Rp. 5.000.000 – Rp. 10.000.000 is 42 respondents (28,6%), Rp. 3.000.000 – Rp. 5.000.000 is 32 respondents (21,3%), below Rp. 1.000.000 is 13 respondents (8,6%) and the smallest is above Rp. 10.000.000 which is 9 respondents (6%).

## 5.2 Factor analysis

The factor analysis is performed using the principal component extraction method with varimax rotation.

### 5.2.1 Initial Factor analysis

#### 5.2.1.1 Initial KMO and Bartlett's test

**Table 5.8**  
**Initial KMO and Bartlett's test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.904
Bartlett's Test of Sphericity	Approx. Chi-Square	2556,134
	df	325
	Sig.	.000

The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy is an index used to examine the appropriateness of factor analysis. High values (between 0.5 and 1.0) indicate factor analysis is appropriate. Values below 0.5 imply that factor analysis may not be appropriate (Field, 2000). Based on the result from table 5.8, the KMO measure is 0,904. Bartlett's test of sphericity tests whether the correlation matrix is an identity matrix, which would indicate that the factor model is inappropriate. From the same table, we can see that the Bartlett's test of sphericity is significant ( $p < .001$ ). That is, its associated probability is less than 0.05. In fact, it is actually 0.000. This means that the correlation matrix is not an identity matrix. So, it is appropriate to proceed a factor analysis for the data.

### **5.2.1.2 Initial Anti image matrices**

The KMO values for variables are produced on the diagonal of the anti-image correlation matrix. These values make the anti-image correlation matrix an extremely important part of the output (although the anti-image covariance matrix can be ignored). As well as checking the overall KMO statistics, it is important to examine the diagonal elements of the anti-image correlation matrix. The value should be above 0.5 for all variables (Field, 2000).

Based on the output before the rotation (see on appendix), the MSA for all of variables included in the analysis was greater than 0.5, so the factor analysis is appropriate.

### **5.2.1.3 Initial Communalities**

Communalities represent the proportion of the variance in the original variables that is accounted for by the factor solution. The factor solution should explain at least half of each original variable's variance, so the communality value for each variable should be 0.50 or higher (Field, 2000).

On first iteration(see table 5.9), the communality for the variable "Easy to approach and contact" [Var26] was 0.412. Since this is less than 0.50, the variable should be removed from the next iteration of the principal component analysis.

**Table 5.9**  
**Initial Communalities**

	<i>Initial</i>	<i>Extraction</i>
VAR1	1,000	,774
VAR2	1,000	,773
VAR3	1,000	,705
VAR4	1,000	,756
VAR5	1,000	,626
VAR6	1,000	,754
VAR7	1,000	,611
VAR8	1,000	,701
VAR9	1,000	,527
VAR10	1,000	,755
VAR11	1,000	,594
VAR12	1,000	,703
VAR13	1,000	,697
VAR14	1,000	,750
VAR15	1,000	,748
VAR16	1,000	,771
VAR17	1,000	,741
VAR18	1,000	,715
VAR19	1,000	,750
VAR20	1,000	,810
VAR21	1,000	,903
VAR22	1,000	,663
VAR23	1,000	,731
VAR24	1,000	,741
VAR25	1,000	,637
VAR26	1,000	,412

Extraction Method: Principal Component Analys

#### **5.2.1.4 Initial Factor extraction**

The first part of the factor extraction process is to determine the linear components within the data set (the eigenvectors) by calculating the eigenvalues of the R-matrix. By default, SPSS uses Kaiser's criterion of retaining factors with eigenvalues greater than 1. In this approach, only factors with Eigenvalues greater than 1.0 are retained. An Eigenvalue represents the amount of variance associated with the factor. Hence, only factors with a variance greater than 1.0 are included.

Factors with variance less than 1.0 are no better than a single variable, since, due to standardization, each variable has a variance of 1.0 (Field, 2000).

Based on the output on first iteration (see table 5.10) lists the eigenvalues associated with each linear component (factor) before extraction, after extraction and after rotation. Before extraction, SPSS has identified 26 linear components within the data set. The eigenvalues associated with each factor represent the variance explained by that particular linear component and SPSS also displays the eigenvalues in terms of the percentage of variance explained. (so, factor 1 explains 42,763% of total variance). It should be clear that the first few factors explain relatively large amounts of variance (especially factor 1) whereas subsequent factors explain only small amounts of variance. SPSS then extracts all factors with eigenvalues greater than 1, which leaves us with six factors.

**Table 5.10**  
**Initial Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	11,118	42,763	42,763	11,118	42,763	42,763	3,557	13,680	13,680
2	2,228	8,568	51,330	2,228	8,568	51,330	3,441	13,235	26,915
3	1,530	5,883	57,213	1,530	5,883	57,213	3,331	12,811	39,726
4	1,375	5,287	62,500	1,375	5,287	62,500	2,968	11,414	51,140
5	1,091	4,196	66,697	1,091	4,196	66,697	2,690	10,346	61,487
6	1,007	3,872	70,568	1,007	3,872	70,568	2,361	9,082	70,568
7	,930	3,576	74,144						
8	,781	3,003	77,148						
9	,649	2,495	79,643						
10	,627	2,413	82,056						
11	,529	2,034	84,090						
12	,449	1,727	85,817						
13	,443	1,704	87,521						
14	,413	1,588	89,109						
15	,362	1,394	90,503						
16	,342	1,315	91,817						
17	,326	1,254	93,071						
18	,272	1,046	94,117						
19	,258	,991	95,108						
20	,252	,971	96,079						
21	,220	,846	96,925						
22	,201	,775	97,699						
23	,181	,696	98,395						
24	,160	,616	99,012						
25	,140	,540	99,552						
26	,117	,448	100,000						

Extraction Method: Principal Component Analysis.

### **5.2.1.5 Initial Rotated component matrix**

Rotation serves to make the output more understandable and is usually necessary to facilitate the interpretation of factors. The sum of eigenvalues is not affected by rotation, but rotation will alter the eigenvalues (and percent of variance explained) of particular factors and will change the factor loadings. Since alternative rotations may explain the same variance (have the same total eigenvalue) but have different factor loadings, and since factor loadings are used to intuit the meaning of factors, this means that different meanings may be ascribed to the factors depending on the rotation - a problem often cited as a drawback to factor analysis. If factor analysis is used, the researcher may wish to experiment with alternative rotation methods to see which leads to the most interpretable factor structure. Hair et al. (1992) suggested that variables with loadings greater than 0.3 were considered significant; loadings greater than 0.4, more important; and loadings 0.5 or greater were very significant. For this study, the general criteria were to accept items with loadings of 0.4 or greater (Tan, 2000).

**Table 5.14**

**Initial Rotated Component Matrix<sup>a</sup>**

	Component					
	1	2	3	4	5	6
VAR17	,798					
VAR16	,770					
VAR15	,702	,303				
VAR18	,688					
VAR24		,832				
VAR23		,773				
VAR25		,714				
VAR22		,637				,313
VAR26	,350	,466				,380
VAR14			,762			
VAR13			,722			
VAR8	,334		,611			
VAR7			,594			,358
VAR10				,329		
VAR9				,739	,371	
VAR12		,391		,636		
VAR6	,496		,381	,556		
VAR19	,462		,452	,545		
VAR11				,516		,427
VAR5	,401		,440	,482		
VAR2			,457	,467		
VAR3					,818	
VAR1					,719	
VAR4				,370	,710	
VAR21			,477		,533	,361
VAR20		,315				,851
		,355				,735

Extraction Method: Principal Component Analysis.  
 Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 9 iterations.

Based on table 5.11, On first iteration , first factor is marked by high loading on var17 “financial security and confidentiality”, var16 “Privacy”, var15 “information safety” and var18 “credit card information security”.

Second factor is marked by high loading on var24 “updated technology”, var23 “unrestricted access to all financial information”, var25 “the webpage do not freeze”, var22 “easy to find policy and notice statement” and var26 “easy to approach and contact”.

Third factor is marked by high loading on var14 “quick confirmation of the service”, var13 “keep service promise”, var8 “prompt service”, and var7 “quick customer service response”

Fourth factor is marked by high loading on var10 “availability of transaction status”, var9 “language informed can be understand”, var12 “knowledge to answer question”, var6 “knowledge and skill of contact personnel”, var19 “easy to navigate and simple to use”, var11 “personal attention”, and var5 “quick problem solving”.

