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Ph.D. Thesis

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**A SERVICE QUALITY MEASUREMENT FRAMEWORK
FOR MOBILE BETTING:
AN ASSESSMENT OF THEORY AND PRACTICE**

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IŞIK UNIVERSITY

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BETTING:
AN ASSESSMENT OF THEORY AND PRACTICE

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SERVICE QUALITY MEASUREMENT FRAMEWORK FOR MOBILE BETTING

Abstract

Since year 2000 Mobile Services or in other words Value Added Services are continuously growing. Business priority at the emergence of these services has been to launch as many services as possible, regardless of the profits or perfect functionality. However today, as users are becoming experienced and more conscious and competition is getting tough, service quality is becoming more important. The study proposes a quality measurement framework for mobile content services with specific reference to mobile betting, which is one of the highest growing sector in mobile. The scope has been limited specifically with Mobile Internet or wap based sports betting services however can be easily adapted to other content types or access channels. Development of the measurement scale is based on extensive literature review, as well as interviews with professional Web designers, service users and visitors. Previous research based on different measurement frameworks like SERVQUAL, SERVPerf, WebQual, WebQual™, Web Site Quality Model and E-S-QUAL among others have been compared and contrasted extensively. The study proposes 8 core dimensions to measure the quality of mobile betting sites: Assurance, competence, ease of use, flexibility, fun, information quality, privacy and responsiveness. The instrument was refined using a web based questionnaire 4 times and final survey was conducted with 260 mobile betting users.

MOBİL BAHİSTE SERVIS KALİTE ÖLÇÜM ÇERÇEVESİ

Özet

2000 yılından bu yana mobil, bir başka deyişle katma değerli servisler hızla büyümekte. Başlangıçta strateji henüz tüm hatalar giderilmemiş olsa da, hatta kar etmeyeceği bilinse de olabildiğince çok yeni servisleri pazara sunmak iken günümüzde kullanıcıların bilinçlenmesi ve rekabetin artması sonucu servis kalitesi önem kazanmaktadır. Bu çalışma özellikle mobilde en hızlı gelişen ikinci sektör olan bahis örneğinden yola çıkarak mobil içerik servisleri için kalite ölçüm çerçevesi oluşturmayı hedeflemektedir. Kapsam özellikle mobil Internet ya da Wap kanalı ile erişilebilen sabit ihtimalli futbol ve at yarışları üzerine müşterek bahisler ile sınırlanmakla birlikte kolaylıkla diğer içerik tipleri ve erişim kanallarına da uyarlanabilir. Yöntem geliştirilirken elektronik servis kalitesi ile ilgili literatür kapsamlı olarak incelenmiş en çok kullanılan SERVQUAL, SERPERF, WebQual, WebQual™, Web Site Quality Model ve E-S-QUAL gibileri detaylı incelenerek karşılaştırılmış, bunun yanısıra profesyonel grafik tasarımcıları, bahis oyuncularını ve site ziyaretçilerinin görüşlerine başvurulmuştur. Çalışma sonucunda mobil bahis örneğinde 8 ana boyutta servis kalitesinin ölçülebileceği önerilmiştir. Bunlar güven (assurance), yeterlilik (competence), kullanım kolaylığı (ease of use), esneklik (flexibility), eğlence (fun), bilgi kalitesi (information quality), gizlilik (privacy) and yanıt alabilme (responsiveness). Çalışmada web tabanlı bir anket uygulaması ile anket soruları revize edilmiş ve son çalışmada 260 mobil bahis oyuncusu ankete katılmıştır.

To my wife and family

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After three years of work with this thesis, I feel happy and proud that the process is at this stage however, I am still not completely satisfied since the research opened new dimensions to work further in the future, maybe in ergonomics, information systems or even economics. German style education creates people who continuously question. And someone who is born curious and persistent becomes skeptical and never satisfied after 8 years of German school. When I started to work on my thesis I could not imagine that advancements in technology would make my life more difficult. Each and every day new articles and research, which have not been accessible via library research, became available on Google Scholar and other web based sources.

First of all I would like to thank my advisor Professor Emre Gönensay for his support and encouragement during the process. Our discussions about the dimensions helped to reshape the subject and discover alternative paths. Also, I want to thank Associate Professor Mehmet Emin Karaaslan, who reviewed the manuscripts twice and helped reshape the questionnaire; Professor Toker Dereli for his valuable comments and corrections starting from the proposal; Associate Professor Bülent Bali for his attention and contribution regarding the methodology and Associate Professor Ensar Yılmaz for his contribution especially on the data analysis.

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List of Abbreviations

ADSL	Asymmetric Digital Subscriber Line is a data communications technology that enables faster data transmission over copper telephone lines
ASP	Active Server Pages, a web-scripting interface by Microsoft
Dial-up	Dial-up Internet Access is a form of Internet access via telephone lines
EDGE	Enhanced Data Rates for GSM Evolution enables higher speed data transmission
GPRS	General Packet Radio Service
GSM	Global System for Mobile communications
ISO	International Standardization Organization
ITU	International Telecommunication Union
ITV	Interactive television, allows viewers to interact with television content as they view it
IVR	Interactive voice response technology that allows a computer to detect voice and touch tones using a normal phone call
MVNO	Mobile Virtual Network Operator
Operator	The GSM/GPRS Network operator (Turkcell, Vodafone, AVEA)
QFD	Quality Function Deployment
QoS	Quality of Service
SMS	Short Message Service
TAM	Technology Acceptance Model
TRA	Theory of Reasoned Action
VAS	Value added service, non-voice service

WAP Wireless Application Protocol, open international standard that enables access to the Internet from a mobile phone or PDA.

WML Wireless Markup Language

Chapter 1

Introduction

“We must measure what can be measured, and make measurable what cannot be measured.” Galileo Galilee, 1610

1.1 Why is the Subject Worth a Thesis?

In 1997 when I started to work for Superonline, number of dial-up Internet subscribers in Turkey was less than 10.000. I started as an Editor and then was responsible for several services from design to development and operations. Service quality was not the priority; primary objective was to roll out before any other competitor, like all over the world, during those years. And when the service is on production, the main measurement scale to evaluate a service has been the number of users.

With the growing number of users and Internet penetration in Turkey in year 2000 (dial-up Internet subscribers reached 2.000.000) service quality became a hot topic. After the launch of services, standard monitoring measures have been taken. However those were mostly technical criteria which were not directly measuring quality from end-user’s perspective. Other research, like focus groups, was useful; however could not easily lead to product improvements or enhancements.

Millennium’s Eve has not only been a major milestone for Internet. GSM operators around the world started to offer non-voice services to their subscribers. Most of them were free of charge and aimed to create a sense of familiarity among users. Later, when mobile services were charged, new preventive measures became necessary to ensure quality. There were several reasons for this, but major ones are still the same,

difficulties and costs of fixing a problem and customer dissatisfaction which leads to cease of service usage.

Controlling the technical aspects has always been the easier part: Even a smart junior programmer could find some simple tools on Internet modify those and could check several aspects automatically on wap and web. SMS services were just developing in 2002 and even technical control mechanisms were not available worldwide. So we started to design a new Service Quality Control Mechanism: This tool should both check technical and non-technical aspects. Designing the software was easy; however the main question was still not answered: How can we measure from the customer's point of view? Using focus groups was too expensive and not feasible to utilize on a continual basis. We could also start simply by using experts' opinion, but to what extent do they reflect end users' perception?

For editorial content services the classic way of taking a quality measure was simple, to put a second step in the workflow who shall edit what is being written. A redactor shall read and approve all the content. However, since these services were offered to customers as they are produced all people shall work simultaneously. That has been the way we worked for a long time even if this could never be financially feasible. There are several difficulties; a news item which can place a page on web should fit into 160 characters (limit of 1 short message [SMS]), the content shall be entered, approved and delivered to consumers as soon as possible and before any other media since the main reason for consumers to pay for the service instead of reading news or watching TV, is the time constraint.

To make the business operate financially successful, some steps had to be eliminated. Instead of many Quality Controls, some Quality Assurance steps were added which should create continuous feedback for improvement. Certainly these controls also included manual periodic checks on several dimensions of the content depending on the nature of the content.

Even if there are several common denominators like response time or accuracy, each content type has different characteristics and the customer profile also varies. For some content types time is not a critical issue since static content is provided for leisure.

So I decided to work on the subject not only as a business professional, and started to research in university libraries, since there was almost nothing available via Internet. When I discovered that research is only limited to Internet usability and quality, I decided to work on it on an academic level. This is the answer to the important question, why is this subject worth a thesis? I thought to be the first one to work on the subject and still today, there is nothing published around the subject yet. Nowadays, much research is published online faster than before and other than various academic reference listings, Google enables us with Google Scholar, which was not on production when I started to work on my thesis, to search within several online libraries and academic listings online. Therefore it is easier to say that, nothing has been published around the subject of this thesis.

1.2 Research Problem

Since year 2000, GSM operators continuously tried to introduce new mobile services into the markets. Nowadays many content, service or business owners move their offerings into the mobile platform. In Turkey, during the development phases, only a few utilize benefits from usability labs or professional testing companies. And once a service is in production most of the services are not monitored during the life cycle from service owners.

Mobile operators on the contrary strictly monitor all voice services or in other words elements of their core business. Quality of Mobile Services is mostly being measured from a technical standpoint; standards are set by International Telecommunications Union or GSM Association. It is a fact that technical quality leads to success but is not sufficient alone.

Current focus in research on mobile service quality is again mostly on the technical side of especially emerging services like Mobile TV. Although service researchers studied technology-based or in other words e-service quality, few studies have been conducted that focus on mobile Internet. Barnes and Vidgen (Barnes and Vidgen 2001) evaluated mobile Internet news sites using the so-called WebQual-M instrument, to assess the quality from the perspective of the 'voice of the customer' via an online questionnaire comparing three England based wap news sites. Limited with web quality, (Loiacono et.al 2002) WebQual™ was developed to measure the quality of a Web site. There are several researches on web site quality however, except the WapQual-M, none aims to measure the quality of a wap site.

Other Ph.D. level research closely related to mobile service quality concentrates on usability issues (McMahon, 2005) or online value perceptions (Broekhuizen, 2006). On wap usability, Jakob Nielsen also has published several articles or papers (Ramsay, M & Nielsen, J 2000).

On the other side, especially operator and vendors work hardly on service quality measurement and standard setting. The Wireless Service Measurements Handbook (TeleManagement Forum, 2004) provides in depth measurement models for mobile services which include section for user perception; besides technical criteria like speed (download, access or response times) and availability, accuracy rates are evaluated. However this handbook also lacks several criteria which will be included in this research.

In this thesis, the research problem has been how to measure Quality of Mobile Services, specifically Mobile betting, from the user point of view including constructs such as assurance, competence, ease of use, flexibility, fun, information quality, privacy and responsiveness.

1.3 Purpose of the Study

The main purpose of the intended study is to establish a quality measurement framework specifically suitable for mobile betting services and test this model with real service users. The scope is limited with the non-technical aspects of the business, which means the network operator business will not be covered in detail but only mentioned whenever necessary. The research aims to build a model which is practically applicable. Quality of Service is still a very hot topic in service industry and among academic circles and almost every day a new research is being published. Most of the research is based on the SERVQUAL methodology developed by Parasuraman, Zeithaml, and Berry (Parasuraman et al, 1985). During the preparation phase, no research or publication has been found addressing either content or in general non-voice services.

Developing a model requires a deep understanding of user behavior and user – service provider interactions. Why do customers re-use a service or cease service usage after certain experiences? SERVQUAL defines the service quality score as the difference between expected and perceived quality, however the interaction between user and service provider or the post purchase behavior is missing. A complimentary analysis is required to understand satisfied and unsatisfied user behavior.

1.4 Research Questions

This research does neither offer any recommendations for problem solving, nor measures to be taken even if these are presented as natural extensions of the research results. The main aim is to measure the quality of mobile betting services from end user's perspective. Therefore, factors that consumers consider when making choices between alternative service providers is an important criteria.

- Which dimensions of service quality shall be included?

Previous research clearly shows the importance of weighted scores in such an evaluation.

- Which are the most important ones?

One of the main reasons for this research is to fill a gap in theory and practice, none of the existing models can extensively measure mobile service quality, and all of the research emerged from web usage. It might be possible to work on the models or merge underlying factors for further research.

- Can existing models be modified?

WebQual, WebQual-M, SERVQUAL, SERVPERF, Normed Quality, Two-Way, QUALITOMETRO or ITU/ISO standards may be modified to measure the level of mobile content service quality perceived by the consumer.

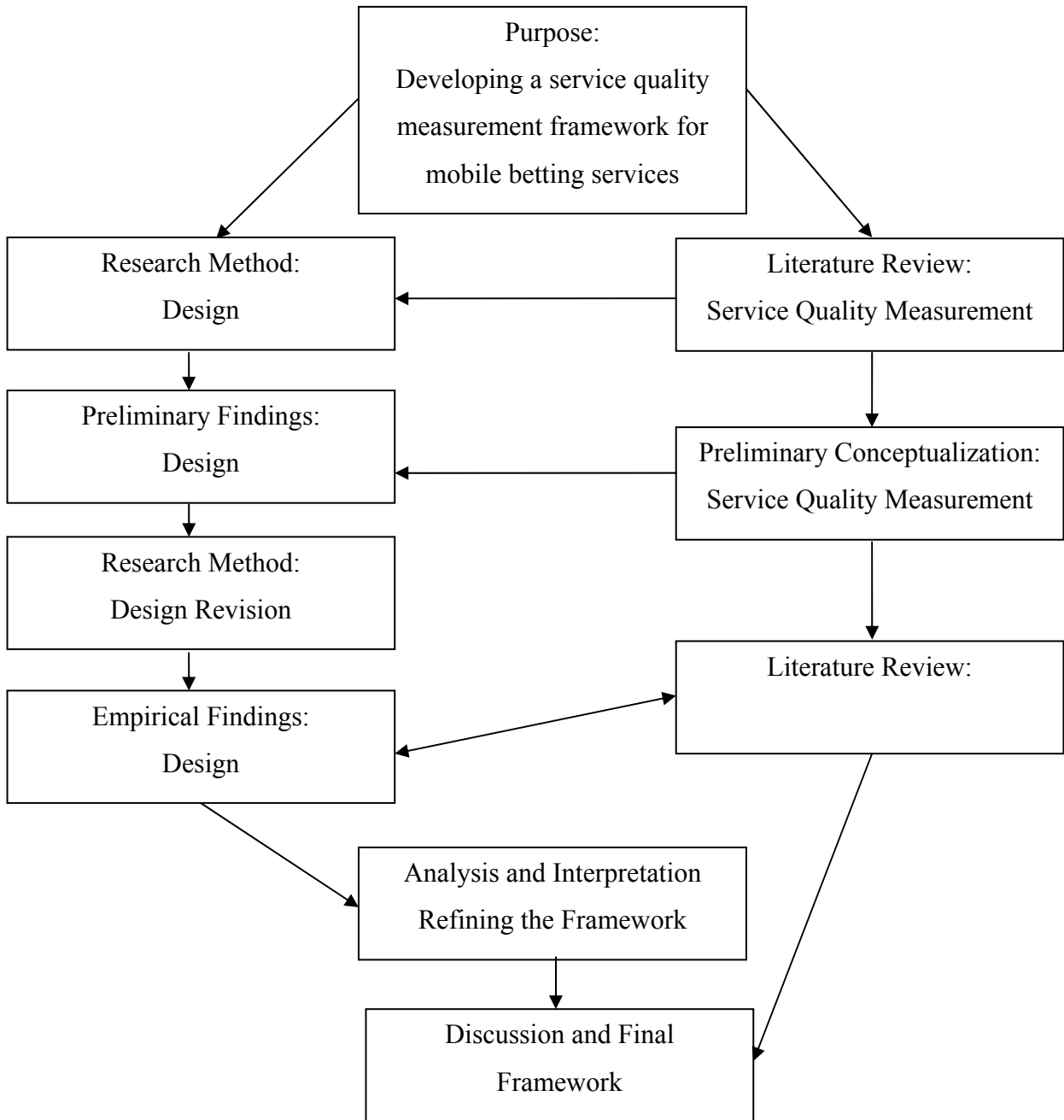
1.5 Structure of Thesis

During the preparation phases, several changes were employed in research strategy. After deciding on the purpose, a deep literature review has been conducted in University libraries, Internet and among professional whitepapers and documents (like Gartner, Informa Telecoms, International Betting consultants) accessible via personal connections. Since the research interest focuses on service quality, theoretical literature review concentrates on service management research with particular reference on service quality. Existing models were compared and contrasted in brief and dimensions and relevant items were identified most of them based on SERVQUAL. With this preliminary analysis, a simplified pilot study was conducted to explore the significance and compliance of the dimensions in the betting environment and to determine bettors' behavior towards attending such an online questionnaire.

At the same time all customer inquiries with e-mail or using a web form or via call center agents for more than one year (more than 50.000 messages), have been filtered and major issues have been listed. That empirical study contributed to refine the dimensions and to shape the final conceptualization and form the new detailed questionnaire accordingly. Additional literature review especially using Internet, since most of the research is online, has been conducted and some other or revised service quality measurements techniques like WebQual 4 or e-TailQ have been evaluated.

The final conceptualization offers a tool to measure mobile betting quality from an end user perspective which defines the level of quality of the service, shows strengths and weaknesses and therefore areas of improvement in practice as well.

Figure 1.1 Research Strategy



1.6 Significance and Contribution of the Study

There is much research conducted on different areas for creating a quality measurement framework, however, there is none made yet on mobile content services. This makes the study an original one from the start on.

This research will not only be a theoretical framework, but the outcome will be easily applicable in businesses. According to Gartner Group (www.gartner.com, 2006), all over the world, mobile content services will generate a large portion of operator revenues by 2010. Especially in Turkey, in year 2008 Higher Board of Telecommunications of Turkish Republic will adjudicate MVNO licenses and mobile number portability is finally issued (11.11.2008) which has been the major barrier for subscribers to switch operators (mobile subscribers will be able to carry their mobile numbers from one operator to another). Another important factor is the 3G license tender which has been postponed to November 2008.

Another important factor is the growing share of mobile in betting industry. A research by Informa Telecoms predicts that 200.000.000 mobile gamblers will spend USD 7.6 billion by year 2010 (Informa Telecoms, 2005).

1.7 Delimitations

The study proposes a service quality measurement framework for mobile betting services. Quality even if there is no consensus on a single definition, includes “value” as a dimension from end user perspective. However, value research is closely related to psychology (as well as socio-economic and cultural studies) and is not included in the current study.

Usability is another key technical concept which needs further attention, however in this research only user's perception under "ease of use" dimension is considered. A research about usability in mobile services shall include ergonomics which is a part of computer science engineering or graphical design.

In mobile communications, several factors influence user-provider interactions. These include mobile network coverage, data connection speed, download speed, drop ratio and similar which are technically measurable. As mentioned above, there are several guidelines and standards issued by ITU or Telecommunications Union addressing that type of measurable elements, however in this research speed is an element valued from customer's point of view and evaluated under "competence" dimension.

Betting traditionally takes place in betting shops (stationary agents). Another alternative for over a century has been telephony. Today alternative channels include world wide web, mobile, interactive television (iTV), interactive voice recognition systems (iVR) and some type of standalone interactive machines connected to internet. Mobile betting can be placed via a WAP site, short messaging (SMS) or an application (Java or similar) which connects through mobile network. If the players use a mobile device to connect to Internet or the typical stationary agents and or stand alone machines are connected via mobile is not in the scope of this research. By mobile betting it should be understood that the only device to put a bet through is the mobile phone's graphical interface, therefore the scope is limited with wap or mobile application usage. Theoretically the relationship can be defined as technology based self-service.

Another major constraint in mobile services is still device compatibility. Major mobile device producers (Nokia, Sony Ericsson, Samsung, Siemens, Motorola) traditionally developed their own operating systems which as a result caused difficulties for application developers in adopting services for each device. Today the two market leading platforms are Symbian, Linux and Microsoft Mobile followed by J2ME, Palm and BlackBerry. Android developed and launched by Google (November 2007) will be in competition as well. During the survey, different Operating systems were not taken

into consideration since the sample population consists of bettors who already benefit from the service.

Chapter 2

Literature Review

The subject of the thesis requires deep understanding of several theoretical concepts as well as major socio-economic issues. What is betting, what is the difference from gambling? How does the industry grow, are there any limits? What kinds of differences exist between service quality and electronic (in general) and mobile (in specific) service quality? Do user perceptions differ from service to service and how can it be valued? There are several models developed and applied to measure traditional and also electronic service quality; how can this thesis benefit from the findings? What are the dimensions of mobile betting quality, how can this be measured? As stated in the above paragraph, the literature review covers a very wide range of topics and in this section these topics will be elaborated one by one.

2.1 Evolution of Betting

2.1.1 Gambling, Betting and Gaming

Gambling is wagering money or something of material value on an event with an uncertain outcome with the primary intent of winning additional money and/or material goods (Wikipedia, 2007). Typically, the outcome of the wager is evident within a short period of time. Or in other words, according to dictionary “gambling is playing games of chance for money”. Betting is “an agreement between two sides that one proved wrong about the outcome of an event and will pay a stipulated sum of money to the other” (Lubet 2006, pp20). All gambling involves betting but not every bet is a gamble, there is a clear distinction between two terms. Another important term, gaming, refers to

instances in which the activity has been specifically permitted by law. Since the subject of the thesis is legal betting, it will be dealt in depth. The types of bets available in Turkey today include sports events such as horse racing and soccer matches. Both types offer some predictability according to bettors' knowledge which will have an advantage over others.

2.1.2 Gambling Industry

Online gaming is still a comparatively young industry, the first online gaming offerings date back to 1996. According to a survey published by Global Betting and Gambling Consultants in 2005 (GBGC, 2005), gross gaming revenues (defined as betting stakes less customer winnings) totaled ca. USD 247 billion worldwide of which only 3,9% coming online ca. USD 9,6 billion. There are several reasons for the rapid increase in the share of online gaming. First of all Internet connection speed is increasing whereby prices decrease. In year 1997 in Turkey, dial-up Internet connection only offered a speed of 56 kb/sec for 30 TL a month. Today, for the same price, ADSL connection with a speed of 2 MB/sec is offered. The penetration rate is still increasing, according to International Telecommunications Union, as of March 2008 number of people connected to Internet in Turkey is about 26,500,000 with a penetration rate of 36.9% (ITU, 2008). Penetration of mobile phones is 72,6% in 2007 which makes Turkey one of the leading countries in Europe (TURKSTAT, 2008).

In the next page, a recent survey (2008) conducted online asking representatives from different betting operators about their shares in online market. Figures about mobile share are not displayed since most of the countries either do not provide mobile betting or did just start this business. The online shares are as follows:

Table 2.1 Share of Internet Sales of Betting in 2008 in some European Countries

Country	Internet sales percentages	Operator
Austria	7%	Tipp3 Wetten
Czech Republic	60%	Sazka
Denmark	16,5%	Danske Spil
France	4%	Francaise des jeux
Greece	N/A	Opap
Netherlands	a little less than %9	Lotto
Hungary	9%	Szerencsejatek
Iceland	25% (in fixed odds game) 60% (in pool games)	Íslensk Getspa
Isreal	7,5%	Toto Israel
Slovenia	35%	Sportna Loterija
Sweden	20%	Svenska Spel
Turkey	11,5%	İnteltek

Source: Compiled through personal communication with the commissioned operators of related countries.

There are some interesting findings. In Czech Republic, Internet is still banned, Sazka is offering Internet betting via phone, by which customers prepare their bets in Internet and then confirm their tickets by the phone or through a printed barcode on any stationary agent. In Greece as well betting via Internet is not offered even if it is not prohibited by law.

In Netherlands, it has gone a little down from 10% probably as a result of growth of the turnover realized in the stationary agents. Hungary represents the opposite, it was 1,9% last year. However increasing the payout rate 6% in the first Quarter of 2008 and launching a new fixed odds game at the end of April only for the Internet bettors the share increased very rapidly.

According to Gartner Group (Gartner, 2005) gambling and pornographic material generates large revenues on Internet and is expected to create similar revenues on the mobile. Service providers have to deal with security and regulatory risks like in Internet; however it is worth to deal with. Informa Telecoms predicts, 200.000.000 mobile gamblers will spent USD 7,6 billion by year 2010 worldwide (Informa Telecoms, 2005). There are three key types of mobile gambling - sports betting, lotteries and casino-gaming (including poker and bingo) which will generate this large volume.

2.1.3 Games of Luck in Turkey

In Turkey betting, gambling or in general games of luck or chance have a relatively short history compared to England or other European countries. Today there are three authorities organizing games of luck, namely Milli Piyango İdaresi Teşkilatı, Türkiye Jokey Kulübü and Spor Toto Teşkilatı.

Oldest document found dates back to late 18th century mentioning of *lotarya*. In year 1856 a lottery among non-Muslim in İstanbul –Yeşilköy was organized distributing houses, fields and money. In 1857 first a foreign lottery tickets were banned and later in the same year there was an attempt to ban lotteries at all. It is understood that there were more than 300 people who were authorized by the police (*Bab-ı Zaptiye*) to organize lotteries. In 1887 state officially organized a lottery called *promise* or “Şark Demiryolları Tahvilleri Piyangosu” to finance the European railway project.

In 1887 Izmir Ottoman Lottery and in 1888 Bulgarian Lottery started authorized by the state and continued until 1914. Between 1906 and 1909 Ziraat Bankası lottery was organized to finance immigrants from Caucasia and Balkans.

First state organized lottery dates back to 1926 called *Tayyare Piyangosu* organized by Türk Hava Kurumu in order to finance education of pilots, buying new aircraft and later to build aircrafts. The General Directorate had 425 agents all over Turkey. To increase

costs and build a dedicated organization in year 1939 Milli Piyango İdaresi Teşkilatı (General Directorate for National Lotteries) was founded.

First horse races in Turkey were organized by Symrna Racing Club in İzmir in 1856. In 1909 Ottoman Racing Club was founded however there is not much information about the activities. In 1913 Sipahi Ocağı Binicilik Kulübü, in 1926 Yüksek Yarış ve İslah Encümeni and finally in 1950 Jockey Club was founded.

Spor Toto Teşkilat Başkanlığı was founded in 1959 after much debate in the parliament. It has been offering only the typical match result estimation (Spor Toto) until “iddaa” the fixed odds betting has been launched in 2004.

Inteltek İnternet Teknoloji Yatırım ve Danışmanlık Ticaret A.Ş. has become the preferred bidder through direct provision and continues the betting game called iddaa. Under this income based subcontracting agreement, Inteltek conducts not only corporate communications and marketing operations of iddaa and Spor Toto games but also manages sales and distribution network including all technical and logistics requirements. More importantly risk management is run by Inteltek.

Risk management is the most important element of fixed-odds betting operations, the total amount players can win by a single coupon is limited with 500.000 YTL, however theoretically there is no limit on the number of winners. With more than 50% tax burden, there a great disadvantage compared to international operators. The income share ratio has been 11,4% before the recent tender, now Inteltek will continue with 1,4 %. In March 2009, basketball and other sports will be added to iddaa menu.

In 2007 total revenues of the three authorities is around YTL 6 billion. All the three organizations have a typical stationary agent network. Since 2005 Spor Toto and since 2006 TJK and Milli Piyango have electronic agents offering different types of games via alternative channels like İnternet, mobile and digital TV, although there is not a real competitive environment. Spor Toto and iddaa, games offered by Spor Toto Teşkilatı,

are accessible via two e-agents namely Bilyoner and Nesine. However TJK and Milli Piyango games are only offered by Bilyoner as of October 2008.

Milli Piyango privatization is the next hot topic in the industry not only in Turkey but also in international arena. The population of Turkey and the current offering attracts major players of the industry.

2.1.4 Legal Environment

In the previous section, all the legal gaming activities are summarized. As an addition to legal betting in Turkey, illegal activities shall also be emphasized. Especially from late 90's with the increasing penetration rate of Internet, until Spor Toto tender, online sports betting have been very popular in Turkey. Even after iddaa, several companies have conducted Turkey operations, with either a localized web page or a new brand for their Turkish customers. Some of them even launched Liaison Offices to run their marketing activities. Even if all activities were illegal, there have been gaps in laws and regulations. According to Sportingbet Annual Report of 2007, its' Turkish Marketing Partner Superbahis' 2007 turnover amount to £127 million.

In Turkey, online gambling and betting activities are regulated under several laws and regulations (Official Gazette Numbers 25772, 25611, 26530, 26108, 10201, and 26448):

1. Misdemeanors Law,
2. Turkish Criminal Code,
3. Law No. 5651 on the Regulation of Publications on the Internet and Suppression of Crimes Committed by means of Such Publications,
4. Online Gaming Regulation
5. Law No. 7258 on Betting Activities Related to Soccer and other Sports Matches recently amended by Law No. 5583.

All the recent laws and regulations passed by the parliament are as a result of the high tax income generated by iddaa and the continuing off-shore betting activities. It is assumed that almost half of sports betting originating from Turkey are placed in illegal channels. There has been a huge loss of tax revenue and therefore several measures have been taken.

All online gaming is monitored by a body formed under the Gaming Directorate of Milli Piyango. Inspectors sent results of such investigations to the legal department of the Gaming Directorate. Legal department may open a case by the relevant courts, and initiate criminal proceedings against the operators. If the relevant court decides to suspend activities of the operator, the judgment is sent to the Telecommunications Authority to halt the publication of the web page by the internet service provider. Even if the service is provided outside of Turkey, the responsible of these entities may be sentenced to imprisonment up to five years and may be subject to monetary fines as well. The same penalties also apply for legal entities that offer advertising opportunities or allow money transfer to illegal betting companies. Of course it is practically impossible to implement any penalty to those individuals or legal entities unless they have a presence in Turkey.

2.1.5 Gaming Limitations

From end user perspective, there are important advantages of the above mentioned illegal channels for fixed-odds sports betting. The possible payout ratio cannot be over 50% at any period. On the other hand, most of the major international betting companies are running their operations in so-called tax-free grounds such as Malta, Gibraltar, Alderney, Guernsey or Isle of Man where the total tax ratios is between 1%-2,5%. The officially declared payout ratios from such companies are varying between 85%-93%. High taxes still build a barrier for a more successful betting environment in Turkey and bettors still try and find a way to play overseas. The advantages are as follows:

1. Single match: Bettors can place a bet on a single event at any time. For iddaa, this is one of the most important disadvantages; the risk is so high that offering single event bets is very seldom.
2. Odds: The odds are considerably higher (1,45 compared to 1,65). Again an issue related to high taxes applied in Turkey.
3. Live betting: Most of the currently banned betting operators, are offering live betting on a single event. So members can bet during a game at any minute about several different options. This is also not offered yet in Turkey by iddaa.
4. Variety of events: Today, iddaa is still limited with soccer, however other sport types will be added as of March 2009 as mentioned above.

Today it is still a fact that millions of Liras are bet on off-shore operators either via phone or even terminals placed in Turkey.

2.1.6 Economic Contribution

In Turkey everyone who plays any type of games of chance, should know that the odds declared as a result of high taxes and therefore the payout ratio is maximum 50%. The rest besides service provider and agency fees, is distributed among several state institutions.

There are 2 tax types applied in general: Value Added Tax (*KDV, Katma Değer Vergisi*) and Tax on Games of Chance (*ŞOV, Şans Oyunları Vergisi*). Entertainment Tax (*Eğlence Vergisi*) is only applied to Horse Races.

It is a fact that Turkish football teams continuously increase their budgets as a result of high iddaa revenues generated in the last 4 years. 9,7% of overall iddaa sales are supporting clubs' budgets and this result in higher transfer budgets or other investments. Today even average Turkcell Super League clubs can utilize most of the foreign player quotas which has not been imaginable 5 years ago.

A sample distribution table of betting revenues is provided in Table 2.2 below. The total contribution to state organizations, sports clubs or other contribution in form of tax revenues are presented in this table. Even if it is subject to change, total payout can never be over 50 % at a period.

Table 2.2 Tax Distribution Table of Fix-Odds Betting Revenues (June 2007)

Tax or State Institution	Share
Tax on Games of Luck	3,00 %
Value Added Tax	13,32 %
Sports Clubs	9,70 %
Social Services and Child Protection Agency	0,84 %
Defense Industry Support Fund	0,07 %
National Olympic Committee	0,01 %
General Directorate of Higher Education Credit and Hostels Institution	0,04 %
Turkish Promotion Fund	0,02 %

Source: www.sportoto.gov.tr (June 2007)

2.2 Service Quality

2.2.1 Quality

The Quality Vocabulary (American Society for Quality, 2007) defines quality as “a subjective term for which each person has his or her own definition”. In technical usage, quality can have two meanings: the characteristics of a product or service that bear on its ability to satisfy stated or implied needs and product or service free of deficiencies. Juran (Juran, 1988) defines it as “fitness for use”, Philip B. Crosby (Crosby, 1979) as “conformance to requirements”. H. James Harrington (Harrington, 1987) says “*Quality is meeting or exceeding customer expectations at a cost that represents value to them*”. A. V. Feigenbaum (Feigenbaum, 1990) defines quality as “the total composite product and service characteristics of marketing, engineering, manufacturing, and maintenance through which the product and services in use will meet the expectations of the customer”, Kaoru Ishikawa in Japan Industrial Standards (Ishikawa, 1985) defines as “a system of production methods which economically produces quality goods or services meeting the requirements of consumers”

All definitions above were general statements for products not specifically services. Especially mobile content service or in specific mobile betting has different characteristics. The typical service characterization of Kotler (Kotler, 2001) as intangible, inseparable, variable and perishable fits to some extent but beyond this classic definition, today in a new era when most people are getting mobilized it becomes a life style.