Fifth factor is marked by high loading on var2 “proper web page”, var3 “easy to understand”, var1 “accurate information” and var4 “problem free”.

Sixth factor is marked by high loading on var21 “easy logout” and var20 “easy login”.

### **5.2.2 Revised Factor Analysis**

On last iteration Var26 “Easy to approach and contact” was removed because the communality value of the variable was 0.412. Since this is less than 0.50, the variable should be removed. That indicated respondent are not satisfied with the bank site’s is easy to approach and contact because they tend to use traditional banking rather than internet banking. Therefore, the principal component analysis was computed again.

### 5.2.2.1 Revised KMO and Bartlett's test

**Table 5.12**  
**Revised KMO and Bartlett's test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,906
Bartlett's Test of Sphericity	Approx. Chi-Square	2478,382
	df	300
	Sig.	,000

Based on the result from table 5.12, after the rotation the KMO measure is 0,906. From the same table, we can see that the Bartlett's test of sphericity is significant ( $p < .001$ ). That is, its associated probability is less than 0.05. In fact, it is actually 0.000. This means that the correlation matrix is not an identity matrix. So, the data is appropriate to proceed a factor analysis.

### 5.2.2.2 Revised Anti image matrices

Then based on the output after the rotation (see on appendix), the MSA for all of variables included in the analysis was greater than 0.5, so the factor analysis is appropriate.

### 5.2.2.3 Revised Communalities

On last iteration (see table 5.13), the communalities for all of the variables included on the components were greater than 0.50 and all variables had simple structure. So, the principal component analysis has been completed.

**Table 5.13**  
**Revised Communalities**

Communalities		
	Initial	Extraction
VAR1	1,000	,774
VAR2	1,000	,773
VAR3	1,000	,705
VAR4	1,000	,758
VAR5	1,000	,631
VAR6	1,000	,755
VAR7	1,000	,608
VAR8	1,000	,699
VAR9	1,000	,580
VAR10	1,000	,739
VAR11	1,000	,579
VAR12	1,000	,692
VAR13	1,000	,700
VAR14	1,000	,751
VAR15	1,000	,747
VAR16	1,000	,783
VAR17	1,000	,758
VAR18	1,000	,734
VAR19	1,000	,748
VAR20	1,000	,819
VAR21	1,000	,899
VAR22	1,000	,668
VAR23	1,000	,732
VAR24	1,000	,761
VAR25	1,000	,621

Extraction Method: Principal Component Analysis.

#### 5.2.2.4 Revised Factor extraction

On the last iteration (see table 5.14) after removing one variable. Before extraction, SPSS has identified 25 linear components within the data set. The eigenvalues associated with each factor represent the variance explained by that particular linear component and SPSS also displays the eigenvalues in terms of the percentage of variance explained. (So, factor 1 explains 43,535% of total variance). SPSS then extracts all factors with eigenvalues greater than 1, which leaves us with six factors.

**Table 5.14**  
**Revised Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	10,884	43,535	43,535	10,884	43,535	43,535	3,507	14,028	14,028
2	2,173	8,692	52,227	2,173	8,692	52,227	3,332	13,326	27,354
3	1,490	5,962	58,189	1,490	5,962	58,189	3,131	12,525	39,880
4	1,372	5,487	63,676	1,372	5,487	63,676	2,866	11,463	51,343
5	1,091	4,364	68,040	1,091	4,364	68,040	2,708	10,830	62,173
6	1,006	4,024	72,064	1,006	4,024	72,064	2,473	9,890	72,064
7	,811	3,242	75,306						
8	,759	3,036	78,342						
9	,648	2,591	80,933						
10	,537	2,148	83,081						
11	,460	1,839	84,920						
12	,448	1,794	86,714						
13	,422	1,687	88,401						
14	,365	1,462	89,862						
15	,345	1,380	91,242						
16	,326	1,306	92,548						
17	,284	1,136	93,684						
18	,262	1,050	94,734						
19	,255	1,021	95,755						
20	,247	,988	96,742						
21	,208	,832	97,574						
22	,183	,731	98,305						
23	,160	,641	98,946						
24	,141	,563	99,509						
25	,123	,491	100,000						

Extraction Method: Principal Component Analysis.

### 5.2.2.5 Rotated component matrix

On last iteration that shown in table 5.15 , First factor is marked by high loading on var17 “financial security and confidentiality”, var16 “Privacy”, var15 “information safety” and var18 “credit card information security”.

Second factor is marked by high loading on var14 “quick confirmation of the service”, var13 “keep service promise”, var8 “prompt service” and var7 “quick customer service response”.

Third factor is marked by high loading on var24 “updated technology”, var23 “unrestricted access to all financial information”, var25 “the webpage do not freeze”, and var22 “easy to find policy and notice statement”.

Fourth factor is marked by high loading on var10 “availability of transaction status”, var9 “language informed can be understand”, var6 “knowledge and skill of contact personnel”, var12 “knowledge to answer question”, var19 “easy to navigate and simple to use”, var5 “quick problem solving” and var11 “personal attention”.

Fifth factor is marked by high loading on var2 “proper web page”, var3 “easy to understand”, var1 “accurate information”, and var4 “problem free”.

Sixth factor is marked by high loading on var21 “easy logout” and var20 “easy login”.

**Table 5.15**  
**Revised Rotated Component Matrix<sup>a</sup>**

	Component					
	1	2	3	4	5	6
VAR17	,813					
VAR16	,782					
VAR15	,707					
VAR18	,701					
VAR14		,767				
VAR13		,732				
VAR8		,606				
VAR7		,591				
VAR24			,841			
VAR23			,767			
VAR25			,691			
VAR22			,626			
VAR10				,716		
VAR9				,685		
VAR6				,546		
VAR12				,526		
VAR19				,515		
VAR5				,480		
VAR11				,453		
VAR2					,820	
VAR3					,721	
VAR1					,713	
VAR4					,534	
VAR21						,861
VAR20						,753

Extraction Method: Principal Component Analysis.  
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 7 iterations.

Based on the results of factor analysis, the variables are classified into six dimensions, which are suitably named. The dimensions and the corresponding variables are shown below in table 5.16

**Table 5.16**  
**Dimensions Variables**

<i>Dimensions</i>	<i>Variables</i>
<i>Privacy</i>	var17, var16 var15 var18
<i>Fulfillment</i>	var14, var13, var8, var7
<i>Access</i>	var24, var23, var25, var22
<i>User - friendliness</i>	var10, var9, var6, var12, var19, var5, var11
<i>Reliability</i>	var2, var3, var1, var4
<i>Efficiency</i>	var21, var20

Generally, factor loading represents how much a factor explains a variable. High loading indicates that the factor strongly influences the variable. Assuming a factor loading of more than 0.80 as having high impact on the variables, it is concluded from the above output that some variables which are less than 0.4 need attention for the quality improvement of internet banking Bank Mandiri.

### 5.3 Reliability testing

Based on Uma Sekaran which cited in *Research methods for Business* (2003), Cronbach alpha is a reliability coefficient that indicates how well the items in a set are positively correlated to one another. Scale reliabilities range from 0,6 to 0,96 indicating that they exhibit an acceptable level of reliability (alpha >0,6 ) (Nunnally,

1978). Based on the analysis of the reliability (see on table 5.17), the result shows that the value of cronbach's alpha for each variable is greater than 0,6 and less than 0,96 which means the data is reliable to be processed.

**Table 5.17 Reliability Testing**

<b>Variable</b>	<b>Cronbach's Alpha</b>	<b>Item</b>
Privacy	0,886	4
Fulfillment	0,829	4
Access	0,838	4
User-friendliness	0,862	7
Reliability	0,852	4
Efficiency	0,892	2

Source : Developed by this research

## 5.4 Discussion

**Table 5.18**  
**Factor Analysis Results**

<b>Factor 1 : Privacy</b>	<b>Loadings</b>	<b>Reliability</b>	<b>Eigenvalues</b>
		<b>0,886</b>	<b>10,884</b>
Var17: financial security and confidentiality	<b>0,813</b>		
Var16:privacy	<b>0,782</b>		
Var15:information safety	<b>0,707</b>		
Var18: credit card information security	<b>0,701</b>		
<b>Factor 2 : Fulfillment</b>			
		<b>0,829</b>	<b>2,173</b>
Var14: a confirmation of the service ordered quickly	<b>0,767</b>		
Var13:keep service promise	<b>0,732</b>		
Var8: prompt service	<b>0,606</b>		
Var7:customer service quick response	<b>0,591</b>		
<b>Factor 3 : Access</b>			
		<b>0,838</b>	<b>1,490</b>
Var24: updated technology	<b>0,841</b>		
Var23: unrestricted access to all financial information	<b>0,767</b>		
Var25: The web pages do not freeze	<b>0,691</b>		
Var22: easy to find policy and notice statement	<b>0,626</b>		
<b>Factor 4 : User - friendliness</b>			
		<b>0,862</b>	<b>1,372</b>
Var10:availability of transaction status	<b>0,716</b>		
Var9: available in the language you can understand	<b>0,685</b>		
Var6:Knowledge and skill of the contact personnel	<b>0,546</b>		
Var12:knowledge to answer question	<b>0,526</b>		
Var19: easy to navigate and simple to use	<b>0,515</b>		
Var5:Quickly solve problems	<b>0,480</b>		
Var11:Personal attention	<b>0,453</b>		
<b>Factor 5 : Reliability</b>			
		<b>0,852</b>	<b>1,091</b>
Var2: Properly web pages	<b>0,820</b>		
Var3: Easy to understand	<b>0,721</b>		
Var1: Accurate information	<b>0,713</b>		
Var4: Problem free	<b>0,534</b>		
<b>Factor 6 : Efficiency</b>			
		<b>0,892</b>	<b>1,006</b>
Var21:easy logout	<b>0,861</b>		
Var20:easy login	<b>0,753</b>		

Source : Developed by this research

### **Factor 1 : Privacy**

First factor consists of the bank provides financial security and confidentiality, you can rely on the personal information remaining the register, you can rely on bank for not misusing information, and the bank's site is secured for your credit card information. All these criteria are related to privacy dimensions that mentioned in the theory. Privacy dimension includes data are not shared and credit card information is secure (Zeithaml et al., 2002). Therefore, Internet bank should not misuse customer's personal information and keep their credit card information secure in order to gain trust and loyal customer. The eigenvalue of this factor is 10,884.

### **Factor 2 : Fulfillment**

Second factor consists of The bank's site provides a confirmation of the service ordered quickly, The bank's site performs the service right at the first time, You are able to talk to a customer service representative in the bank over the telephone and The bank is willing to help customers, provide appropriate information and prompt service. All these criteria are related to the theoretical perspective of fulfillment, which according to Zeithaml et al., (2002) are accuracy of service promises, and delivering the product in the promised time. The eigenvalue of this factor is 2,173

### **Factor 3 : Access**

Third factor consists of The bank provides the updated technology regularly for internet banking, The bank's site has unrestricted access to all financial information, The web pages do not freeze after you have put in all your information and It is easy to find policy and notice statement on the bank's site. All these criteria are related to the theoretical perspective of access, which according to Berry et al. (1985)

access involves approach, ability and ease of contact. It means: the service is easily accessible by telephone, waiting time to receive service is not extensive, hours of operation are convenient and location of service facility is convenient. The eigenvalue of this factor is 1,490

**Factor 4 : User – friendliness**

Fourth factor consists of The bank's site provide information about the transactions and products, The website is available in the language you can understand, Knowledge and skill of the contact personnel, The bank authority care to listen to your queries and meet your personal needs, The bank's site is easy to navigate and simple to use, The bank takes care of problems properly and compensate for the problems they create, and Personalization of bank's site for customer's personal requirement.

All these criteria are related to the theoretical perspective of user-friendliness, which according to Johnston (1995) is the warmth and personal approachability (rather than physical approachability) of the service, particularly of contact staff, including cheerful attitude, and the ability to make the customer feel welcome. The eigenvalue of this factor is 1,372

**Factor 5 : Reliability**

Fifth factor consists of The web pages are functioning properly, Information content and texts are easy to understand, Information that is provided is accurate and Links are problem free, accurate and the pages download quickly.

All these criteria are related to the theoretical perspective of reliability, which according to Johnston (1995) is the reliability and consistency of performance of service facilities, goods and staff. This includes punctual service delivery and an ability to keep to agreements made with the customer. The eigenvalue of this factor is 1,091

**Factor 6 : Efficiency**

Sixth factor consists of easy login and logout. All these criteria are related to the theoretical perspective of efficiency, which according to Zeithaml et al., (2002) is the ability of the customers to get to a website, find their desired product and information associated with it. The eigenvalue of this factor is 1,006.

## CHAPTER VI

### CONCLUSION AND LIMITATION

This chapter provides conclusions drawn from findings and discussion presented in the previous chapter, followed by assessment of the potential limitations present in this study and possible future directions for the research

#### 6.1 Conclusion of the research

This research is a quantitative research to get statistical data to show factors affecting internet banking service quality, by using factor analysis. It has been conducted on customer of Bank Mandiri in Padang.

The data used are primary data. Primary data is gathered by questionnaires distribution to customer of Bank Mandiri in Padang. Data have been processed by using a factor analysis with SPSS 15.0 software tool as previous data processing, classical assumption test has been performed in order to ascertain that data are normally distributed.

Based on the results of factor analysis, the variables are classified into six dimensions :

1. First factor consists of the bank provides financial security and confidentiality, you can rely on the personal information remaining the register, you can rely on bank for not misusing information, and the bank's site is secured for your credit card information. Then this factor can be named **Privacy**.

2. Second factor consists of The bank's site provides a confirmation of the service ordered quickly, The bank's site performs the service right at the first time, You are able to talk to a customer service representative in the bank over the telephone and The bank is willing to help customers, provide appropriate information and prompt service. Then this factor can be named **Fulfillment**.
3. Third factor consists of The bank provides the updated technology regularly for internet banking, The bank's site has unrestricted access to all financial information, The web pages do not freeze after you have put in all your information and It is easy to find policy and notice statement on the bank's site. Then this factor can be named **Access**.
4. Fourth factor consists of The bank's site provide information about the transactions and products, The website is available in the language you can understand, Knowledge and skill of the contact personnel, The bank authority care to listen to your queries and meet your personal needs, The bank's site is easy to navigate and simple to use, The bank takes care of problems properly and compensate for the problems they create, and Personalization of bank's site for customer's personal requirement. Then this factor can be named **User – friendliness**.
5. Fifth factor consists of The web pages are functioning properly, Information content and texts are easy to understand, Information that is provided is accurate and Links are problem free, accurate and the pages download quickly. Then this factor can be named **Reliability**

6. Sixth factor consists of easy login and logout. Then this factor can be named **Efficiency**.

## **6.2 Limitations of the research**

There are some limitations of this research and some advice to be considered in further research, as follows:

1. The sample of this research only customer of Bank Mandiri in Padang not customer of Bank Mandiri in West Sumatera due to the limitation of time and many other problem.

For the futher research, the sample of the researcher is customer of Bank Mandiri in West Sumatera.

2. Responses to the questionnaires may be influenced by the individual's mood and by the environmental conditions in the setting at the time the questionnaires are completed.

3. The research only uses for increasing the internet banking service quality not overall electronic banking service quality of Bank Mandiri.

For further research, the object of the researcher is overall electronic banking service quality of Bank Mandiri.

## **6.3 Implications of the research**

This research have several implication for Bank Mandiri in Padang in order to fix their internet banking service quality to increase customer satisfaction. This

research found that there are six factors that affect internet banking service quality of Bank Mandiri in Padang which are privacy, fulfillment, access, user – friendliness, reliability and efficiency.

Privacy dimension suggests that privacy/security may be the critical determinant of the success of the Internet banks. It is found that privacy is the most important factor in service quality in this study. Since the Internet is an open network, Internet banking customers tend to be much more concerned with the security of their banking transaction and the privacy of their personal information. Therefore, in order to create satisfaction with customer, Internet banking should try their best to ensure and keep security of their customers' personal information, banking transaction and credit card secure.

Fulfillment dimension implies that Internet banks should pay more attention to customers' emails, phone calls and personal contact face to face when problems occur. Banks should reply customers' e-mails as soon as possible and provide proper information when customers need some advice. Since quick response can increase customers' satisfaction, personal contact can establish good relationship and trust with the customers. It is recommended that the bank can provide live support over the Internet instead of e-mails. The e-mail responses are not fast enough. So chatting with the personnel over the Internet may be easier to solve the problem and it will also be a more convenient service for customer.