2.2.2 E-Service Quality

When mobile content services are considered, all of the definition fully applies with management implications. The nature of mobile content services from Kotler's marketing perspective mentioned in previous section can be categorized as hybrid or major service with accompanying goods and services. The quality of the service, on the contrary to products, is not only judged on the evidence of the outcome itself, but also the aspect of the way in which it was produced (Slack et.al 2000). Slack creates a unified view from the operational and customers' perception and defines quality as "the degree of fit between customers' expectations and their perception of the product or service". Therefore the approach used in this research will be instead of a transcendent or manufacturing, a user (fit for its purpose)-product (measurable set of characteristics)-value based (cost-and-price) approach (Garvin, 1988).

The most important difference between traditional and electronic service quality comes from the actors of interaction. In e-services, a machine is replacing the human interaction. Therefore the typical dimensions and variables also differ. The typical dimensions in traditional service quality are tangibles, reliability, responsiveness, assurance and empathy (Parasuraman et.al 1988).

2.2.3 Service Quality and Customer Satisfaction

In the evolution of service quality concept, one of the major issues has been distinguishing it from the concept of customer satisfaction. There is a consensus that the two are "conceptually distinct, yet empirically overlapping constructs" (Schneider et al, 2003), but there is still debate going on about details. The definitions provided in the previous section all figure that service quality from a user's perspective is user's judgment about the service itself, whereas satisfaction is more a judgment on the emotional effects of the service perceived by the user. Quality perception develops

before personal experience even by advertisement and word of mouth communication, however satisfaction, consumer has personally experience the service.

Next is a more important question which will directly affect the questionnaire and the model to be established: Does satisfaction cause quality judgments or vice versa? There is a consensus on this: quality judgments cause satisfaction. (Schneider et al 2003).

As a summary of different definition, service quality can be best described as judgment of customers on different levels of service characteristics which lead to customer satisfaction.

2.3 Measurement Framework Models

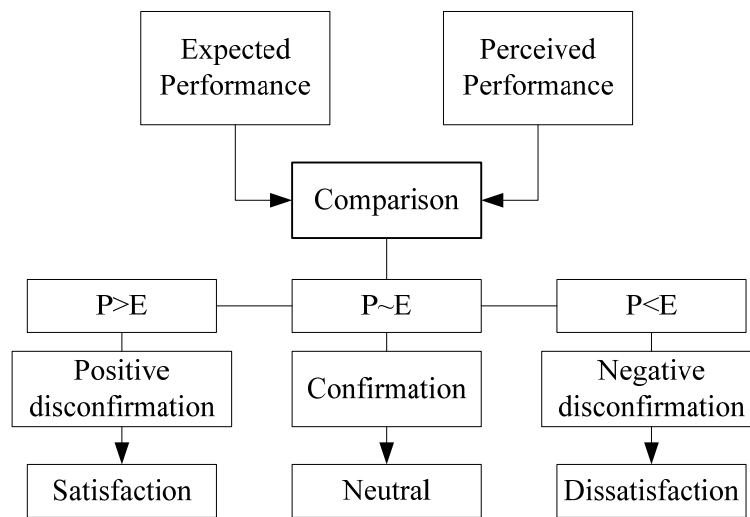
Quality has been a topic researcher deal for a century however models for measuring quality of services developed date back to late 80s. There are several methods some of which will be studied in detail. SERVQUAL is the most important one and much research conducted has been based on this model. Therefore this section starts with a comprehensive analysis of the research conducted by Parasuraman, Zeithaml and Berry.

2.3.1 SERVQUAL

The last service quality definition is in parallel with the SERVQUAL model which measures the difference between customer expectations of service and perceived service. Its foundations lie back in the gap model presented by Parasuraman, Zeithaml and Berry (1985, 1988) with roots in disconfirmation paradigm¹ (Walker, 1995).

¹ Perception of service quality (or customer satisfaction) can be analyzed as confirmation or disconfirmation of customer expectations of service offered (Walker, 1995)

Figure 2.1 Disconfirmation Paradigm



Source: Walker (1995) Journal of Services Marketing, pp 6.

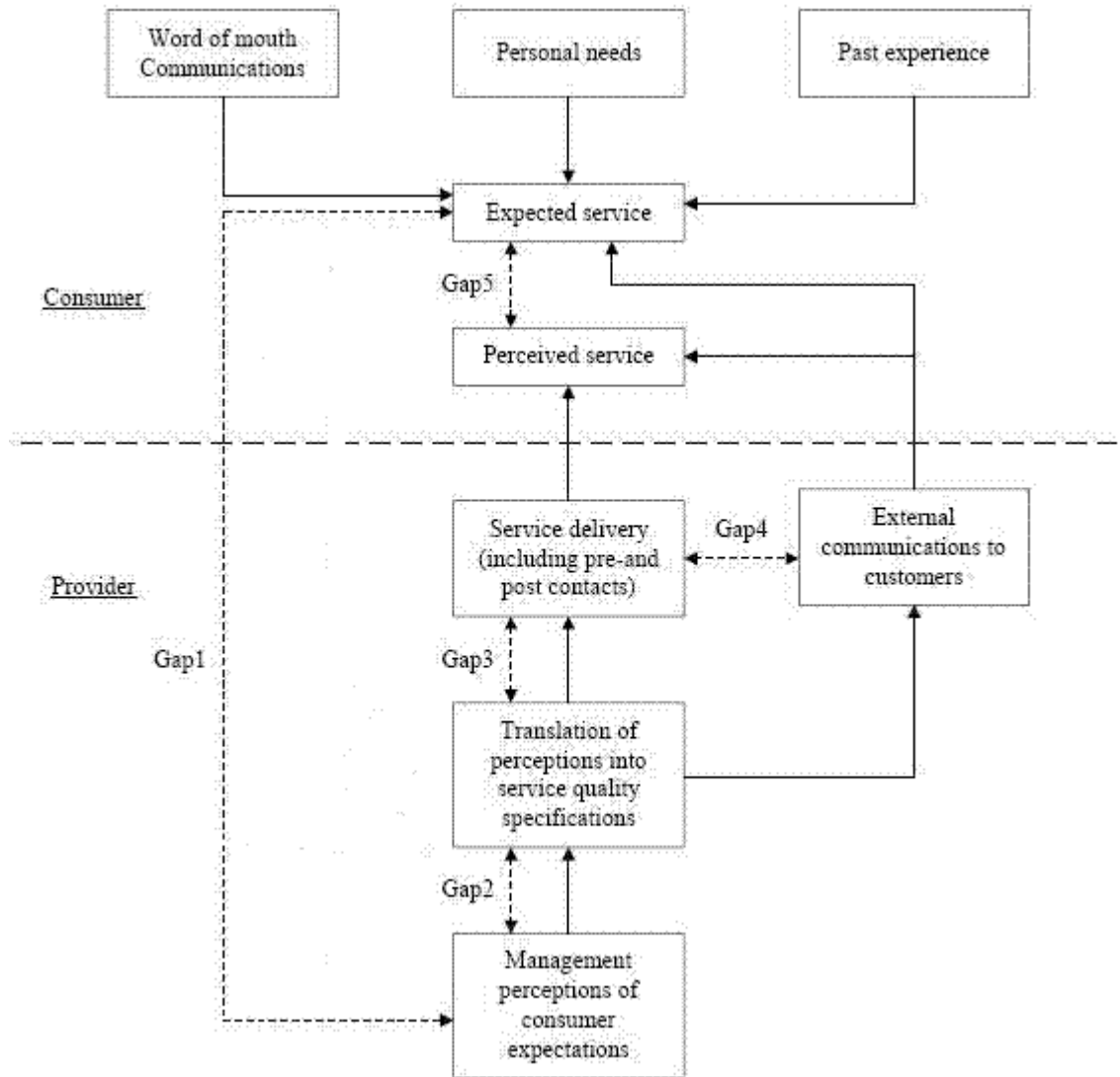
In the first research in 1985 there has been limited literature on service quality measurement and therefore the authors started with an exploratory qualitative study to investigate the concept. They conducted focus group interviews with consumers and in-depth interviews with executives from different departments (Customer Relations, Marketing, Operations and Senior Management) of 4 well recognized service companies to find answers to the following questions:

- What do managers of service firms perceive to be the key attributes of service quality? What problems and tasks are involved in providing high quality service?
- What do consumers perceive to be the key attributes of service quality?
- Do discrepancies exist between both perceptions?
- Can both perceptions be combined in a general model that explains service quality from the consumers' standpoint?

They chose 4 service categories for investigation, retail banking, credit card, securities brokerage and product repair and maintenance. 3 focus groups for each sector were

conducted with recent male and female customers of each company. As a result of focus groups and in-depth interviews commonalities among industries prevailed. However, they also identified 5 gaps presented in Figure 2.2 below.

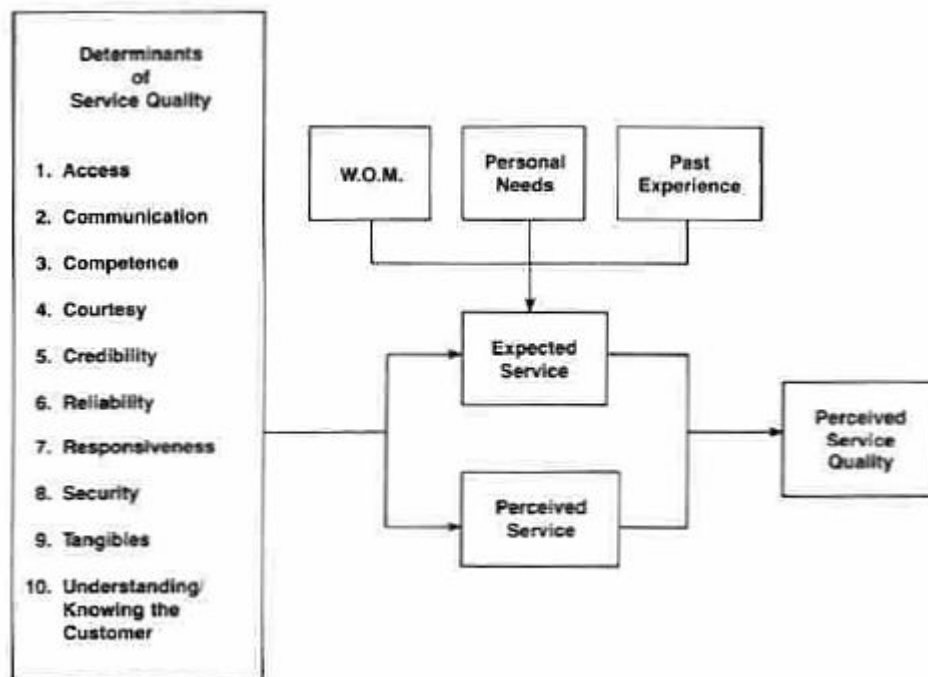
Figure 2.2 Service Quality Model



Source: Parasuraman et.al (1985) Journal of Marketing, Fall 85, pp 44

They proposed regardless of the service, consumers used similar criteria to evaluate services, which fall into 10 key categories labeled as “service quality determinants” shown in figure 2.3 below.

Figure 2.3 Determinants of Perceived Service Quality



Source: Parasuraman et.al (1985) Journal of Marketing, Fall 85, pp 48

If the expectations are higher than the perceived performance perceived quality is not satisfactory. The SERVQUAL technique is the mostly used method for measuring service quality.

In 1988 they focused on the 10 determinants of the service quality and after a two-step scale purification, they reduced the number to 5 ranked in order of importance: reliability, assurance, tangibles, responsiveness and empathy.

This technique consists of three sections, and is based on the above shown gap analysis which is conducted measuring the discrepancies of a providers' service quality performance against customer service quality expectations or needs. This empirical technique can be used in any traditional service organization to increase performance and improve quality. In this method to understand the needs and expectations of target or existing customers a questionnaire is run. In the original research data was collected from 2 banks, 2 telephone companies and 2 insurance companies and questionnaires were dispensed using mail. Sample size differed between 290 and 487. The first questionnaire consisted of 22 items.

The second questionnaire is provided to see the existing level of service quality perceived by the usage of the service again including 22 items. In both, customer is asked to rate expectations / perceptions on a seven point Likert scale (1 strongly disagree, 7 strongly agree). The result of the gap analysis is Perceived Performance-Expectations. In the 3rd stage level of importance of five key determinants/dimensions are measured to weight the final service quality score. Data analysis included factorial analysis followed by oblique rotation. Reliability declared (Cronbach's alpha coefficient) was between 0.8 and 0.93. Dimensions are shown in Figure 2.

$$SQ_i = \sum_{j=1}^k (P_{ij} - E_{ij})$$

where:

SQ_i = perceived service quality of individual 'i'

k = number of service attributes/items

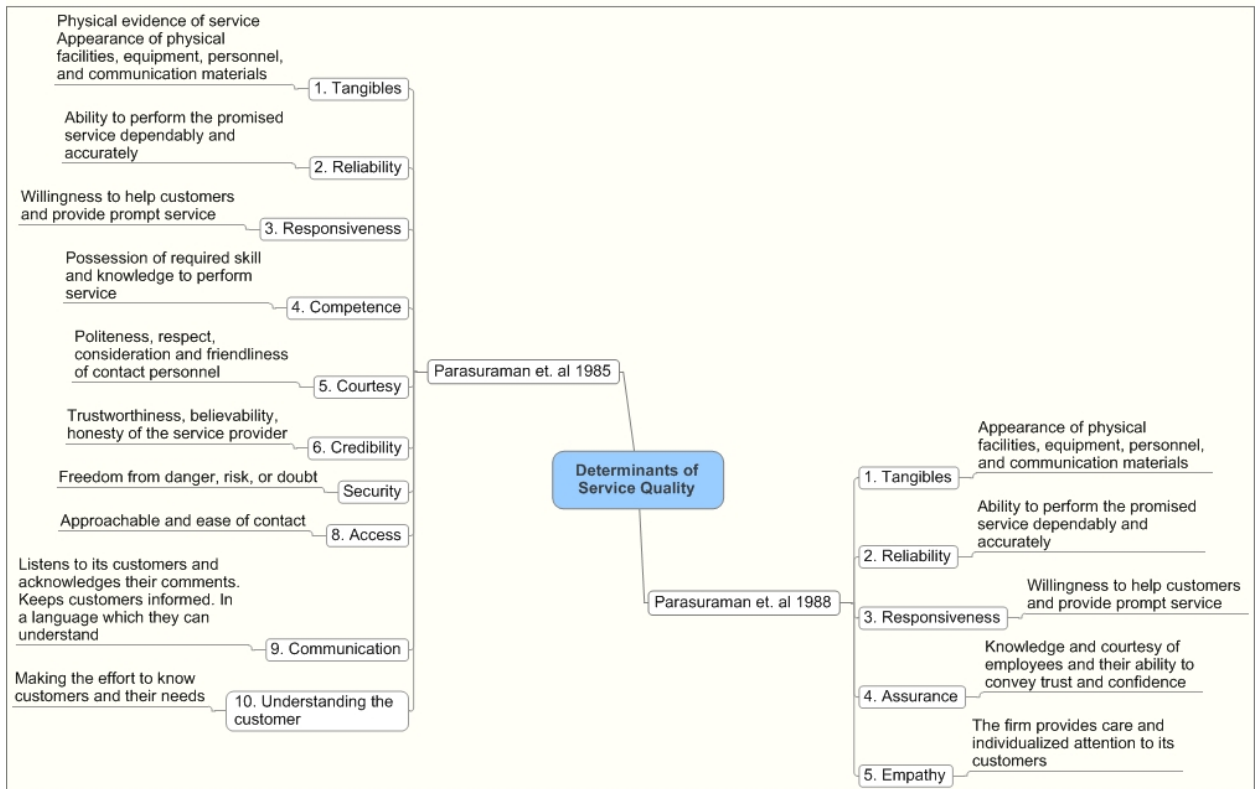
P = perception of individual 'i' with respect to performance of a service firm attribute 'j'

E = service quality expectation for attribute 'j' that is the relevant norm for individual 'i'

The SERVQUAL scale has been criticized on various grounds. Major critics concentrate on the length of the questionnaire, the use of (P-E) gap scores, predictive power of the instrument, and validity of the five-dimension structure (e.g., Babakus and Boller, 1992; Cronin and Taylor, 1992).

Development of determinant of service quality by Parasuraman et al. can be seen below in Figure 2.3.

Figure 2.4 Development of Determinants of Service Quality



2.3.2 SERVPERF

Since the ground-breaking introduction of SERVQUAL method in 1988, discussions are still going on the concept, and validity. Cronin and Taylor (1992) were amongst the critics who developed a new scale called SERVPERF. The new model excluded E, the expectation component, and instead P, performance component be used alone; so service quality is evaluated by perceptions only, without expectations and without importance weights. Higher perceived performance means higher service quality.

They provided empirical evidence to prove the superiority of the new instrument over the SERVQUAL in several industries (namely banks, pest control, dry cleaning, and fast food). They used very similar methodology during the research; the response scale is a seven point Likert scale, questionnaires dispensed via mail and data analysis again included factorial analysis followed by oblique rotation. Reliability declared was between 0.63 and 0.98.

$$SQ_i = \sum_{j=1}^k P_{ij}$$

where:

SQ_i = perceived service quality of individual 'i'

k = number of attributes/items

P = perception of individual 'i' with respect to performance of a service firm on attribute 'j'

It is a fact that service quality attributes are not equally important among different sector, for this reason, Cronin and Taylor included important weights in the formula (Zeithaml et al did the same later in 1998):

$$SQ_i = \sum_{j=1}^k I_{ij}(P_{ij})$$

Zeithaml in a study admitted that "...Our results are incompatible with both the one-dimensional view of expectations and the gap formation for service quality. Instead, we find that perceived quality is directly influenced only by perception (of performance)." (Boulding et al., 1993). This confession alone may prove the superiority of the SERVPERF scale.

2.3.3 WebQual or WebQual/M

Barnes and Vidgen developed the model based on Quality Function Deployment (QFD), "structured and disciplined process that provides a means to identify and carry the voice of the customer through each stage of product and or service development and implementation" (Slabey, 1990). The process starts with capturing the "voice of customer" turning them into business / software development requirements and offer as quality of service. All qualitative customer assessments are turned into quantitative metrics which offer a tool for managerial decision making. The tool is used in two separate ways; either to compare sites in the same sector or reevaluate the same site over a time period to observe changes and take necessary measures.

In the survey users are asked to rate target web/wap sites for each quality against a 5 point scale and also appoint importance to each of the qualities.

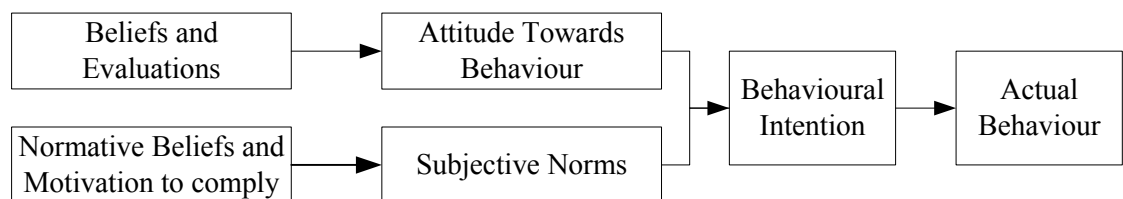
The three main dimensions customer perceived quality in the model are information quality, interaction quality and Web site design quality. Information quality is based on the communications theory of the information systems literature and is therefore more suitable for information intensive sites like news. Interaction quality is derived from SERVQUAL, and Web site design is based on usability or ergonomics literature.

WebQual is a transaction specific assessment of a web site. It does not offer a tool to measure the quality of a web site, rather provides a comparison or improvement framework for web designers.

2.3.4 WebQual™

This model Loiacono et.al (2002) is based on Theory of Reasoned Action (TRA) (Fishbein and Ajzen, 1975), Technology Acceptance Model (TAM) (Davis, 1989) and develops a measure of Web site quality that predicts customers reuse of the site with 12 core dimensions: informational fit-to-task; tailored communications; trust; response time; ease of understanding; intuitive operations; visual appeal; innovativeness; emotional appeal; consistent image; on-line completeness; and relative advantage.

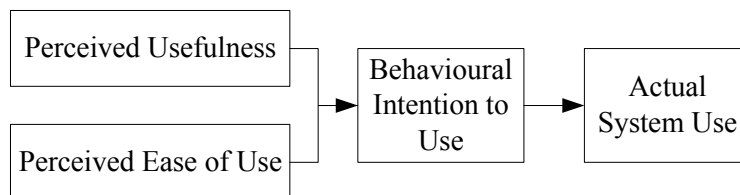
Figure 2.5 Theory of Reasoned Action



Source: Fishbein-Aizen (1975), pp 16

The authors believe that while both theories providing a strong conceptual basis, they both have limitations: TAM only identifies two very general beliefs, ease of use and usefulness and TRA does not specify which beliefs are adequate for technology use.

Figure 2.6 Technology Acceptance Model

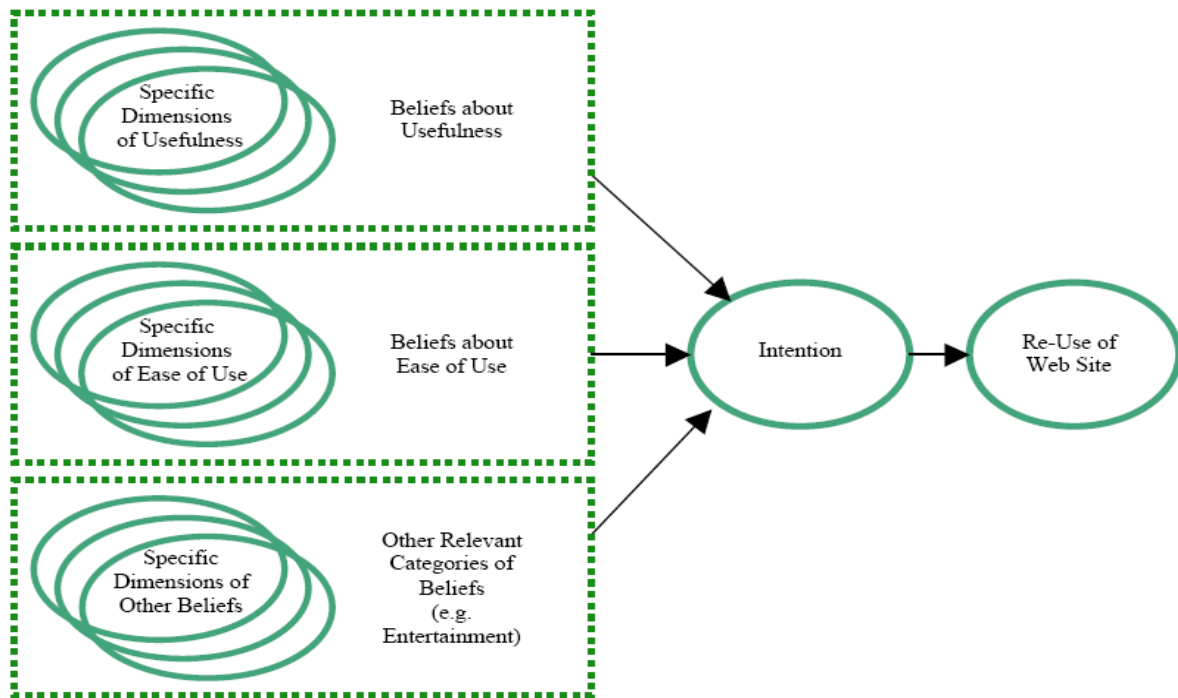


Source: Davis (1989) pp 320

They argue that web sites are a form of information system and therefore theories related to information systems are appropriate, however, using a website is also a marketing interaction and therefore they utilized from both Marketing and MIS literature. Further they tried to underline multiple distinct dimensions under ease of use or usefulness and any others. So the final model is a composition of both TAM and TRA.

The main purpose of the measurement scale is not measuring the quality, on the other hand generating information for web site designers. Some dimensions of the scale like innovativeness, business processes and relative advantage (substitutability) are not aimed to measure the quality of the service and another very important aspect which is customer service is excluded because the methodology used cannot measure it.

Figure 2.7 WebQual™ Model

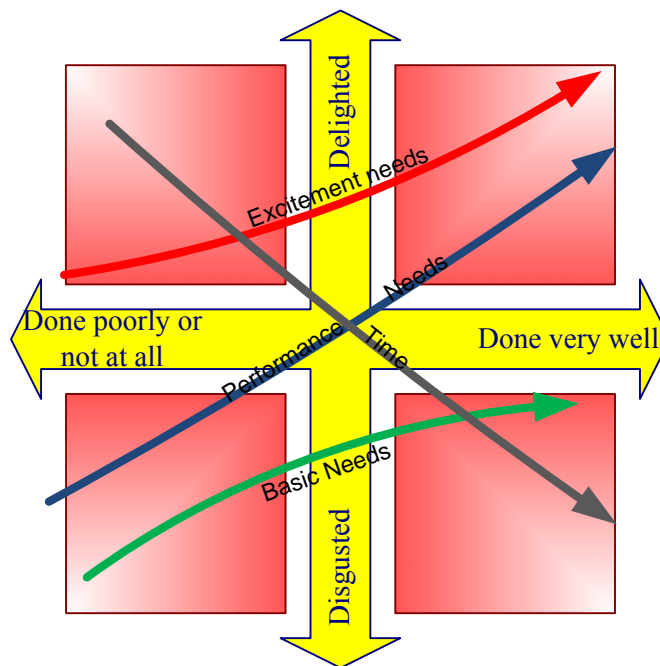


Source: Loiacono et.al (2002)

2.3.5 Web Site Quality Model

According to Zhang & von Dran (2002) consumers' preferences, requirements vary across different e-commerce domains and may change over time. In order to develop their model, they used Kano quality model (Kano et al, 1984) to understand customers' expected quality factors.

Figure 2.8 Kano Model



Source: www.KanoModel.com

The model can be used as a checklist of quality factors for web site design by web designers. It does not offer a way to measure the quality of the service.

2.3.6 E-S-QUAL

Parasuraman, Zeithaml and Malhotra in 2000 extended SERVQUAL to E-S-QUAL (Parasuraman et al, 2005) trying to create a “Multiple-Item Scale for Assessing Electronic Service Quality”. They argue that customers’ assessment of web site quality should not only include aspects during the interaction, but also post interaction. So based on their SERVQUAL methodology, they created a new scale for electronic domain. The dimensions in the new scale are as follows:

Reliability: Correct technical functioning of the site and the accuracy of service promises (having items in stock, delivering what is ordered, delivering when promised), billing, and product information.

Responsiveness: Quick response and the ability to get help if there is a problem or question.

Access: Ability to get on the site quickly and to reach the company when needed.

Flexibility: Choice of ways to pay, ship, buy, search for, and return items.

Ease of navigation: Site contains functions that help customers find what they need without difficulty, has good search functionality, and allows the customer to maneuver easily and quickly back and forth through the pages.

Efficiency: Site is simple to use, structured properly, and requires a minimum of information to be input by the customer.

Assurance/trust: Confidence the customer feels in dealing with the site and is due to the reputation of the site and the products or services it sells, as well as clear and truthful information presented.

Security/privacy: Degree to which the customer believes the site is safe from intrusion and personal information is protected

Price knowledge: Extent to which the customer can determine shipping price, total price, and comparative prices during the shopping process.

Site aesthetics: Appearance of the site.

Customization/personalization: How much and how easily the site can be tailored to individual customers’ preferences, histories, and ways of shopping

Working on the new domain, they hired a research firm to conduct the survey to test the new dimensions. After several iterations they finalized two different scales, one for the assessment of the site's quality during the interaction and one for the post interaction. The final E-S-QUAL scale they formed consists of 22 items on the following 4 dimensions:

Efficiency: The ease and speed of accessing and using the site.

Fulfillment: The extent to which the site's promises about order delivery and item availability are fulfilled.

System availability: The correct technical functioning of the site.

Privacy: The degree to which the site is safe and protects customer information.

As mentioned above, the scale only includes the constructs during the interaction with the website. For the post interaction process (or in their own words the "recovery service provided by the websites") they created a scale called as e-recovery service quality; E-RecS-QUAL including 11 items on the following 3 dimensions:

Responsiveness: Effective handling of problems and returns through the site.

Compensation: The degree to which the site compensates customers for problems.

Contact: The availability of assistance through telephone or online representatives.

2.3.7 Quality of Service-related Technical Standards

The International Telecommunication Union (ITU) created a set of recommendations in the area of QoS covering areas of general QoS frameworks-management and measurement. Most of them are also adopted and issued by the International Standardization Organization (ISO).

ITU-T E.800: A thorough survey of the QoS concept is found in the ITU-T standard E.800 from 1994 relating QoS and network performance and providing a set of performance measures especially for telecommunication networks.

Lack in those recommendations is simply the user perception and end-to-end service experience since all concentrate to issues only from a technical point of view. Also those are all about QoS for voice services, but not for non-voice services.

2.3.8 Other Methods

Yoo and Donthu developed a nine-item web site quality measurement scale called SITEQUAL (Yoo and Donthu, 2001). The scale uses four dimensions: ease of use, aesthetic design, processing speed and security. It only covers some of the aspects of quality and is therefore not a comprehensive assessment.

Szymanski and Hise studied the role that user perceptions play in e-satisfaction assessments (Szymanski and Hise, 2000) using an online survey. The dimensions included were online convenience, merchandising, site design and financial security. This study measured customer satisfaction rather than service quality.

There are several other methods developed based on SERVQUAL method such as Normed Quality by Teas in 1993, Two-Way proposed by Schvaneveldt, Enkawa, and Miyakawa in 1991 and QUALITOMETRO proposed by Franceschini and Rossetto in 1997 (Franceschini et al., 1998).

2.4 Summary and Critical Review

There are several critics about the use of SERVQUAL instrument especially in the use of Information Systems or electronic services. *“The perception component of the difference score exhibits better reliability, convergent validity, and predictive validity than the perception-minus-expectation difference score”* says Van Dyke (Van Dyke 2000, pp 205) and offers to use Perceived Quality score instead of Expected Quality-Perceived Quality.

SERVPERF which is derived from SERVQUAL and proves to be superior to it eliminated the Expectation level and included the weight factor however, the quality dimensions remained the same and applications in electronic services are not found during the literature review.

WebQual is mostly criticized on theoretical level for its validity and reliability. It also lacks the post purchase steps of the customer life-cycle. Even if it overall focuses to help web designers to build better sites, it lacks to provide specific guidance on how to develop.

The most recent research by Zeithaml and Parasuraman is superior to all the other previously mentioned methodologies from several aspects:

1. It aims to measure the service quality instead of providing a guideline for web designers or measure overall satisfaction.
2. It has been tested with real customers who match several criteria for being respondents unlike others which have only been tested by convenience samples (most of them were tested in university classrooms by students and staff) who have been directed to visit some websites and fill in the questionnaires accordingly.
3. Post interactions with the website are also taken into consideration.
4. Customer service which is an important criterion of overall quality is included

There are also some deficiencies in the final version. Some dimensions and items although evaluated in previous research by the same authors were not included in E-S-QUAL:

1. Customization or personalization is not evaluated in depth. Even if these functions do not belong to basic functionality since year 2000, it has been provided in Internet. Therefore customers are used to it and it became a necessity for much users.
2. Flexibility or providing alternative ways for completing transactions is neither included among dimensions nor among the questions asked. Even it is again not a must during a single transaction; subsequent usage makes it more and more important.
3. Graphical interface or *Site aesthetics* is not included which not only makes users' first interaction friendlier but also drives users to visit more frequently when offers a nice look and feel and is updated regularly. Appearance of the site has also an effect besides easy navigation when online users have to choose among alternatives.
4. Relative advantage which has been emphasized by Loiacono et al is a construct which the authors claim to be irrelevant with quality measurement. Loiacono used this construct to compare electronic service with traditional or conventional ways of completing transactions. From customers' point of view even this does not directly reflect quality, disregarding substitutability as a quality dimension is in contradiction with their own definition of e-service quality: "*The extent to which a Web site facilitates efficient and effective shopping, purchasing, and delivery.*"

Chapter 3

Research Methodology

This chapter presents the theoretical and methodological considerations related to the research process. Starting with the structure of the thesis, development of the research design, empirical setting and choice of the respondents are reflected

3.1 Pre-understanding

To understand mobile betting behavior in Turkey, first of all, traditional ways of betting should be summarized.

3.1.1 Traditional Ways of Betting

Not only in Turkey, but all over the world traditional ways of gaming is standard: Who wants to play iddaa or Altılı goes to a nearby stationary agent with cash in pocket, places a bet, pays for the approved ticket and with the ticket either leaves the shop or waits to see the results on television. (In some countries like Sweden, ready coupons for horse racing filled in by the machine called Quick Pick are sold like Milli Piyango tickets on the street.)