Access dimension indicate that the Internet has a positive impact on it. The analyses in present study indicate that the Internet bring several differences between the physical bank and internet bank. Firstly, the Internet leads better accounting

access and brings more convenience to customers since it can be reached anywhere and anytime when computer is available. It can be reached 24 hours a day, 30 days a month and 365 days a year. Moreover, it can be reached either at home, offices or on the way home/offices. It is even possible for customers to buy or use banking services from any place in the world. Secondly, it leads time and cost saving. Online customers don't need waiting for banking services like physical banks do. Compared with post services, it leads more money saving at the same time. Thirdly, compared with offline services in bank, internet banking services provide more control and freedom. Additionally, safety and access are well combined. It means that customers may conduct business in the evening or even at night and don't worry about the safety.

User – friendliness dimension indicate that internet banking should provide customers with understandable content on bank's website. Multi language selection was high recommended, at least the most popular English version should be provided on website. Since most customers expect to use various financial transactions over internet. Moreover, the bank's site should provide the adequate explanations in order to attract more customers.

Reliability dimension indicate that the Internet has big affects on it since most of online customers are really concerned about the reliability of virtual service providers. In physical bank, performance of employees is always focused by customers, therefore the bank have paid more attention on it and provided more opportunities to develop their staff to instill customers' confidence in banking services. It is important for the bank to conduct business both online and offline. The

reliability of both online and offline is relatively important. It's also suggested that technical function and accurate record provided by Internet should be focused on by banking service provider in online services. It is because online services lack of personal contact. In other words, employees' performance has been replaced by the performance of technical function and accurate record in online banking services to instill confidence in customers.

Efficiency dimension indicate that compared with traditional banking service, Internet banking provides better accountings, quicker transfer speedy and efficiency. It can be said that traditional banking service means prompt service conducted through human contact; while online services means efficient services through click up on Internet. The differences between traditional and Internet banking services indicate that Internet has led more efficient services than traditional ones. At the same time, customers enjoy this time saving services. While the Internet acts as faster, easier transaction platform both for customers and service providers, it's no doubt that Internet has improved customer services.

#### **6.4 Suggestion for future research**

With the development of e-commerce and Internet banking, some areas which are not covered in this study are interesting and need to explore. In addition, the limitation and shortcoming of this study also provide implications for future research. Future research could make several extensions of the current study.

This study has clearly identified access as the most important dimension in service quality. It is identified in this study that Internet leads banking service more convenience, time saving and easier to reach. In addition, it's identified that performance of employees in traditional bank still plays an important role in the dimension of reliability from online perspective.

In the future research can be conducted to explore and include the providers' viewpoint. In other words, it could assess the bank and other financial institutions' viewpoints and their stance regarding what they might identify as service quality variables to satisfy their customers.

Finally, during the process in present research, some other interesting areas are identified for further research:

- Barriers for Internet banking to conduct excellent services.
- Service quality and the importance of customer role in banking sector.
- Service quality and customer satisfaction in internet banking.

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## B. The Internet Banking Service Quality

### Instruction:

Choose the best answer by marking [√]

	Very dissatisfied	Dissatisfied	Neutral	Satisfied	Very satisfied
1. Information that is provided is accurate	1	2	3	4	5
2. The web pages are functioning properly	1	2	3	4	5
3. Information content and texts are easy to understand	1	2	3	4	5
4. Links are problem free, accurate and the pages download quickly	1	2	3	4	5
5. The bank takes care of problems properly and compensate for the problems they create	1	2	3	4	5
6. Knowledge and skill of the contact personnel	1	2	3	4	5
7. You are able to talk to a customer service representative in the bank over the telephone	1	2	3	4	5
8. The bank is willing to help customers, provide appropriate information and prompt service	1	2	3	4	5
9. The website is available in the language you can understand	1	2	3	4	5
10. The bank's site provide information about the transactions and products	1	2	3	4	5
11. Personalization of bank's site for customer's personal requirement	1	2	3	4	5
12. The bank authority care to listen to your queries and meet your personal needs	1	2	3	4	5
13. The bank's site performs the service right at the first time	1	2	3	4	5



## Kuesioner

### Faktor – Faktor yang mempengaruhi Kualitas Pelayanan Internet Banking (Studi kasus : Nasabah Bank Mandiri di Padang)

#### A. Profil Responden

Petunjuk pengisian:

Pilihlah jawaban yang paling tepat dan sesuai menurut Anda dengan memberi tanda [√] pada kotak yang tersedia.

1. Jenis kelamin
  - 1. Pria
  - 2. Wanita
2. Usia (Tahun)
  - 1. < 20
  - 2. 30 – 39
  - 3. 20 – 29
  - 4. 40 – 49
  - 5. > 50
3. Pekerjaan
  - 1. PNS
  - 2. Peg. BUMN
  - 3. Polisi / ABRI
  - 4. Wiraswasta
  - 5. Peg. Swasta
  - 6. Pensiunan
  - 7. Pelajar / Mahasiswa
  - 8. Lain – lain / sebutkan.....
4. Pendidikan
  - 1. SMP
  - 2. SMA
  - 3. D1 / D3
  - 4. S1
  - 5. S2
5. Frekuensi menggunakan internet banking ( per minggu )
  - 1. < 1 kali
  - 2. 1- 3 kali
  - 3. 4 – 6 kali
  - 4. 7 – 9 kali
  - 5. > 10 kali
6. Waktu menggunakan internet banking ( per minggu )
  - 1. < 1 jam
  - 2. 1 – 5 jam
  - 3. 6 – 10 jam
  - 4. 11 – 15 jam
  - 5. 16 – 20 jam
  - 6. 21 – 24 jam
  - 7. > 24 jam
7. Pendapatan per bulan
  - 1. < Rp. 1.000.000
  - 2. Rp. 1.000.000 – Rp. 3.000.000
  - 3. Rp. 3.000.000 – Rp. 5.000.000
  - 4. Rp. 5.000.000 – Rp. 10.000.000
  - 5. > Rp. 10.000.000



	Sangat tidak puas				Sangat puas
19. Situs bank mudah dinavigasi dan mudah digunakan	1	2	3	4	5
20. Kecepatan login account Anda cepat	1	2	3	4	5
21. Kecepatan logout account Anda cepat	1	2	3	4	5
22. Sangat mudah untuk menemukan kebijakan dan pernyataan pemberitahuan di situs bank	1	2	3	4	5
23. Situs bank memiliki akses tidak terbatas ke semua informasi keuangan	1	2	3	4	5
24. Bank melakukan pembaharuan secara berkala untuk internet banking	1	2	3	4	5
25. Halaman web tidak bermasalah setelah Anda memasukkan semua informasi Anda	1	2	3	4	5
26. Halaman web mudah untuk di jangkau dan di kontak	1	2	3	4	5

Sumber: Khan, M. S., Mahapatra, S. S., & Sreekumar. (2009).

# Frequencies

## Statistics

	gender	age	occupation	education	frequency using internet banking	time spent using internet banking	income
N	Valid 150 Missing 0	150 0	150 0	150 0	150 0	150 0	150 0
Mean	1,4467	2,9667	3,5133	3,6067	2,5667	2,2200	2,8667

## Frequency Table

### gender

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid male	83	55,3	55,3	55,3
female	67	44,7	44,7	100,0
Total	150	100,0	100,0	

### age

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid < 20	2	1,3	1,3	1,3
20 - 29	48	32,0	32,0	33,3
30 - 39	65	43,3	43,3	76,7
40 - 49	23	15,3	15,3	92,0
> 50	12	8,0	8,0	100,0
Total	150	100,0	100,0	

### occupation

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid civil servants	29	19,3	19,3	19,3
state-owned enterprise employee	26	17,3	17,3	36,7
police/military entrepreneur	15	10,0	10,0	46,7
private company employee	37	24,7	24,7	71,3
retired	23	15,3	15,3	86,7
student	3	2,0	2,0	88,7
others	16	10,7	10,7	99,3
Total	150	100,0	100,0	100,0

education

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid junior high school	2	1,3	1,3	1,3
senior high school	24	16,0	16,0	17,3
diploma degree	24	16,0	16,0	33,3
bachelor degree	81	54,0	54,0	87,3
master degree	19	12,7	12,7	100,0
Total	150	100,0	100,0	

frequency using internet banking

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid < 1	33	22,0	22,0	22,0
1 - 3	45	30,0	30,0	52,0
4 - 6	42	28,0	28,0	80,0
7 - 9	14	9,3	9,3	89,3
> 10	16	10,7	10,7	100,0
Total	150	100,0	100,0	

time spent using internet banking

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid < 1	56	37,3	37,3	37,3
1 - 5	46	30,7	30,7	68,0
6 - 10	25	16,7	16,7	84,7
11 - 15	10	6,7	6,7	91,3
16 - 20	9	6,0	6,0	97,3
21 - 24	3	2,0	2,0	99,3
> 24 jam	1	,7	,7	100,0
Total	150	100,0	100,0	

income

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid < Rp. 1.000.000	13	8,7	8,7	8,7
Rp. 1.000.000 – Rp. 3.000.000	54	36,0	36,0	44,7
Rp. 3.000.000 – Rp. 5.000.000	32	21,3	21,3	66,0
Rp. 5.000.000 – Rp. 10.000.000	42	28,0	28,0	94,0
> Rp. 10.000.000	9	6,0	6,0	100,0
Total	150	100,0	100,0	

# Factor Analysis (Initial)

## KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,904
Bartlett's Test of Sphericity	Approx. Chi-Square df	2556,134
	Sig.	,000

## Communalities

	Initial	Extraction
VAR1	1,000	,774
VAR2	1,000	,773
VAR3	1,000	,705
VAR4	1,000	,756
VAR5	1,000	,626
VAR6	1,000	,754
VAR7	1,000	,611
VAR8	1,000	,701
VAR9	1,000	,527
VAR10	1,000	,755
VAR11	1,000	,594
VAR12	1,000	,703
VAR13	1,000	,697
VAR14	1,000	,750
VAR15	1,000	,748
VAR16	1,000	,771
VAR17	1,000	,741
VAR18	1,000	,715
VAR19	1,000	,750
VAR20	1,000	,810
VAR21	1,000	,903
VAR22	1,000	,663
VAR23	1,000	,731
VAR24	1,000	,741
VAR25	1,000	,637
VAR26	1,000	,412

Extraction Method: Principal Component Analysis.

VAR2	-.103	.418	-.146	-.040	-.005	.030	-.062	.006	.025	-.032	.003	-.031	-.014	.019	-.020	-.055	-.055	.054	-.042	-.004	-.004	-.051	.008	.023	-.008	-.021	.050	.017	.054	-.030	.021
VAR3	-.068	-.146	.382	-.050	.000	-.010	-.006	-.002	-.061	.014	-.017	-.006	.084	-.061	-.073	.031	.071	-.023	-.048	.004	.010	.037	-.047	.002	.022	-.025					
VAR4	-.072	-.040	-.050	.298	.010	-.024	.023	-.012	-.023	.012	-.009	-8.1E-005	-.062	-.040	.007	-.007	-.014	-.004	.088	.015	-.100	-.018	-.051	.016	-.010	.047					
VAR5	-.037	-.005	.000	.010	.355	-.143	-.068	-.030	-.018	.058	-.026	-.031	.035	-.035	-.045	-.012	.014	.056	-.014	-.027	-.008	.041	-.033	.058	-.002	.055					
VAR6	.044	.030	-.010	-.024	-.143	.322	-.034	-.049	-.045	-.040	-.004	-.001	-.046	.014	.034	-.065	-.039	.006	-.057	-.018	.074	-.031	.028	-.028	.007	.008					
VAR7	.025	-.062	-.006	.023	-.068	-.034	.371	-.140	.002	-.058	.073	-.064	-.048	.021	-.018	-.006	-.015	.019	.086	.012	-.044	-.059	-.005	.039	-.040	.050					
VAR8	.017	.006	-.002	-.012	-.030	-.049	-.140	.357	-.004	.009	-.114	.049	.017	-.046	-.011	.017	.020	-.092	-.031	.015	-.022	.033	.038	-.022	.015	.018					
VAR9	.035	.025	-.061	-.023	-.018	-.045	.002	-.004	.540	-.163	.070	-.049	-.024	-.003	.028	-.046	.021	.006	-.057	.009	-.009	.012	.067	.053	.050	-.113					
VAR10	-.095	-.032	.014	.012	.058	-.040	-.058	.009	-.163	.365	-.089	-.040	-.012	-.005	-.040	.071	.018	.010	-.068	.011	-.014	.053	-.039	-.054	-.004	.086					
VAR11	.008	.003	-.017	-.009	-.026	-.004	.073	-.114	.070	-.089	.371	-.152	.002	-.006	-.008	.001	-.012	.026	.053	-.041	-.011	-.043	.002	.026	.055	-.034					
VAR12	-.031	.017	-.006	-8E-005	-.031	-.001	-.064	.049	-.049	-.040	-.152	.344	-.008	-.015	.013	.007	-.001	-.031	-.012	.026	.053	-.041	-.011	-.043	.002	.026	.055	-.034			
VAR13	-.014	-.039	.084	-.062	.035	-.046	-.048	.017	-.024	.012	.002	-.008	.330	-.189	-.036	.018	-.015	.039	-.023	-.016	.028	.004	-.013	-.047	-.023	-.021	.028				
VAR14	.019	.040	-.061	-.040	-.035	.014	.021	-.046	-.003	-.005	-.006	-.015	-.189	.321	.010	.009	.004	-.057	.036	-.026	.017	.009	.016	-.006	-.069	.019					
VAR15	-.020	.069	-.073	.007	-.045	.034	-.018	-.011	.028	-.040	-.008	.013	-.036	.010	.290	-.125	-.059	-.034	.002	.002	.009	.006	.036	-.074	-.006	-.061					
VAR16	-.055	-.044	.031	-.007	-.012	-.065	-.006	.017	-.046	.071	.001	.007	.018	.009	-.125	.296	-.040	-.058	-.002	-.022	.008	.034	-.039	-.013	-.008	.023					
VAR17	-.055	.005	.071	-.014	.014	-.039	-.015	.020	.021	.018	-.012	-.001	-.015	.004	-.059	-.040	.335	-.140	-.084	.026	.013	-.025	.001	.006	.062	-.016					
VAR18	.054	-.051	-.023	-.004	.056	.006	.019	-.092	.006	.010	.026	-.031	.039	-.057	-.034	-.058	-.140	.339	.004	-.008	-.020	.008	-.035	.025	-.007	-.013					
VAR19	-.042	.008	-.048	.088	-.014	-.057	.086	-.031	-.057	-.068	.053	-.012	-.023	.036	.002	-.002	-.084	.004	.361	-.056	-.066	-.007	-.042	.021	-.019	-.011					
VAR20	-.004	.023	.004	.015	-.027	-.018	.012	.015	.009	.011	-.041	.004	-.016	-.026	.002	-.022	.026	-.008	-.056	.242	-.129	-.069	.020	-.037	.004	.076					
VAR21	.051	-.008	.010	-.100	-.008	.074	-.044	-.022	-.009	-.014	-.011	.009	.028	.017	.009	.008	.013	-.020	-.066	-.129	.204	-.012	.008	.028	-.045	-.072					
VAR22	-.054	-.021	.037	-.018	.041	-.031	-.059	.033	.012	.053	-.043	-.027	.004	.009	.006	.034	-.025	.008	-.007	-.069	-.012	.382	-.063	-.063	-.039	-.047					
VAR23	.017	.050	-.047	-.051	-.033	.028	-.005	.038	.067	-.039	.002	-.047	-.013	.016	.036	-.039	.001	-.035	-.042	.020	.008	-.083	.381	-.138	-.041	-.067					
VAR24	.054	-.014	.002	.016	.058	-.028	.039	-.022	.053	-.054	.028	-.023	-.014	-.006	-.074	-.013	.006	.025	.021	-.037	.028	-.063	-.138	.446	-.126	-.007					
VAR25	-.030	.012	.022	-.010	-.002	.007	-.040	.015	.050	-.004	.055	-.021	.059	-.069	-.006	-.008	.062	-.007	-.019	.004	-.045	-.039	-.041	-.126	.468	-.114					
VAR26	.021	-.036	-.025	.047	-.055	.008	.050	.018	-.113	.086	-.034	.028	-.081	.019	-.061	.023	-.016	-.013	-.011	.076	-.072	-.047	-.067	-.007	-.114	.549					