If the bettor becomes a frequent visitor, there is an unofficial credit offered and so it becomes possible to play without pre-paying. Placing bets via phone is also a natural result of being a frequent visitor.

In both cases, if a person wins, there are two ways of withdrawing the prize money. The winner goes to the shop with the ticket and receives the payment. If the prize is a high amount (differs among game types) the person either has to go to a bank or to the premises of the central authority to withdraw money. The risk of carrying the ticket or money is something people do not want to take.

3.1.2 Interactions in Mobile Betting

The model of customer interactions below shows the steps of user-provider relations in detail, including alternative decisions players may take. Previous research mostly focus on a single interaction level, however, pre and post interactions shall be examined in detail for a better understanding of the interaction as a whole and development a complete measure for quality measurement:

Table 3.1 Model of User Interactions

PROVIDER	USER
Marketing contact	Recommendations, word of mouth, brand image, personal experiences
Info about service	Reach the site, browse, assess reliability and read product info
Multiple channels to enroll	Decide to enroll /or leave the site
Notification for successful activation	Where/how to enroll
Demonstration screens	Service activated
Alternative channels for transfer	Trial
Game provisioning	First money transfer
Result entry	First bet wagered
Notification (SMS, e-mail, client based)	tracking and waiting for betting results
Payout approved and transferred to user account	wins/loses
Alternative channels for playing	wins and asks for payout
Customization opportunities	Search for other channels for gaming
Remember customer's preferences	Personalize Service
Service Interruption	Subsequent usage
Problem resolved	Change personalization
If problems not resolved	Experience problem
	Report problem
	Customer notified
	Cease service

In this section all interactions will be explored in detail for a better understanding of the general user behavior and all aspects affecting quality and customer satisfaction.

The first contact with any site can be as a result of either traditional marketing activities or personal contact with other existing users who recommend the site or using search in Internet or mobile Internet. The quality of advertising material is not subject to thesis however, it is a fact that the image created by such activities shall be consistent and not conflicting with the real product or service offering. If there is a gap between the offerings and marketing communication, according the SERVQUAL, Gap 4 will negatively affect overall quality score by increasing expectations.

Demonstration screens or information about gaming in an interactive channel is also important. There are huge differences compared to traditional betting and for many people it is a kind of “rocket science”. However, when the steps are simply presented to users and the ease of use and other relative advantages like time and location independencies are shown from the very beginning, there are limited reasons for not playing online.

Membership is an obligatory activity for mobile betting. Each and every prospective customer has to fill in a simple form for enrollment which consists of necessary information including identity number (Kimlik Numarası). There is a unique functionality in the case of the thesis which is an online check for controlling the age of applicant. According to law, only adults can play games of chance and this control is guaranteeing this requirement from the very beginning. (International operators check this when a bettor wins and requests a withdrawal, by asking a photocopy of the identity or passport via fax) Membership application shall be online. Compared to traditional ways of betting, there is no need for such an action and bettors can play in a stationary agent whenever they fill in the coupon and pay the bill. Also since there is not such a requirement, people can stay unanimous.

Offering alternative channels for enrollment is another critical issue. The person may be a frequent web user however, may need an immediate registration via mobile phone not to miss the next match which the person think will result the way he thinks.

Payment process is the most important prerequisite for gaming. All over the world operators in online betting use credit cards for payment and withdrawal processes. In Turkey use of credit card is not allowed by law although in many stationary agents it becomes possible. There are sanctions applied however at some events it is condoned. As an example 2007 and 2008 Milli Piyango tickets were sold by credit card in several agents and some agents were even offering installment sales. Since credit cards are not allowed the only way of transferring cash is via banks or alternative channels working with banks like online post offices or recently emerged so-called Payment Centers. If there is integration between banks and electronic agents, money transfer becomes a simple and smooth operation. It eliminates risks of wrong money transfers by validating the persons' membership identification number. All transactions are completed within minutes like in other money orders in contrast to electronic funds transfers.

When the member has credit in his or her account, it is time to place a bet. Bettors' attitude when gaming differs, some people look for detailed information, work for hours on a single coupon consisting of three or four games others just trust their own knowledge and some just try their chance on a regular basis disregarding all other inputs. Regardless of peoples' choices, the amount and variety of related information provided is important in web however, in mobile channels today with existing technologies and speed experienced information is limited. Also when you consider the stimuli for playing via mobile, several questions regarding information has been eliminated in the final survey.

Reasons for playing mobile shall be emphasized again:

- There may be no stationary agents in a nearby location.
- The person may not have access to Internet.
- Internet access may be limited to gaming sites during office hours
- The person may be mobile (traveling or similar)
- The person may need privacy.
- Time constraints

Therefore, questions regarding the quality of information provided (or qualities of supplementary content offered such as accurate, trustable, detailed, comprehensive) are eliminated.

After playing any type of games of chance there is an exciting period when bettors wait for results. In sports betting and horse races, since events can be followed from the beginning until the end, live score result provisioning in any form becomes important. Some may have access to television or radio to follow, but others will only be able to follow from the site or application provided. Alerts about events in any form (about each score in an event or result of each coupon in form of SMS or e-mail) may be a premium service offered. Bettors cannot stand waiting for payment when they know they won. Therefore ease and speed in result evaluation and payment processes become critical.

The most pleasant part of the interaction is the withdrawal phase. If a user wins and wants to withdraw money, he or she wants to be sure when the amount will be transferred to the bank account. It is one of the unique applications by the company XYZ that money can be withdrawn only to the account owner's account in a bank with the same name and surname. Otherwise the transfer is blocked and the user is informed to provide another bank account. This is the most critical measure taken to prevent hacking attempts since the person has to hack the bank account at the same time.

Another excitement or performance service offered can be customization or personalization. Customization is an action initiated by the user, creating bookmarks or quick links in a browser is an example. Personalization is an automated process run by the service provider which saves users' behavior and tries to make the interaction with the site easier. It is like ordering Turkish coffee without telling the amount of sugar needed, knowing that the right composition will be served. However, if not run in a right way, it may disturb customers and may cause problems in privacy perceptions. It is a very broad area and needs specific attention, therefore will not be explored in detail in this research.

In the first days of any technological service, problems or service interruptions are expected and may be acceptable to an extent by innovators even not by early adaptors, who are willingly using the service. However as time passes by any kind of problem may be a reason to cease the service. It is expected that uninterrupted service with a certain level of performance is provided. When a problem occurs, a need to consult or contact the provider emerges. Customer service via all channels shall be consistent, and promised service levels shall be provided.

Besides user and service provider interactions, one must also understand overall business flow applied in Turkey, which is shown in Figure 3.1 in the following page. A person who wants to place a bet via mobile phone has to interact at least with the following organizations directly or indirectly and practically or technically:

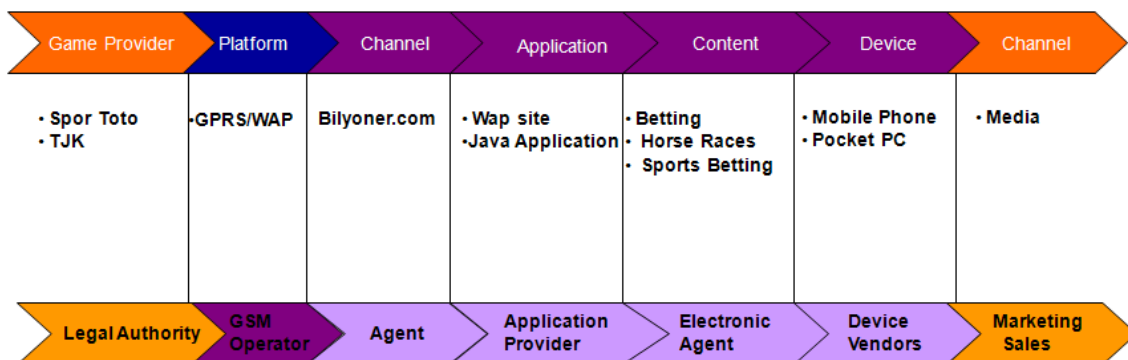
- Device vendors, or their representative sales offices
- GSM operator
- Electronic Agent (Betting service provider)
- Head Gaming Distributor (Central Betting System Infrastructure Provider)
- Game Provider (Legal Authority)
- Bank

For playing mobile, everyone needs a mobile device. It can be either bought by a shop or obtained with a long-term contract from the GSM operator. If the person wants to visit a mobile wap site or install an application and run it, several setting are to be made. Nowadays most of the mobile devices are provided with standard settings already installed however; sometimes it is not the case. The electronic agent provides instructions for setting in the web page or via call center agents however; when new devices are introduced to the market it may be the case that the members are redirected to GSM Operators' or even to Device Vendors' Call Center.

For both money transfer and withdrawal, users have to work with a bank. Since 2007 there are alternative payment channels available for money transfer, which do not require a bank account like Payment Centers, PTT Offices or ATMs. However as mentioned above for withdrawal a bank account in the name of the person registered is required.

If user experiences any problems with the electronic agent and the problems cannot be solved there are two options. The user can contact either the Head Distributor or the legal authority.

Figure 3.1 Mobile Betting Business Flow



The business flow is similar in many countries where the operations are run or strictly controlled by the state, however in liberalized countries Electronic Agent, Central Betting System and Game Provider are identical.

3.1.3 Research Approach

The dimensions of service quality in much research mentioned in the literature review are from various sectors. There is still debate going on about whether to use general dimensions or modify for each specific sector. Especially WebQual, WebQual TM, E-TailQ, E-S-QUAL are about electronic services and therefore the dimensions are the most relevant ones. However, still in case of mobile betting, dimensions used in previous research do not fit perfect, there are some other constructs needed for evaluation.

When measuring, shall only “Perceived quality” be considered or also the “Expected Quality” was an important question to be answered. As stated in previous section, there is a confession by Parasuraman about the superiority of Perceived quality. Another important factor for the design is the importance of each factor in the eyes of the customers; therefore a weighted measurement may be used. These were the first thoughts after analyzing previous models in depth.

The establishment of above mentioned models base on different theories which vary from TAM, TRA, Disconfirmation Paradigm to Kano’s Model of Customer Satisfaction which is based on Herzberg’s Motivation Theory.

In the domain of mobile services, time is a very important factor. 1994 the first mobile phone call was made, devices did not support short messaging until 1996 and first client supporting wap was introduced into the market in 1999. The service was prices premium, even though the connection speed has been very limited. First GPRS and then EDGE support were installed in mobile networks, which offered high speed Internet connections. Today advanced mobile users are curiously waiting for the 3G service which will enable them to connect to Internet at a similar speed to ADSL. According to

Kano's Model of Customer Satisfaction, performance features become basic and exciting features are downgraded to performance in consumers' perception as time goes by. And that happens very rapidly in this domain and advance technology offerings become commodities in a very short period of time compared to other domains.

Considering the issues above as a starting point the basic model is formulated as follows:

Figure 3.2 Model of Service Quality Framework

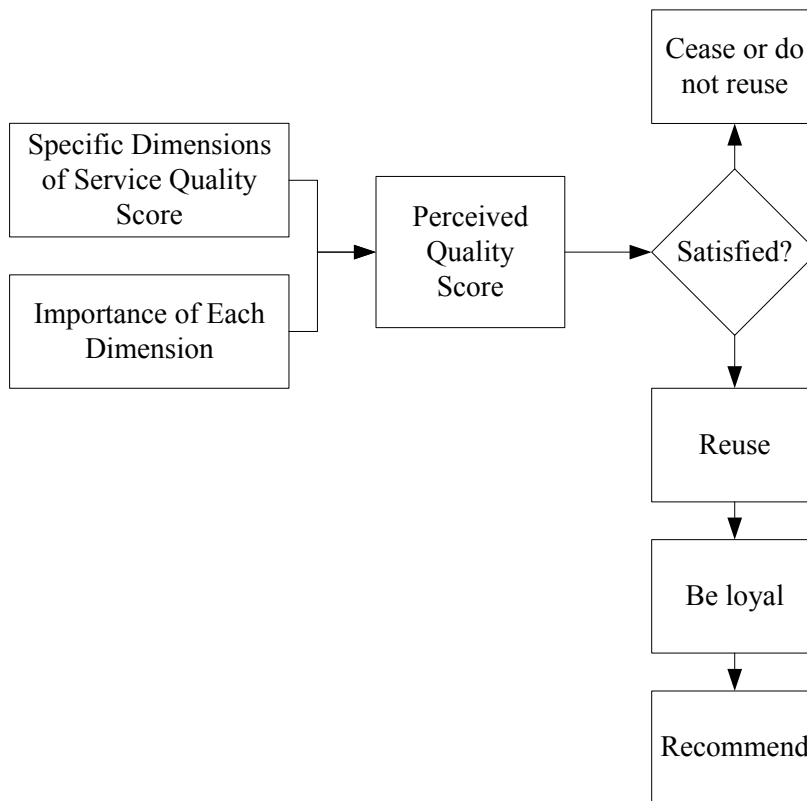
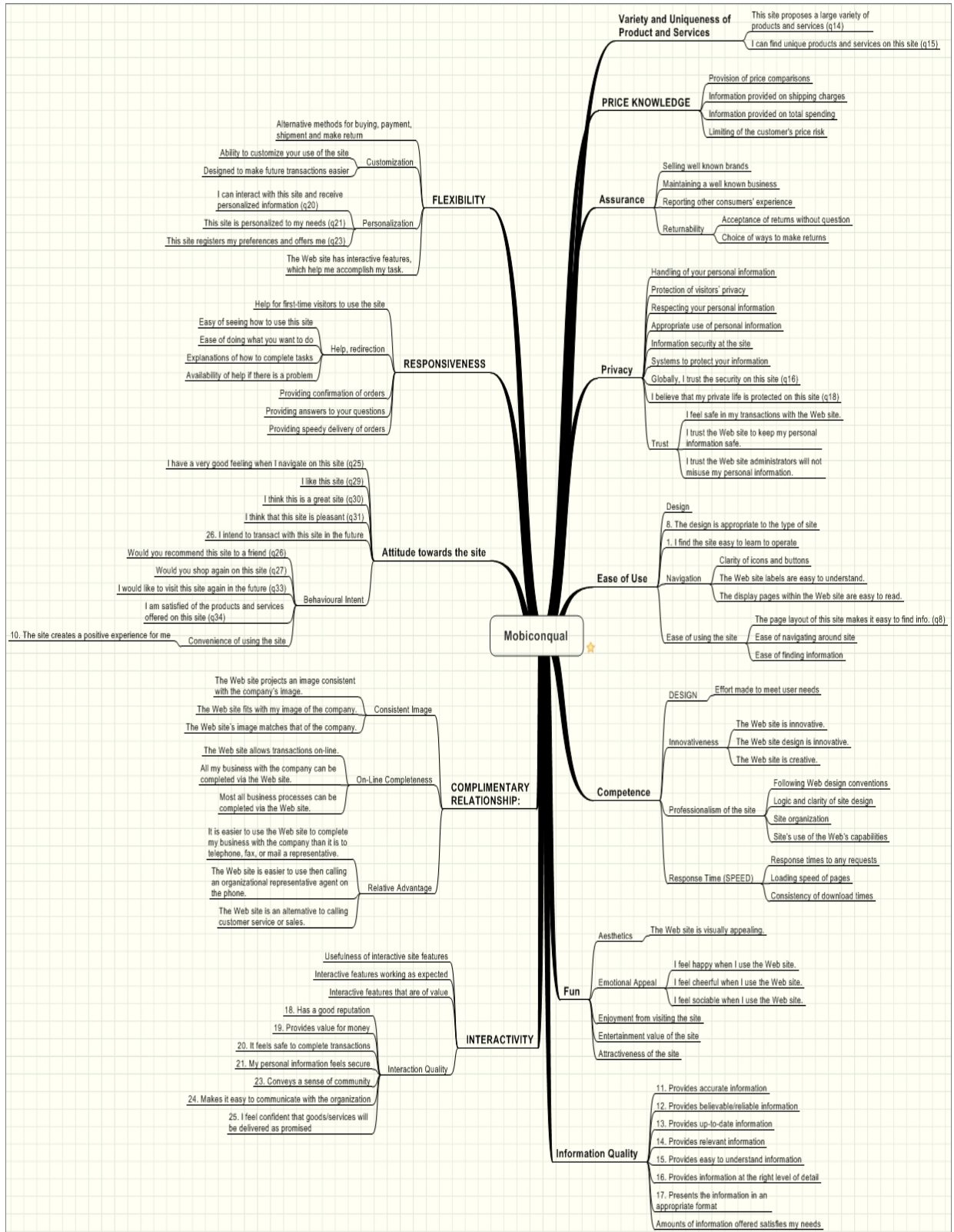


Figure 3.3 Dimension and Related Questions



3.2 Design

3.2.1 Independent Variables

Independent variables in this research are each of the quality dimensions:

1. Assurance
2. Competence
3. Ease of use
4. Flexibility
5. Fun
6. Information quality
7. Privacy
8. Responsiveness

Belongingness and Attitude are not included as independent variables but during the data analysis, interrelation will be elaborated as well. These two dimensions need extra attention: On the one hand, these two are determinants of the final score however; on the other hand, those are also dependant on the overall satisfaction. In other words, if a user is not satisfied, he or she would neither reuse the service nor recommend to friends. The reason for not theoretically include these two as independent variables is preventing a confusion of variables.

The research is conducted among members of an e-agent which has a first mover advantage in the sector. There is currently only one competitor with a low market share, who provides sports betting services and Horse Races (started as of 2008.11.7) not National Lottery. The sector is not perfectly competitive and this may distort the findings. So it may be a fact that members have a strong feeling of belongingness even if they are not satisfied with the offering.

Again because of limited competition members may be unsatisfied but willing to become frequent visitors or loyal members.

Those facts are in contrast with the main hypotheses that if the perceived values are higher than the expected, this is regarded as positive lead to satisfaction, loyalty and recommendation.

3.2.2 Dependent Variables

Dependent variables are three,

Overall satisfaction with the service offering

Loyalty towards service provider

Recommendation of the service to others prospective customers

3.3 Conceptual Framework in Depth

3.3.1 Empirical Setting

As seen above in literature review, much of the research in the area lacks a satisfactory sample size. On the contrary, this research has a great superiority in this specific manner: During the preliminary research and data collection, a web based questionnaire has been provided to bettors, who are members of the one and only e-agent licensed by all games of luck authorities in Turkey. The questionnaire was accessible to everyone visiting the web site so in the preliminary survey 4017 users have participated in only 2 days. From those, who already use mobile services was filtered and 1975 mobile channel users have been determined. And in the final survey 260 users participated.

3.3.2 Pilot Survey Questions

In the preliminary survey, the questions were not specifically related to mobile usage, on the contrary aiming to reflect attitude towards the service offerings in general, rate overall satisfaction with the service and to see major areas for improvement. Another important finding has been the willingness of users to take part at a survey.

Main questions were simply design, ease of use, content, speed, customer care, and easy money transfer representing fun, ease of use, information quality, competence, responsiveness and again ease of use respectively. For each dimension, 2 questions were asked to participants; importance and how they evaluate the offering in that specific dimension in a 5 point scale. Besides these dimensions 2 other questions related to the research were asked defining the dependent variables: are you satisfied with the offering and would you recommend to others?

Other informative questions were about participants' knowledge of alternative channels and where else participants play games of chance.

The analysis started by eliminating responses which are not consistent. Before eliminating any items, some members were contacted by phone to ask the reason for giving "null" to each item (both importance and the company perceived score). When it was understood that the reason for their choice was only "to fill in the questionnaire and getting rewarded somehow" these items were eliminated.

As a result of the survey (see Appendix F) two dimensions proved to be more important than others, usability and swift money transfer which are both items of ease of use or usability. Whereas content and design attributes are the least important ones.

In the next phase the refined survey (see Appendix G) was conducted among professionals to decrease number of questions in the survey. As a result of this iterative process the questions have been refined four times besides editorial changes.

As a result of a factorial analysis, items were eliminated. One of the major changes regarding the mobile has been the limitation with content offered. Even here by “content” supplementary data like live scores or game result is meant, it is difficult to present it in a compact and understandable way to end users. So the final questionnaire for the mobile users was formed as seen in Appendix H.

3.3.3 Survey Questions in Depth

Constructs used, related questions and their descriptions are explored in the following paragraphs.

Assurance: Assurance can be described by several questions; informing customers about pricing, acceptance of returns without question, confirmation on transactions to prevent possible errors, maintaining a well known business. Here users will be asked if they trust the company and service offering, if the company tries to ensure a flawless service by minimizing the risk of error’s that can be made by the user, and fulfillment of the promised service with the following questions:

ASS1 Detailed information about additional pricing like wap connection or money transfer is provided; I did not pay any money that I did not expect

ASS2 If I make a mistake and want to cancel my coupon, I did cancel and received my money back

ASS3 When I won and wanted to withdraw money, I receive the payment the following day, I did not wait any longer

ASS4 Approval steps during my transactions minimize the risk of making any errors

Competence: How competent is the service provider company? In the original SERVQUAL Model, under the Tangibility dimension, several questions are asked to evaluate the physical facilities, appearance of the personnel and physical representation of the service. In their final work in 2005 E-S-QUAL Parasuraman et al developed a new item called System Availability, the related questions can be read in Appendix C. However, today in 2008, system availability is a something that service providers cannot sacrifice. 99,99 % system availability is aimed and end users do not experience any crashes or unavailability. Therefore perceived service response times with speed, professionalism of the site, innovativeness and differentiated features are questioned with the following item. Service up-time or other technical or tangible items are not included since uninterrupted service is what the users are used to in our case and therefore would bias the findings positively.

COM1 All screens load rapidly all the time, I do not wait.

COM2 I think that the mobile channels are professionally developed and are both creative and innovative

COM3 I think that the Company XYZ provides differentiated gaming products and services (like National Lottery Ticket subscriptions)

Ease of Use: Ease of use is an important dimension starting from the first interaction until the last one. It starts with the enrollment / membership process and can followed by navigation, money transfer, placing bets and withdrawal if won. Since the user-provider interactions start with enrollment process, the first question has been included. Ease of use is not only about using the site itself and finding what the user is looking for. One of the important things is money transfer to betting account which is a prerequisite for starting any further interaction.

EOU1 I did easily and rapidly enroll, and made transactions without being lost in the site/ application

EOU2 I can easily find what I am looking for in the wap site or in the Java application.

EOU3 I can swiftly transfer money to my account.

Flexibility: Flexibility is a crucial factor in any competitive environment. A service provider may work with one single bank and still provide the same services. Alternative channels may not be offered. However, it is a critical item for respondents to evaluate. Since credit cards are not accepted as it is the case all over the world for similar activities, even if several channels (banks and post offices) are provided for payment, lack of credit card payment is in the minds of customer who have been placing bets abroad. Under flexibility, alternative methods for gaming and payment, customization and personalization offerings are questioned. Several questions in the pilot survey were eliminated from this dimension as a result of data reduction with Factor Analysis and FLE1 was used instead. Once again, not only the flexibility within the site but with banks is investigated.

FLE1 I work with different banks and I can transfer money from all of those to my XYZ account

FLE2 I can easily follow the result with e-mail or SMS alert provided by XYZ.

FLE3 I think, XYZ is offering personalized advantages and campaigns

Fun: The emotional affect of using the Web site, enjoyment from visiting the site and entertainment value of the site. Again as a result of data reduction, the only item used in the final survey, questions the visual appeal of the mobile site.

FUN1 I like the visual design of the site

Information Quality: Information provided is accurate, reliable, relevant, updated, and in appropriate format and detail. For betting, most of the users check a lot of information including statistics, previous records, latest news, line-ups, professional commentary and similar content. However, in the mobile, it is not easy to open several windows like in a computer and therefore the coupon shall be completed at once. There is a “save and turn back” functionality but again because of channel limitation, it is not that helpful. Content offered in mobile are limited with the match program, different types of odds or betting types, instant coupons prepared by known professionals, live scores and final results. When the model shall be modified to evaluate quality of a betting web site, accuracy, reliability, relevancy, actuality, format and level of detail shall be asked with separate questions.

INF1 There is enough reliable and up-to-date information provided with detail.

Privacy: Protection of members’ privacy, information security at the site. Privacy is one of the most critical issues in betting. As mentioned in previous section, it is the reason for some players to play online for confidentiality. Also people do not want to be contacted without their content, and do not want to receive any material from a betting company and therefore another question is included to evaluate this issue.

PRI1 I have no doubt in the security of any transactions or privacy of information I submit

PRI2 I do not receive any SMS or e-mail messages without my consent, messages I receive do not disturb me

Responsiveness: Help, redirection, providing confirmation of orders, providing answers to questions. Even most advanced users need help when new features are offered or when they get confused when finishing a complicating coupon. There are several ways of getting help, they look for an answer in help or frequently asked questions, send an e-

mail or contact a customer representative via phone. Since there is no live agent help, this has not been included.

RES1 I find answers to my questions in help pages

RES2 I receive answers to my questions that I have sent as message or submitted via online form

RES3 I receive satisfactory answers to my questions when I talk to a customer representative

3.3.4 Choice of Respondents for the Final Survey

At the last stage, after refining the questionnaire, members who have been using mobile channels within the last month have been selected from the main user database as sampling frame. The link of the questionnaire was accessible to the users when they logged in to site. When users click on the link or banner a login screen appears. After a successful login with the username and password, users could fill in the survey. In two days, 260 people answered the questions.

3.4 Research Findings

3.4.1 Analysis of Demographics and the Relation with Satisfaction

The total population of mobile users is 5263. The sample size (262) is representing 5% of the total population. The sample consists of predominantly college graduate (50%) males (97%) between the ages of 18 and 45 with an average of 30, working in Private sector (50%) with an average monthly income between 500-2000 TL who are Turkcell subscribers. They support one of the three big teams (82%). They are in average member of the service for 2 years and 3 months and spend 4 TL per day for betting and lose 2,5 TL.

Since every member has to submit identity number, age and gender information is already known however it has been asked again as a part of the survey. Regarding age, there have been only 2 differences. For some reasons people may not want to declare their personal information; reasons may be confidentiality, privacy or their age. Some people may use their employees account to play, some their friends or relatives. It is a fact that they have to use a bank account registered to the same name. There were also 3 differences in gender. 95% of respondents are between 18 and 45 years of age with an average of 30. In a research conducted online by eCOGRA², in 96 countries with 10865 online gamblers in 2006, similar distribution has been observed (Average ages are 27 in UK, 28 in Germany, 31 in USA and 32 in Sweden). However, gender distribution is totally different (ECOGRA, 2007). Whereas 97% of respondents in Turkey are male, in the worldwide survey only 58% were males. It is a fact that the gender gap is closing, however, the reason of the huge difference is due to the respondents' choices of online games. The eCOGRA research was conducted among online casino and poker players

² eCOGRA. (2007) Global Online Gambler Report. An Exploratory Investigation into the Attitudes and Behaviours of Internet Casino and Poker Players. Commissioned by eCOGRA (e-Commerce and Online Gaming Regulation and Assurance) Conducted by International Gaming Research Unit, Psychology Division and Betting Research Unit, Economics Division, Nottingham Trent University

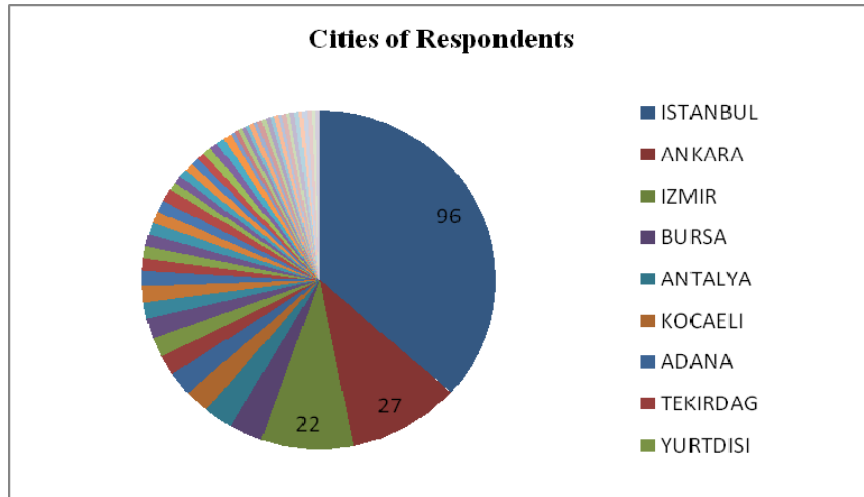
and these are preferred by female as well compared o sports betting. The summary socio demographics of the sample are as shown in Table 3.2.

Table 3.2 Demographics of Participants

Variables	Total	Number	Percentage
Age	Not declared	3	1%
	18-25	78	30%
	26-35	126	48%
	36-45	44	17%
	46-55	12	5%
	56 +	0	0%
Gender	Female	7	3%
	Male	256	97%
Marital status	Not declared	2	1%
	Single	129	49%
	Married	126	48%
	Divorced	6	2%
	Widowed	0	0%
Education	Not declared	4	2%
	Primary education	13	5%
	Secondary education	65	25%
	College	169	64%
	Graduate	8	3%
	Post-graduate	4	2%
Sector	Not declared	5	2%
	Public	53	20%
	Private	131	50%
	Self-employed	31	12%
	Not working	43	16%
Monthly income	Not declared	24	9%
	500-1000 YTL	76	29%
	1000-1500 YTL	71	27%
	1500-2000 YTL	49	19%
	2000-3000 YTL	20	8%
	3000 YTL+	23	9%

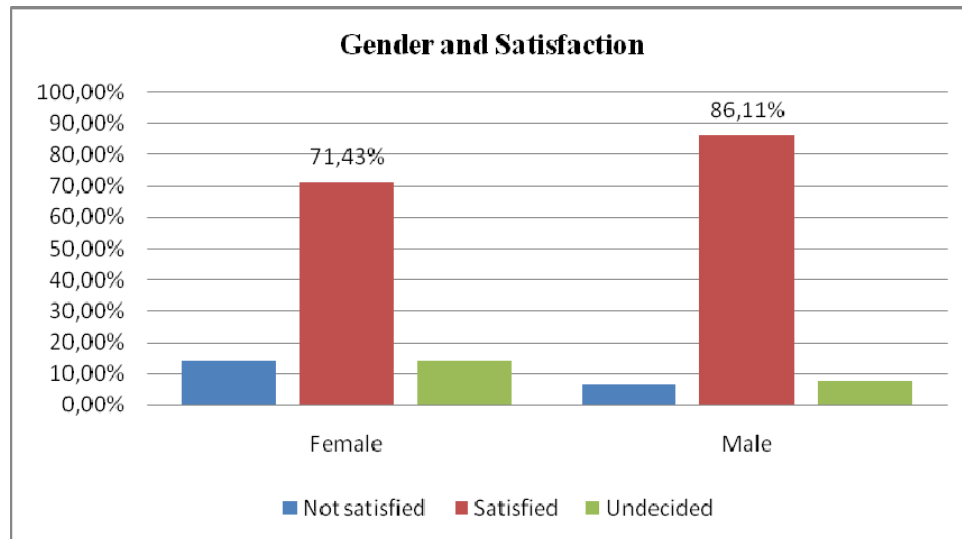
52% of the respondents are from İstanbul (32%), Ankara (12%) and İzmir (9%), followed by Antalya, Adana and Bursa each with 3%.

Table 3.3 Cities of Participants



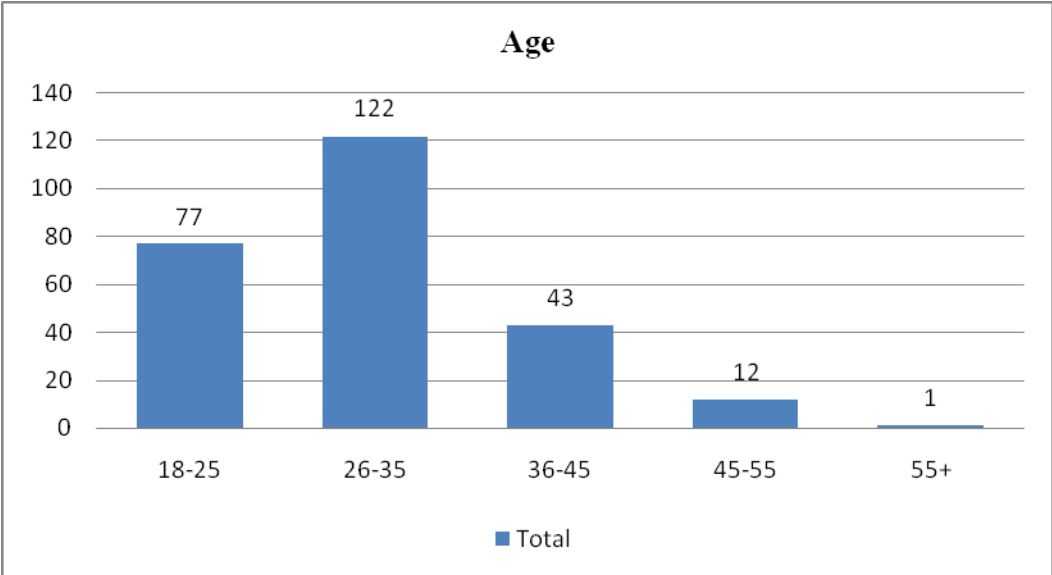
There is a difference between satisfaction levels of male and female respondents. There may be several reasons but one which has been included in the free text is valid for many people. Women are more interested in other types of gaming such as casino games or lottery, since these are not provided within the service, which may be one of the reasons.