Anti-Image Correlation	VAR1	.895*	-.286	-.199	-.237	-.112	.140	.075	.050	.085	-.283	.022	-.094	-.044	.062	-.066	-.181	-.169	.168	-.127	-.013	.205	-.157	.049	.146	-.079	.050					
	VAR2	-.286	.897*	-.367	-.113	-.013	.081	-.157	.017	.053	-.081	.007	.045	-.106	.110	.197	-.126	.014	-.135	.020	.073	-.026	-.052	.125	-.034	.028	-.076					
	VAR3	-.199	-.367	.905*	-.149	.001	-.028	-.016	-.006	-.135	.038	-.044	-.016	.236	-.178	-.218	.092	.199	-.063	-.130	.012	.036	.097	-.123	.005	.052	-.054					
	VAR4	-.237	-.113	-.149	.927*	.032	-.079	.070	-.037	-.057	.036	-.028	.000	-.197	-.131	.023	-.025	-.045	-.014	.268	.058	-.404	-.055	-.153	.044	-.027	.117					
	VAR5	-.112	-.013	.001	.032	.921*	-.423	-.187	-.084	-.041	.162	-.071	-.090	.103	-.104	-.139	-.037	.039	.162	-.040	-.091	-.031	.112	-.088	.146	-.006	-.125					
	VAR6	.140	.081	-.028	-.079	-.423	.901*	-.099	-.145	-.108	-.116	-.013	-.004	-.140	.044	.110	-.210	-.120	.017	-.166	-.064	.290	-.087	.081	-.074	.018	.019					
	VAR7	.075	-.157	-.016	.070	-.187	-.099	.905*	-.386	.005	-.159	.196	-.179	-.139	.060	-.056	-.018	-.042	.054	.235	.042	-.161	-.156	-.014	.096	-.096	.112					
	VAR8	.050	.017	-.006	-.037	-.084	-.145	-.386	.913*	-.008	.026	-.313	.141	.049	-.136	-.034	.051	.057	-.265	-.087	.052	-.082	.090	.102	-.056	.036	.041					
	VAR9	.085	.053	-.135	-.057	-.041	-.108	.005	-.008	.873*	-.367	.155	-.115	-.057	-.007	.070	-.114	.049	.014	-.130	.024	-.027	.027	.148	.108	.099	-.208					
	VAR10	-.283	-.081	.038	.036	.162	-.116	-.159	.026	-.367	.881*	-.243	-.114	.034	-.015	-.122	.216	.052	.027	-.188	.038	-.051	.141	-.106	-.133	-.010	.192					
	VAR11	.022	.007	-.044	-.028	-.071	-.013	.196	-.313	.155	-.243	.902*	-.425	.006	-.017	-.023	.003	-.035	.075	.145	-.138	-.039	-.113	.005	.064	.133	-.075					
	VAR12	-.094	.045	-.016	.000	-.090	-.004	-.179	.141	-.115	-.114	-.425	.945*	-.024	-.046	.040	.021	-.002	-.090	-.033	.012	.034	-.074	-.130	-.058	-.052	.064					
	VAR13	-.044	-.106	.236	-.197	.103	-.140	-.139	.049	-.057	.034	.006	-.024	.876*	-.581	-.116	.058	-.044	.117	-.065	-.057	.107	.012	-.036	-.037	.151	-.191					
	VAR14	.062	.110	-.176	-.131	-.104	.044	.060	-.136	-.007	-.015	-.017	-.046	-.581	.899*	.032	.031	.012	-.172	.107	-.093	.068	.025	.044	-.017	-.178	.046					
	VAR15	-.066	.187	-.218	.023	-.139	.110	-.056	-.034	.070	-.122	-.023	.040	-.116	.032	.922*	-.425	-.189	-.108	.005	.008	.038	.017	.107	-.206	-.016	-.152					
	VAR16	-.181	-.126	.092	-.025	-.037	-.210	-.018	.051	-.114	.216	.003	.021	.058	.031	-.425	.921*	-.126	-.182	-.007	-.083	.034	.100	-.115	-.035	-.021	.057					
	VAR17	-.169	.014	.199	-.045	.039	-.120	-.042	.057	.049	.052	-.035	-.002	-.044	.012	-.189	-.126	.909*	-.417	-.243	.090	.050	-.069	.003	.016	.158	-.038					
	VAR18	.168	-.135	-.063	-.014	.162	.017	.054	-.265	.014	.027	.075	-.090	.117	-.172	-.108	-.182	-.417	.914*	.012	-.027	-.078	.023	-.097	.065	-.019	-.030					
	VAR19	-.127	.020	-.130	.268	-.040	-.186	.235	-.087	-.130	-.188	.145	-.033	-.065	.107	.005	-.007	-.243	.012	.908*	-.191	-.244	-.019	-.113	.052	-.046	-.025					
	VAR20	-.013	.073	.012	.056	-.091	-.064	.042	.052	.024	.038	-.138	.012	-.057	-.093	.008	-.083	.090	-.027	-.191	.897*	-.583	-.226	.066	-.112	.011	.208					
	VAR21	.205	-.026	.036	-.404	-.031	.290	-.181	-.082	-.027	-.051	-.039	.034	.107	.068	.038	.034	.050	-.078	-.244	-.583	.836*	-.045	.030	.094	-.146	-.215					
	VAR22	-.157	-.052	.097	-.055	.112	-.087	-.156	.090	.027	.141	-.113	-.074	.012	.025	.017	.100	-.069	.023	-.019	-.226	-.045	.940*	-.217	-.153	-.092	-.102					
	VAR23	.049	.125	-.123	-.153	-.088	.081	-.014	.102	.146	-.106	.005	-.130	-.036	.044	.107	-.115	.003	-.097	-.113												

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	11,118	42,763	42,763	11,118	42,763	42,763	3,557	13,680	13,680
2	2,228	8,568	51,330	2,228	8,568	51,330	3,441	13,235	26,915
3	1,530	5,883	57,213	1,530	5,883	57,213	3,331	12,811	39,726
4	1,375	5,287	62,500	1,375	5,287	62,500	2,968	11,414	51,140
5	1,091	4,196	66,697	1,091	4,196	66,697	2,690	10,346	61,487
6	1,007	3,872	70,568	1,007	3,872	70,568	2,361	9,082	70,568
7	,930	3,576	74,144						
8	,781	3,003	77,148						
9	,649	2,495	79,643						
10	,627	2,413	82,056						
11	,529	2,034	84,090						
12	,449	1,727	85,817						
13	,443	1,704	87,521						
14	,413	1,588	89,109						
15	,362	1,394	90,503						
16	,342	1,315	91,817						
17	,326	1,254	93,071						
18	,272	1,046	94,117						
19	,258	,991	95,108						
20	,252	,971	96,079						
21	,220	,846	96,925						
22	,201	,775	97,699						
23	,181	,696	98,395						
24	,160	,616	99,012						
25	,140	,540	99,552						
26	,117	,448	100,000						

Extraction Method: Principal Component Analysis.

Rotated Component Matrix

	Component					
	1	2	3	4	5	6
VAR17	,798					
VAR16	,770					
VAR15	,702					
VAR18	,688					
VAR24		,832				
VAR23		,773				
VAR25		,714				
VAR22		,637				
VAR26		,466				
VAR14			,762			
VAR13			,722			
VAR8			,611			
VAR7			,594			
VAR10				,739		
VAR9				,636		
VAR12				,556		
VAR6	,496		,452	,545		
VAR19	,462			,516		
VAR11			,440	,482		,427
VAR5	,401		,457	,467		
VAR2					,818	
VAR3					,719	
VAR1					,710	
VAR4			,477		,533	
VAR21						,851
VAR20						,735

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 9 iterations.

# Factor Analysis (Revised)

## KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,906
Bartlett's Test of Sphericity	Approx. Chi-Square	2478,382
	df	300
	Sig.	,000

## Communalities

	Initial	Extraction
VAR1	1,000	,774
VAR2	1,000	,773
VAR3	1,000	,705
VAR4	1,000	,758
VAR5	1,000	,631
VAR6	1,000	,755
VAR7	1,000	,608
VAR8	1,000	,699
VAR9	1,000	,580
VAR10	1,000	,739
VAR11	1,000	,579
VAR12	1,000	,692
VAR13	1,000	,700
VAR14	1,000	,751
VAR15	1,000	,747
VAR16	1,000	,783
VAR17	1,000	,758
VAR18	1,000	,734
VAR19	1,000	,748
VAR20	1,000	,819
VAR21	1,000	,899
VAR22	1,000	,668
VAR23	1,000	,732
VAR24	1,000	,761
VAR25	1,000	,621

Extraction Method: Principal Component Analysis.

Anti-Image Covariance		VAR1	VAR2	VAR3	VAR4	VAR5	VAR6	VAR7	VAR8	VAR9	VAR10	VAR11	VAR12	VAR13	VAR14	VAR15	VAR16	VAR17	VAR18	VAR19	VAR20	VAR21	VAR22	VAR23	VAR24	VAR25
VAR1		.311	-.102	-.068	-.075	-.036	.044	.024	.018	.041	-.103	.009	-.032	-.011	.019	-.018	-.056	-.054	.055	-.042	-.007	.057	-.053	.020	.055	-.027
VAR2		-.102	.420	-.149	-.037	-.009	.030	-.080	.008	.019	-.027	.001	.019	-.047	.042	.067	-.043	.004	-.052	.007	.030	-.013	-.024	.046	-.015	.005
VAR3		-.068	-.149	.383	-.049	-.002	-.009	-.004	-.001	-.070	.019	-.018	-.004	.084	-.061	-.077	.032	.071	-.023	-.049	.007	.007	.035	-.051	.002	.018
VAR4		-.075	-.037	-.049	.302	.016	-.026	.019	-.014	-.014	.005	-.006	-.002	-.058	-.043	.012	-.010	-.013	-.003	.090	.009	-.099	-.015	-.047	.017	.000
VAR5		-.036	-.009	-.002	.016	.360	-.144	-.065	-.028	-.031	.071	-.030	-.029	.029	-.034	-.053	-.010	.012	.056	-.016	-.020	-.017	.037	-.041	.058	-.015
VAR6		.044	.030	-.009	-.026	-.144	.323	-.035	-.050	-.045	-.043	-.004	-.002	-.046	.014	.036	-.065	-.039	.006	-.056	-.020	.079	-.030	.030	-.028	.009
VAR7		.024	-.060	-.004	.019	-.065	-.035	.376	-.144	.013	-.070	.077	-.068	-.043	.019	-.013	-.008	-.014	.021	.088	.006	-.040	-.056	.001	.040	-.032
VAR8		.016	.008	-.001	-.014	-.028	-.050	-.144	.358	.000	.007	-.113	.049	.020	-.047	-.009	.016	.020	-.092	-.031	.013	-.021	.035	.041	-.022	.020
VAR9		.041	.019	-.070	-.014	-.031	-.045	.013	.000	.565	-.158	.066	-.046	-.044	.001	.016	-.043	.018	.003	-.062	.026	-.026	.003	.057	.054	.029
VAR10		-.103	-.027	.019	.005	.071	-.043	-.070	.007	-.158	.379	-.088	-.047	.027	-.009	-.032	.070	.022	.012	-.069	-.001	-.003	.063	-.031	-.055	.015
VAR11		.009	.001	-.018	-.006	-.030	-.004	.077	-.113	.066	-.088	.373	-.151	-.003	-.005	-.012	.002	-.013	.026	.053	-.038	-.016	-.046	-.002	.026	.051
VAR12		-.032	.019	-.004	-.002	-.029	-.002	-.088	.049	-.046	-.047	-.151	.345	-.004	-.016	.016	.005	.000	-.030	-.011	.000	.013	-.025	-.045	-.023	-.016
VAR13		-.011	-.047	.084	-.058	.029	-.046	-.043	.020	-.044	.027	-.003	-.004	.343	-.194	-.048	.022	-.018	.039	-.025	-.005	.019	-.003	-.024	-.016	.047
VAR14		.019	.042	-.061	-.043	-.034	.014	.019	-.047	.001	-.009	-.005	-.016	-.194	.321	.012	.009	.004	-.056	.037	-.030	.021	.010	.018	-.006	-.069
VAR15		-.018	.067	-.077	.012	-.053	.036	-.013	-.009	.018	-.032	-.012	.016	-.048	.012	.297	-.125	-.062	-.036	.000	.011	.001	.000	.030	-.076	-.020
VAR16		-.056	-.043	.032	-.010	-.010	-.065	-.008	.016	-.043	.070	.002	.005	.022	.009	-.125	.297	-.039	-.057	-.141	-.085	.029	.011	-.026	-.001	.066
VAR17		-.054	.004	.071	-.013	.012	-.039	-.014	.020	.018	.022	-.013	.000	-.018	.004	.062	-.039	.336	-.141	-.085	.029	.011	-.026	-.001	.066	.062
VAR18		.055	-.052	-.023	-.003	.056	.006	.021	-.092	.003	.012	.026	-.030	.039	-.056	-.036	-.057	-.141	.339	.004	-.006	-.023	.007	-.037	.025	-.011
VAR19		-.042	.007	-.049	.090	-.016	-.056	.088	-.031	-.062	-.069	.053	-.011	-.025	.037	.000	-.002	-.085	.004	.362	-.057	-.071	-.008	-.044	.021	-.023
VAR20		-.007	.030	.007	.009	-.020	-.020	.006	.013	.026	-.001	-.038	.000	-.005	-.030	.011	-.027	.029	-.006	-.057	.253	-.131	-.066	.031	-.037	.021
VAR21		.057	-.013	.007	-.099	-.017	.079	-.040	-.021	-.026	-.003	-.016	.013	.019	.021	.001	.012	.011	-.023	-.071	-.131	.213	-.020	-.001	.029	-.066
VAR22		-.053	-.024	.035	-.015	.037	-.030	-.056	.035	.003	.063	-.046	-.025	-.003	.010	.000	.036	-.026	.007	-.008	-.066	-.020	.386	-.091	-.064	-.052
VAR23		.020	.046	-.051	-.047	-.041	.030	.001	.041	.057	-.031	-.002	-.045	-.024	.018	.030	-.037	-.001	-.037	-.044	.031	-.001	-.091	.389	-.142	-.059
VAR24		.055	-.015	.002	.017	.058	-.028	.040	-.022	.054	-.055	.026	-.023	-.016	-.006	-.076	-.012	.006	.025	.021	-.037	.029	-.064	-.142	.446	-.134
VAR25		-.027	.005	.018	.000	-.015	.009	-.032	.020	.029	.015	.051	-.016	.047	-.069	-.020	-.003	.062	-.011	-.023	.021	-.066	-.052	-.059	-.134	.492
Anti-Image Correlation		VAR1	VAR2	VAR3	VAR4	VAR5	VAR6	VAR7	VAR8	VAR9	VAR10	VAR11	VAR12	VAR13	VAR14	VAR15	VAR16	VAR17	VAR18	VAR19	VAR20	VAR21	VAR22	VAR23	VAR24	VAR25
VAR1		.892 <sup>a</sup>	-.283	-.197	-.245	-.106	.139	.070	.048	.097	-.299	.026	-.097	-.035	.060	-.059	-.184	-.168	.170	-.126	.024	.221	-.153	.057	.147	-.070
VAR2		-.283	.897 <sup>a</sup>	-.373	-.105	-.023	.083	-.150	.020	.038	-.068	.001	.050	-.124	.114	.188	-.122	.012	-.137	.018	.091	-.044	-.061	.115	-.035	.011
VAR3		-.197	-.373	.902 <sup>a</sup>	-.143	-.006	-.027	-.010	-.004	-.149	.049	-.049	-.012	.231	-.174	-.229	.095	.197	-.065	-.132	.024	.025	.092	-.132	.005	.040
VAR4		-.245	-.105	-.143	.931 <sup>a</sup>	.047	-.062	.058	-.042	-.034	.014	-.019	-.008	-.179	-.137	.041	-.032	-.041	-.010	.273	.033	-.391	-.043	-.138	.046	-.001
VAR5		-.106	-.023	-.006	.047	.920 <sup>a</sup>	-.424	-.175	-.079	-.069	.191	-.081	-.083	.082	-.099	-.161	-.030	.035	.180	-.043	-.067	-.060	.100	-.109	.145	-.035
VAR6		.139	.083	-.027	-.082	-.424	.897 <sup>a</sup>	-.101	-.146	-.108	-.122	-.011	-.006	-.139	.043	.115	-.211	-.119	.018	-.165	-.070	.301	-.086	.065	-.074	.023
VAR7		.070	-.150	-.010	.058	-.175	-.101	.907 <sup>a</sup>	-.393	.029	-.185	.206	-.188	-.120	.055	-.040	-.025	-.038	.057	.240	.019	-.141	-.146	.003	.088	-.073
VAR8		.048	.020	-.004	-.042	-.079	-.146	-.393	.911 <sup>a</sup>	.000	.018	-.311	.139	.057	-.139	-.028	.049	.058	-.284	-.086	.045	-.075	.095	.109	-.055	.047
VAR9		.097	.038	-.149	-.034	-.069	-.106	.029	.000	.892 <sup>a</sup>	-.340	.143	-.104	-.100	.003	.040	-.105	.042	.008	-.138	.070	-.075	.006	.122	.107	.055
VAR10		-.299	-.068	.049	.014	.191	-.122	-.185	.018	-.340	.887 <sup>a</sup>	-.233	-.129	.074	-.025	-.096	.209	.061	.033	-.186	-.002	-.010	.165	-.080	-.133	.035
VAR11		.026	.001	-.049	-.019	-.081	-.011	.206	-.311	.143	-.233	.903 <sup>a</sup>	-.422	-.009	-.014	-.035	.007	-.038	.073	.144	-.125	-.057	-.122	-.007	.063	.120
VAR12		-.097	.050	-.012	-.008	-.083	-.006	-.188	.139	-.104	-.129	-.422	.945 <sup>a</sup>	-.013	-.049	.050	.017	.000	-.088	-.031	-.001	.049	-.068	-.123	-.057	-.038
VAR13		-.035	-.124	.231	-.179	.082	-.139	-.120	.057	-.100	.074	-.009	-.013	.880 <sup>a</sup>	-.584	-.584	-.149	.070	-.052	.113	-.071	-.018	.069	-.008	-.041	.113
VAR14		.080	.114	-.174	-.137	-.099	.043	.055	-.139	.003	-.025	-.014	-.049	-.584	.895 <sup>a</sup>	.040	.028	.014	-.171	.108	-.105	.080	.030	.052	-.016	-.173
VAR15		-.059	.188	-.229	.041	-.161	.115	-.040	-.028	.040	-.096	-.035	.050	-.149	.040	.921 <sup>a</sup>	-.422	-.197	-.114	.001	.041	.006	.001	.087	-.210	-.052
VAR16		-.184	-.122	.095	-.032	-.030	-.211	-.025	.049	-.105	.209	.007	.017	.070	.028	-.422	.921 <sup>a</sup>	-.124	-.181	-.006	-.097	.047	.107	-.108	-.034	-.008
VAR17		-.168	.012	.197	-.041	.035	-.119	-.038	.058	.042	.061	-.038	.000	-.052	.014	-.197	-.124	.908 <sup>a</sup>	-.418	-.244	.100	.043	-.073	-.002	.015	.153
VAR18		.170	-.137	-.065	-.010	.160	.018	.057	-.264	.008	.033	.073	-.088	-.113	-.171	-.114	-.181	-.418	.911 <sup>a</sup>	.011	-.021	-.087	.020	-.102	.065	-.026
VAR19		-.126	.018	-.132	.273	-.043	-.165	.240	-.086	-.136	-.186	.144	-.031	-.071	.108	.001	-.006	-.244	.011	.904 <sup>a</sup>	-.190	-.256	-.022	-.118	.052	-.053
VAR20		-.024	.091	.024	.033	-.067	-.070	.019	.045	.070	-.002	-.125	-.001	-.018	-.105	.041	-.097	.100	-.021	-.190	.905 <sup>a</sup>	-.584	-.210	.099	-.112	.061
VAR21		.221	-.044	.025	-.391	-.060	.301	-.141	-.075	-.075	-.010	-.057	.049	.069	.080	.006	.047	.043	-.087	-.256	-.584	.838 <sup>a</sup>	-.069	-.002	.093	-.204
VAR22		-.153	-.061	.092	-.043	.100	-.066	-.146	.095	.006	.165	-.122	-.068	-.008	.030	.001	.107	-.073	.020	-.022	-.210	-.069	.938 <sup>a</sup>	-.235	-.155	-.119
VAR23		.057	.115	-.132	-.138	-.109	.085	.003	.109	.122	-.080	-.007	-.123	-.066	.052	.087	-.108	-.002	-.102	-.118	.099	-.002	-.235	.918 <sup>a</sup>	-.340	-.135
VAR24		.147	-.035	.005	.046	.145	-.074	.088	-.055	.107	-.133	.063	-.057	-.041	-.016	-.210	-.034	.015	.065	.052	-.112	.093	-.155	-.340	.871 <sup>a</sup>	-.285
VAR25		-.070	.011	.040	-.001	-.035	.023	-.073	.047	.055	.035	.120	-.038	.113	-.173	-.052	-.008	.153	-.026	-.053	.061	-.204	-.119	-.135	-.285	.909 <sup>a</sup>