Table 3.4 Gender and Satisfaction



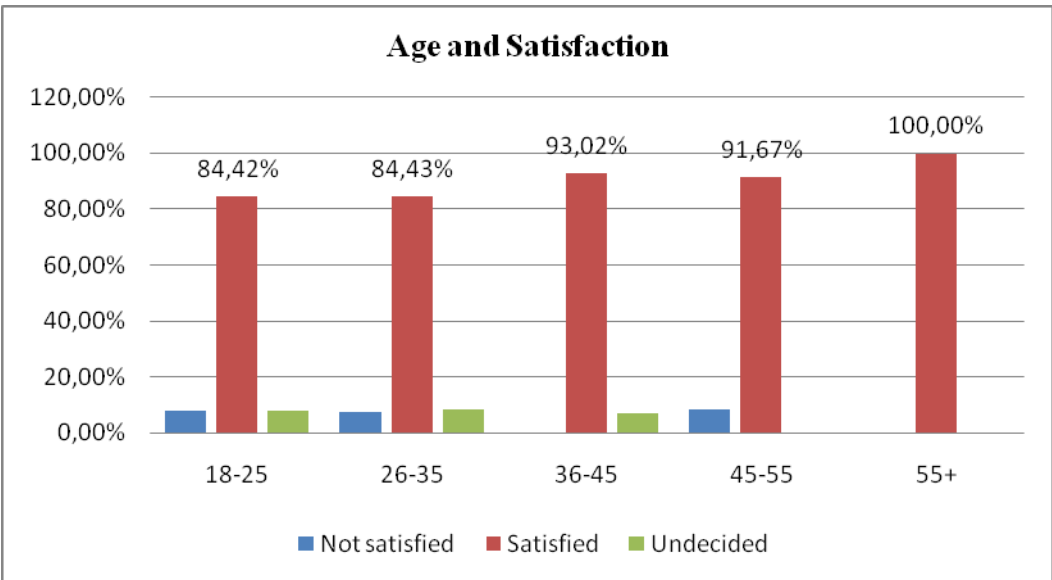
The largest group within the sample is between 26-45 years of age. It is consistent with findings in other countries as mentioned above.

Table 3.5 Age Distribution



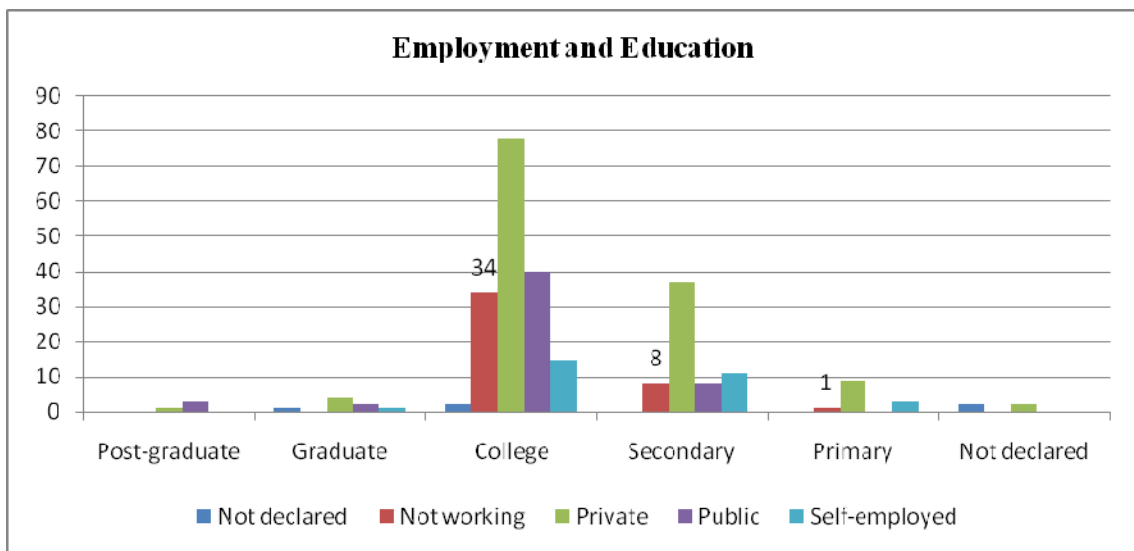
There is a weak positive relationship between age and satisfaction (Correlation coefficient = 0,078). The older the respondents, the satisfied they are.

Table 3.6 Age and Satisfaction



Majority of the sample is college graduate (63%) followed by Secondary education with 26%. It is not within the scope of the research however; it is an interesting fact that 20% of college graduates declared themselves as not working at the time they have filled in the questionnaire (16/11/2008). Only 8% of the secondary education is not employed. However, when the method of data collection is considered (voluntary participation) this finding may be biased since unemployed people would have comparably more time to spend filling in the questionnaire.

Table 3.7 Employment and Education



There is no or little negative association between education and satisfaction. (Pearson's Correlation Coefficient -0,04). However, as seen in the Table 3.5 in the next page, at both ends (primary school and post graduate) all samples are satisfied. Since the number of respondents of those subgroups are very low, the correlation analysis results with a very low negative value which indicates to no correlation.

Table 3.8 Distribution of Education

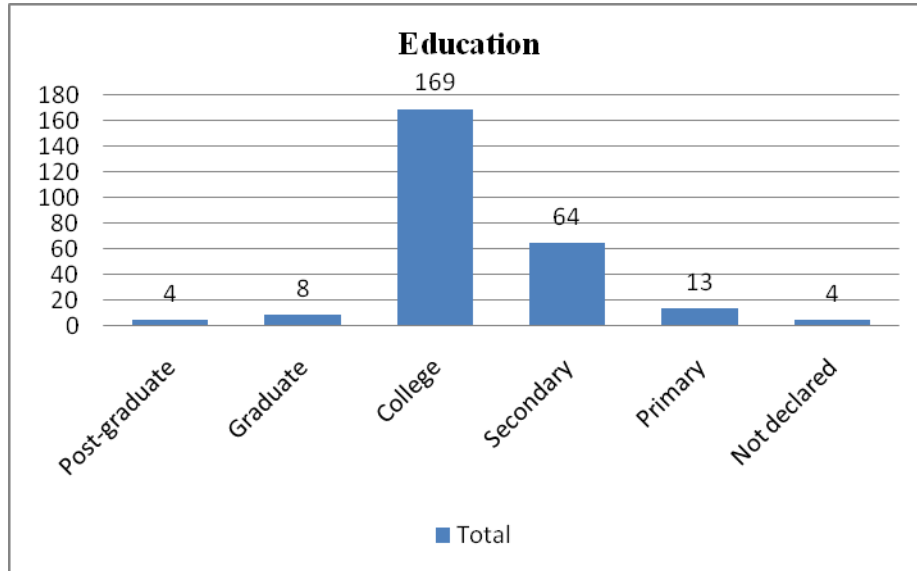
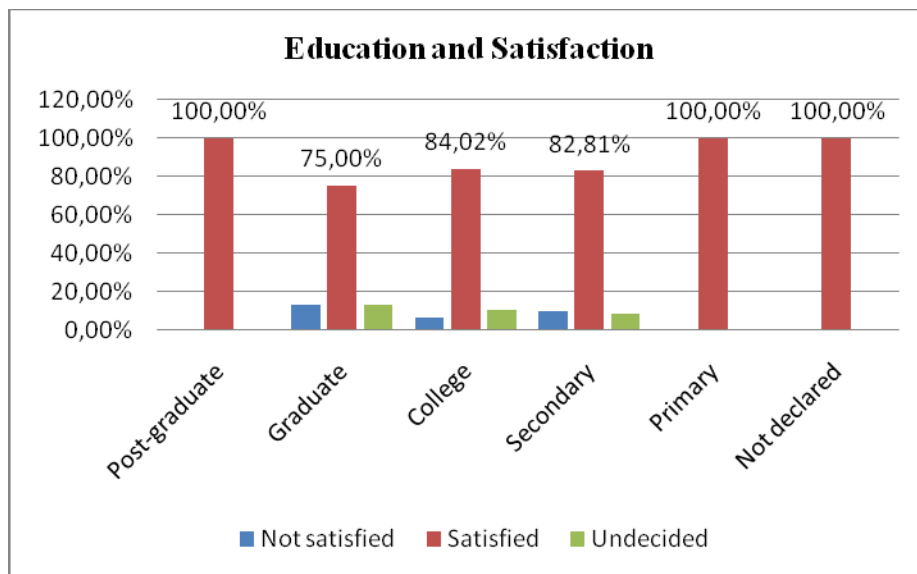


Table 3.9 Education and Satisfaction



Most of the respondents are working in private sector. There is again no or weak negative correlation (Correlation Coefficient -0,037).

Table 3.10 Distribution of Employment

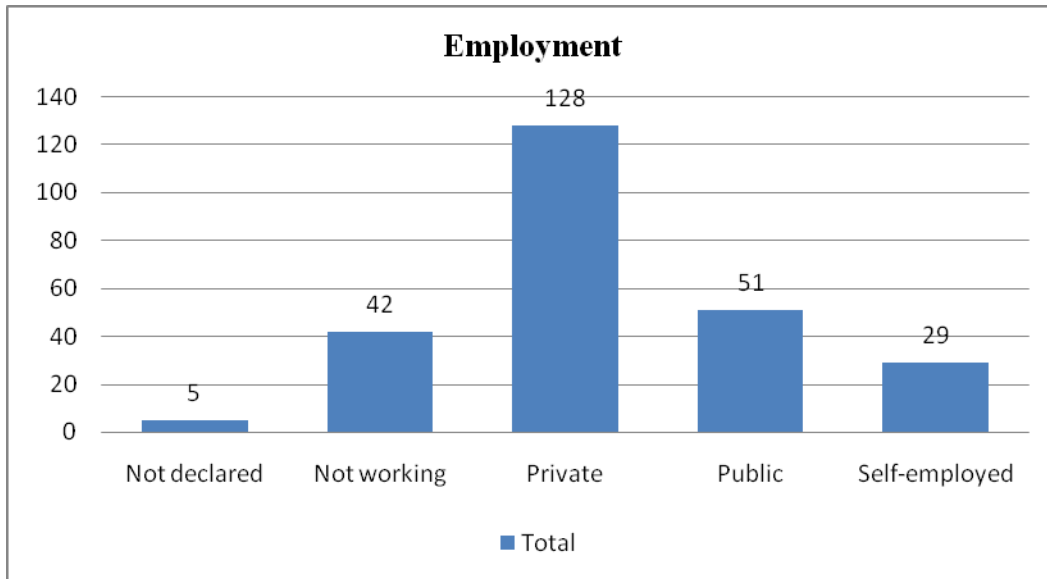
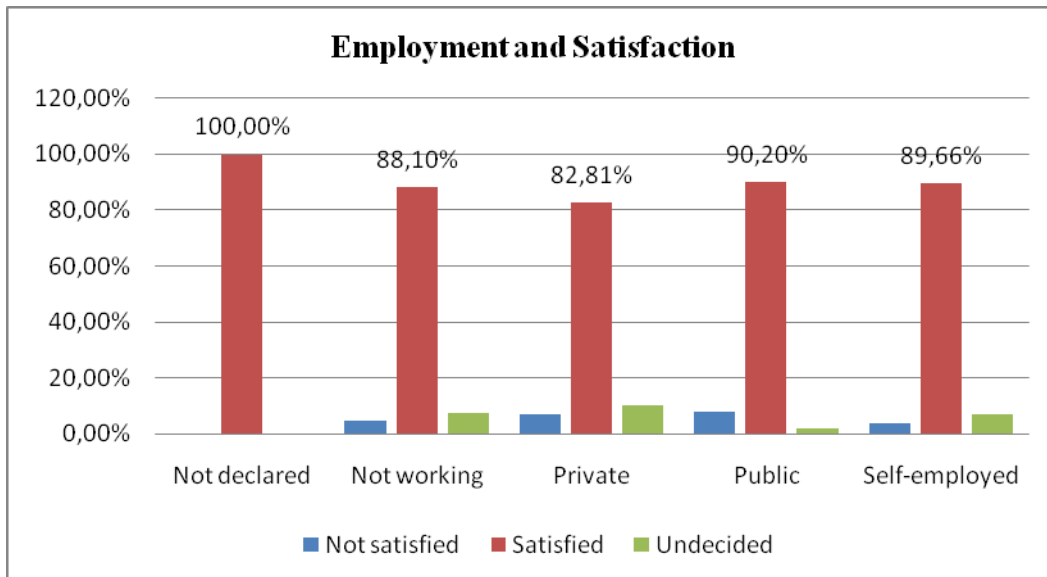


Table 3.11 Employment and Satisfaction



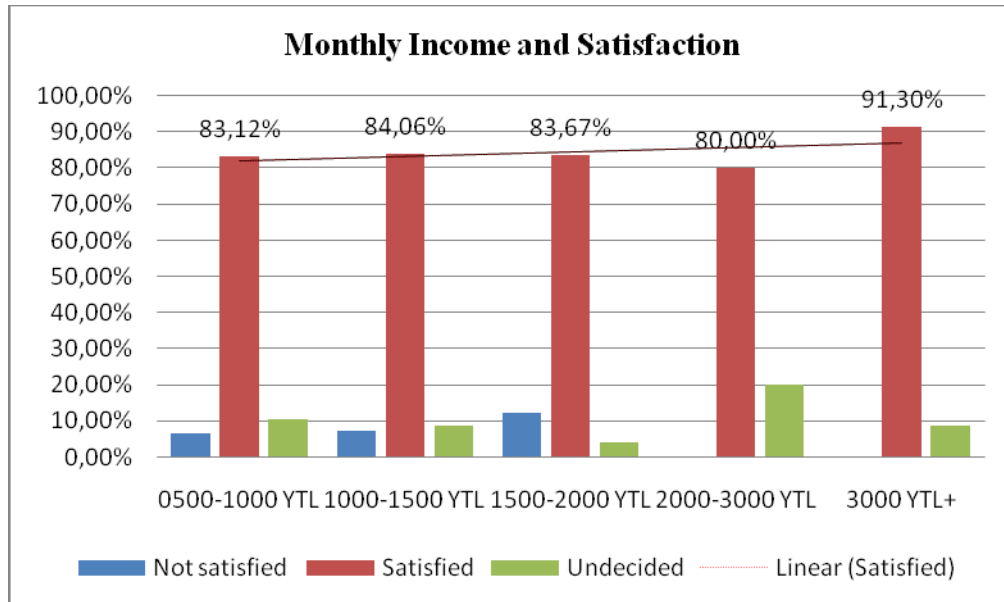
Monthly income figures and distribution is presented below. The average income is figures are close to TURKSTAT's 2006 survey data adjusted with 2 years pay increase according to inflation rate (TURKSTAT, 2008). The weighted monthly average gross wage according to 2006 data is 1310 TL, whereas the average of the sample is 1465.

Table 3.12 Monthly Income and Employment Status

Row Labels	0500-1000 TL	1000-1500 TL	1500-2000 TL	2000-3000 TL	3000 TL+	Not declared	Grand Total
Not declared						5	5
Not working	24	2			1	16	43
Private	40	41	22	16	11	1	131
Public	3	19	21	4	6		53
Self-employed	10	7	6		5	2	30
Grand Total	77	69	49	20	23	24	262

-0,0119 correlation coefficient shows again a very weak or no correlation .

Table 3.13 Monthly Income and Satisfaction



Married respondents are more satisfied than the single group. One of the reasons for that is that they do not have to go out for betting, which is not favored by wife and “no more causes trouble” as one of the respondents admits. Another reason may be the opportunity of betting secretly. Since mobile phone is part of everyday life, no one can see that a bet is placed via the mobile device.