a. Measures of Sampling Adequacy(MSA)

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	10,884	43,535	43,535	10,884	43,535	43,535	3,507	14,028	14,028
2	2,173	8,692	52,227	2,173	8,692	52,227	3,332	13,326	27,354
3	1,490	5,962	58,189	1,490	5,962	58,189	3,131	12,525	39,880
4	1,372	5,487	63,676	1,372	5,487	63,676	2,866	11,463	51,343
5	1,091	4,364	68,040	1,091	4,364	68,040	2,708	10,830	62,173
6	1,006	4,024	72,064	1,006	4,024	72,064	2,473	9,890	72,064
7	,811	3,242	75,306						
8	,759	3,036	78,342						
9	,648	2,591	80,933						
10	,537	2,148	83,081						
11	,460	1,839	84,920						
12	,448	1,794	86,714						
13	,422	1,687	88,401						
14	,365	1,462	89,862						
15	,345	1,380	91,242						
16	,326	1,306	92,548						
17	,284	1,136	93,684						
18	,262	1,050	94,734						
19	,255	1,021	95,755						
20	,247	,988	96,742						
21	,208	,832	97,574						
22	,183	,731	98,305						
23	,160	,641	98,946						
24	,141	,563	99,509						
25	,123	,491	100,000						

Extraction Method: Principal Component Analysis.

Rotated Component Matrix

	Component					
	1	2	3	4	5	6
VAR17	,813					
VAR16	,782					
VAR15	,707					
VAR18	,701					
VAR14		,767				
VAR13		,732				
VAR8		,606				
VAR7		,591				
VAR24			,841			
VAR23			,767			
VAR25			,691			
VAR22			,626			
VAR10						
VAR9				,716		
VAR6				,685		
VAR12				,546		
VAR19				,526		
VAR5				,515		
VAR11				,480		
VAR2				,453		
VAR3					,820	
VAR1					,721	
VAR4					,713	
VAR21					,534	
VAR20						,861
						,753

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 7 iterations.

## Reliability

### Scale: Privacy

#### Case Processing Summary

		N	%
Cases	Valid	150	100,0
	Excluded <sup>a</sup>	0	,0
	Total	150	100,0

a. Listwise deletion based on all variables in the procedure.

#### Reliability Statistics

Cronbach's Alpha	N of Items
,886	4

## Reliability

### Scale: Fulfillment

#### Case Processing Summary

		N	%
Cases	Valid	150	100,0
	Excluded <sup>a</sup>	0	,0
	Total	150	100,0

a. Listwise deletion based on all variables in the procedure.

#### Reliability Statistics

Cronbach's Alpha	N of Items
,829	4

## Reliability

### Scale: Access

#### Case Processing Summary

		N	%
Cases	Valid	150	100,0
	Excluded <sup>a</sup>	0	,0
	Total	150	100,0

a. Listwise deletion based on all variables in the procedure.

#### Reliability Statistics

Cronbach's Alpha	N of Items
,838	4

## Reliability

### Scale: User-friendliness

#### Case Processing Summary

		N	%
Cases	Valid	150	100,0
	Excluded <sup>a</sup>	0	,0
	Total	150	100,0

a. Listwise deletion based on all variables in the procedure.

#### Reliability Statistics

Cronbach's Alpha	N of Items
,862	7

## Reliability

### Scale: Reliability

#### Case Processing Summary

		N	%
Cases	Valid	150	100,0
	Excluded <sup>a</sup>	0	,0
	Total	150	100,0

a. Listwise deletion based on all variables in the procedure.

#### Reliability Statistics

Cronbach's Alpha	N of Items
,852	4

## Reliability

### Scale: Efficiency

#### Case Processing Summary

		N	%
Cases	Valid	150	100,0
	Excluded <sup>a</sup>	0	,0
	Total	150	100,0

a. Listwise deletion based on all variables in the procedure.

#### Reliability Statistics

Cronbach's Alpha	N of Items
,892	2