Table 3.14 Distribution of Marital Status

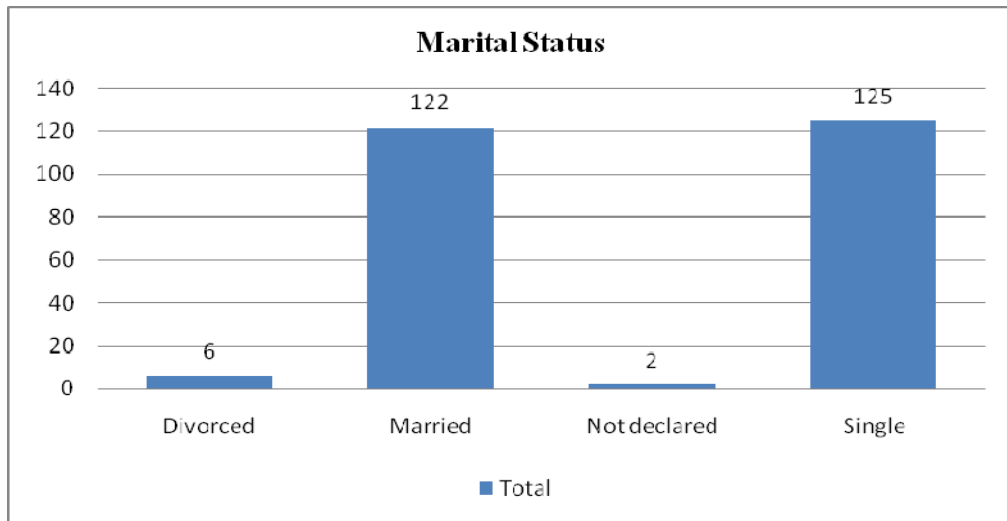
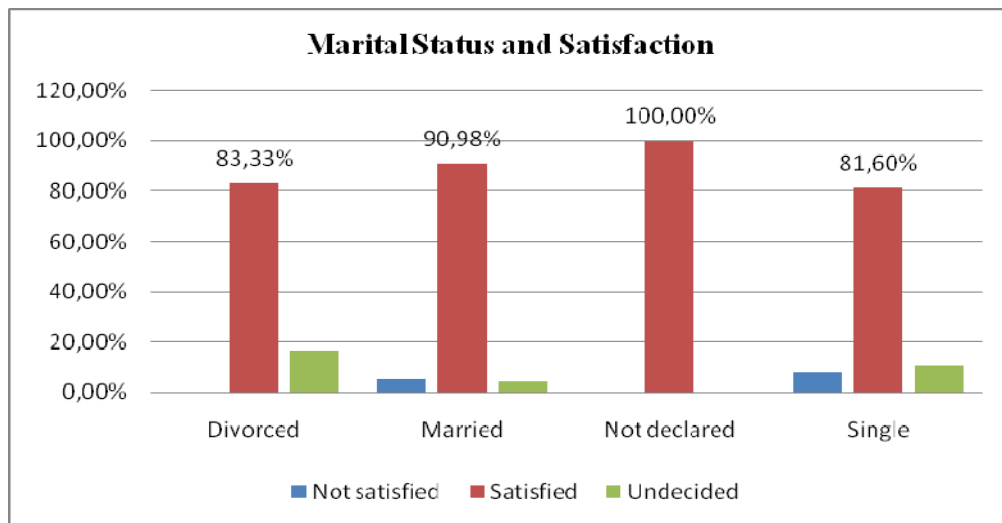
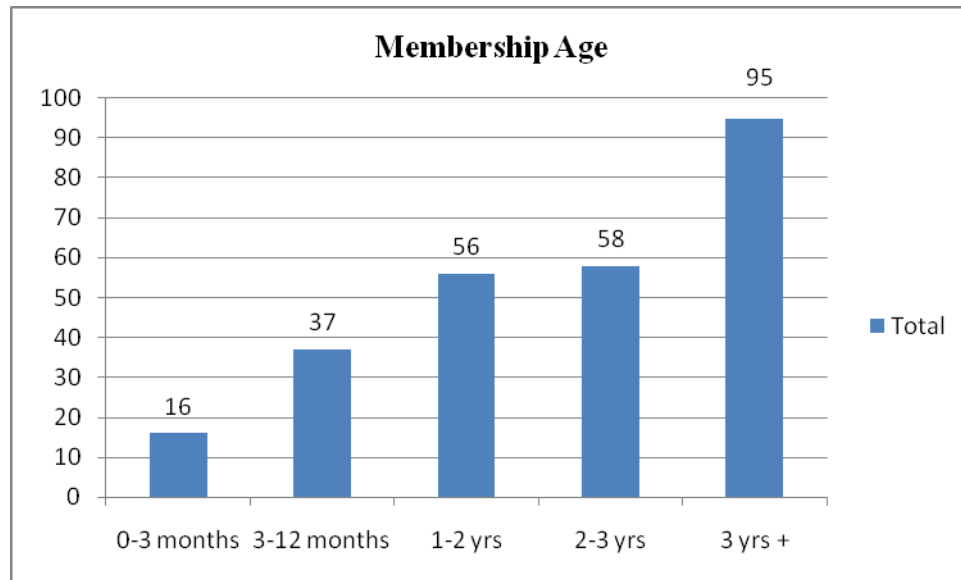


Table 3.15 Marital Status and Satisfaction



An important factor affecting satisfaction has been found as the membership age. The average membership age (defined by “today – registration date”) is 2 years and 3 months.

Table 3.16 Membership Age



As it can be seen in Table 3.19 in the next page, none of the respondents are “not satisfied”, who have enrolled within the last year. There may be 2 reasons: The first one may be a major improvement on the infrastructure of the service provider finalized exactly 1 year ago. Members, who enrolled within the last year enjoy a much faster, easy to navigate and comprehensive service. To investigate the relationship further, an additional table (3.20) is presented which shows the relationship between Membership Age and answers to the question COM1 (*All screens load rapidly all the time, I do not wait.*). Even if all members at the time of the questionnaire are receiving the same improved service, prejudices may be hard to overcome. People, who have been using the old pages, still think that it is slow.

The second reason may be explained with the Kano model, people are rapidly getting used to what they have perceived as performance need and those become basic need

whereby the expectation of a better quality (in this case faster connection speed) emerges.

Table 3.17 Membership Age and Satisfaction

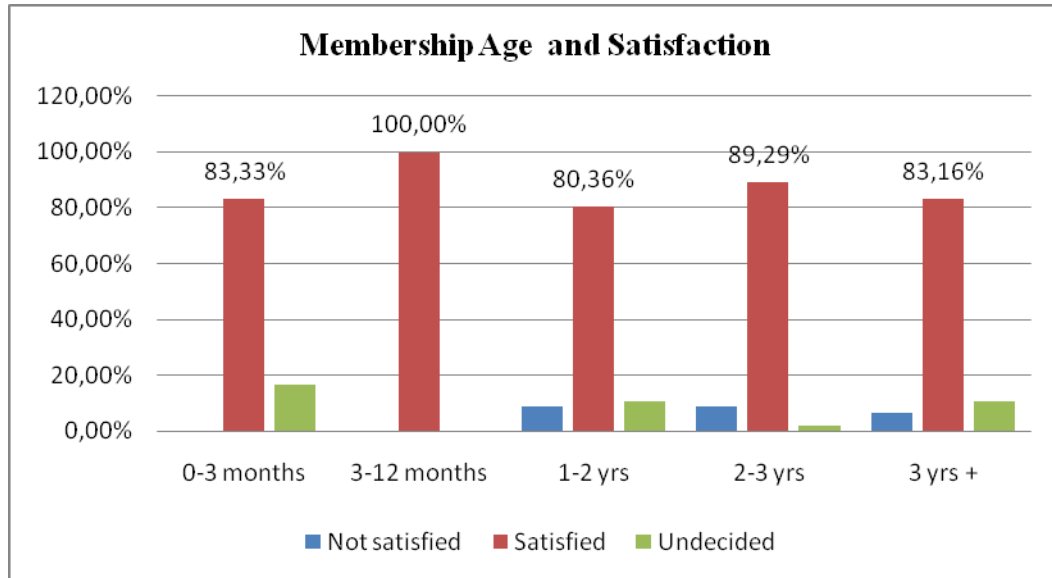
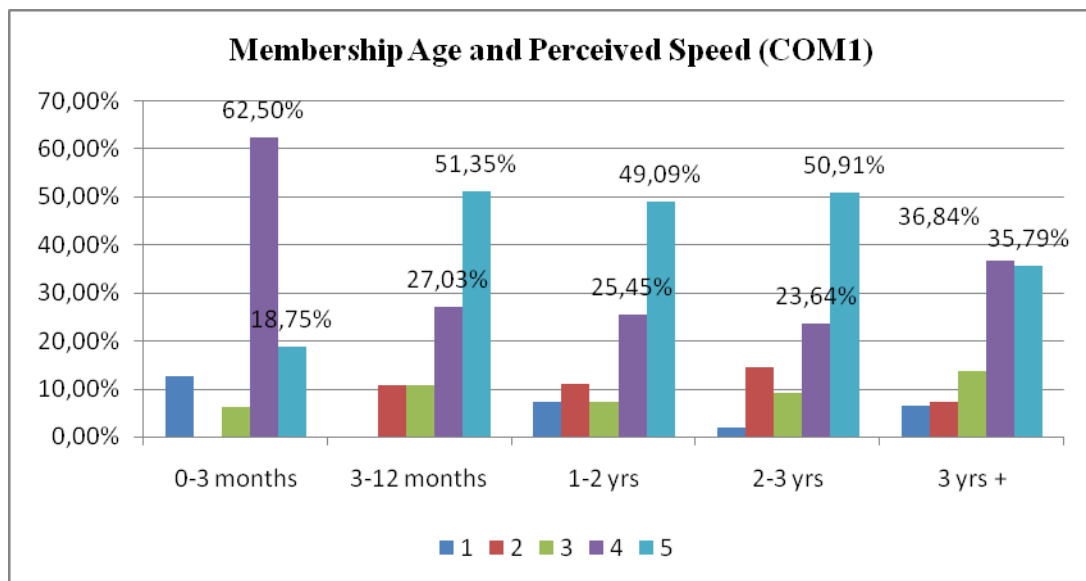
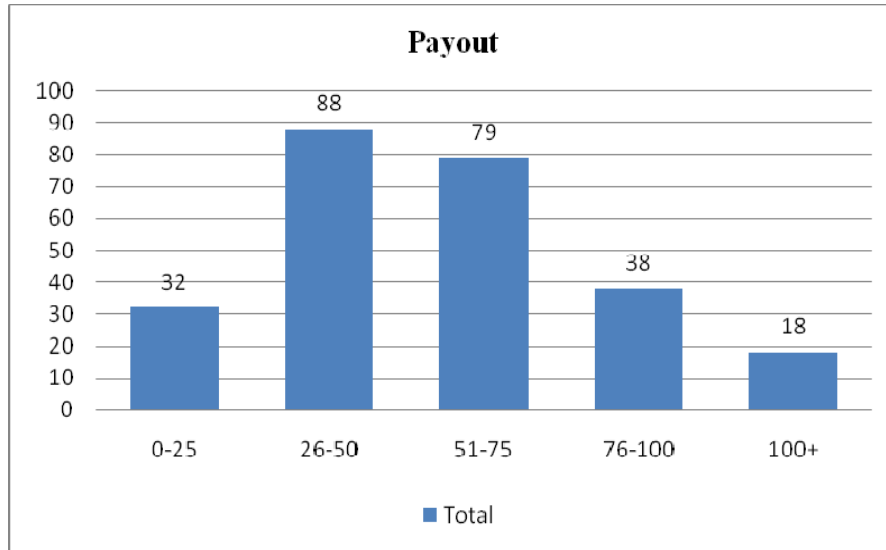


Table 3.18 Membership Age and Perceived Speed



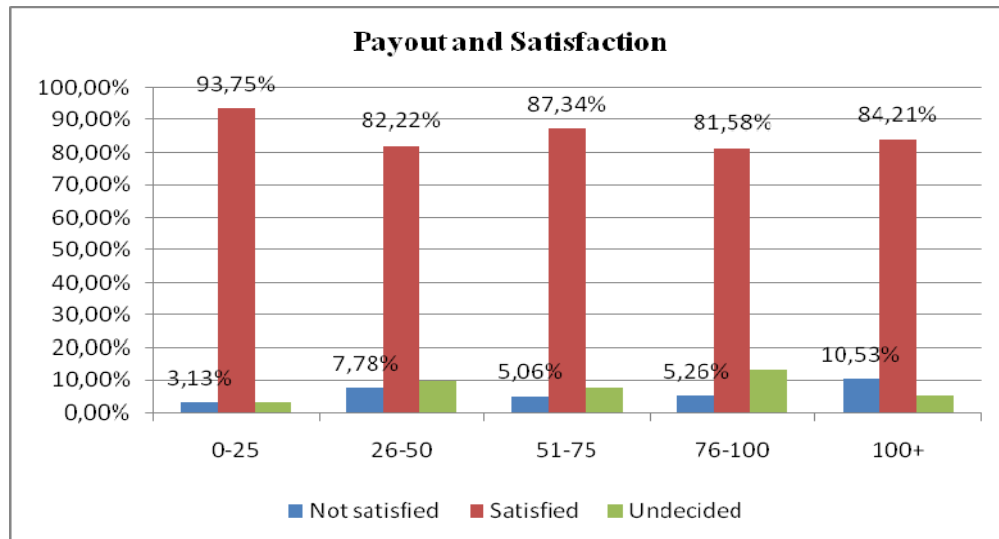
One of the most interesting and meaningful findings of the research is related to payout ratios and satisfaction level. 7% of the sample has a positive balance, whereas the rest is losing different levels of the money they have spent for betting. People who are losing most are the most satisfied group followed by the winners.

Table 3.19 Payout Distribution



* Column names are payout ratios in percentages (%)³

Table 3.20 Payout and Satisfaction



* column names are in percentages (%)

³ For every 100 TL bet, the first column indicates that the bettor has won between 0 and 25 TL. Only the last column is in a net winner position, i.e. for every 100 TL bet their average return is more than 100 TL

The reason for the high satisfaction level of respondents who are losing in average 75% of their betting budget may be explained looking into the motivation of the players. Betting or gaming is encouraged as a leisure activity. However, it is not always the case. One of the important reasons why people bet is socializing (e-COGRA, 2007). Many people play games for relaxation, socializing, distraction or escape, whereas others play for excitement or financial reasons. For people who play with a motivation of the first group, placing a bet is a kind of consumption, not investment. The bet is placed, games or races are watched or followed at the end, whether they win or not is not an important issue. The main idea of playing was having a good time, and by placing the bet, they can seize the period and even the day after. Socializing is one of the most common motivators for gaming. It is a privilege to talk about the coupon lost by only one match.

Especially when players start to chase losses, “motivation changes from entertainment and fun to restoring self esteem and make financial reparation” (Lesieur and Rosenthal, 1991), which may lead to an addiction. Therefore personal budget share becomes important. In Turkey, according to latest statistics of household consumption expenditure by types of expenditure by TURKSTAT, share of entertainment and culture is 2,1% (TURKSTAT, 2008). It seems to be very low, however when compared with some countries in Europe & Central Asia in upper-middle income group according to World Bank Classification⁴ like Turkey (Worldbank, 2008) there is not a big gap between Bulgaria (Recreation, culture and education 3,6%) however Croatia (Recreation and culture 6,21%) and Romania (Leisure and culture 4,4%) figures are two or three times higher than Turkey data. In Turkey, budget for entertainment has decreased from 2,5% to 2,1% within the last six years. To analyze with the sample group data, calculated monthly average betting amount was divided by declared monthly income and a values for average budget share have been obtained and divided into three subgroups: up to 2,5%, 2,5% and 10 % and more than 10%. Most of the

⁴ Other countries are Belarus, Bulgaria, Croatia, Kazakhstan, Latvia, Lithuania, Montenegro, Poland, Romania, Russian Federation, Serbia

sample (57%) is spending less than 2,5% of their budget for betting. However, some of them are above 10% as can be seen in the table below.

Table 3.21 Budget Shares

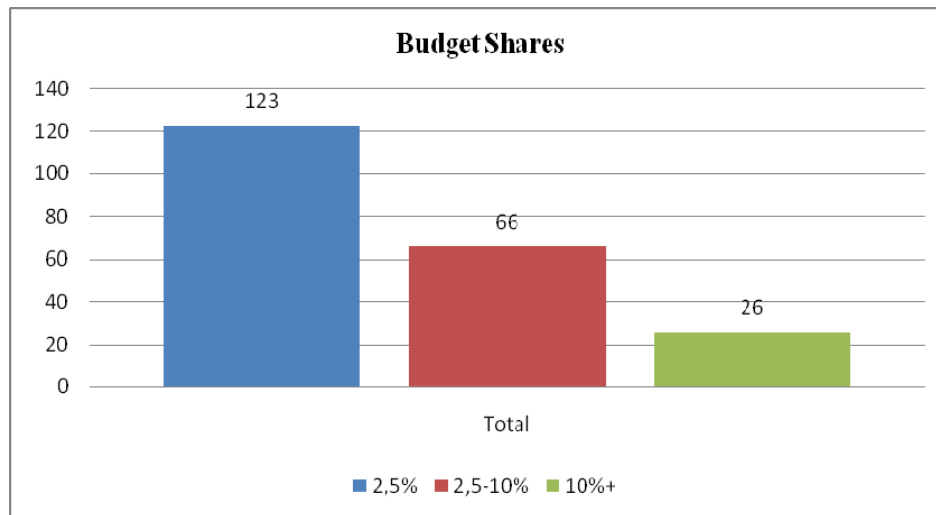
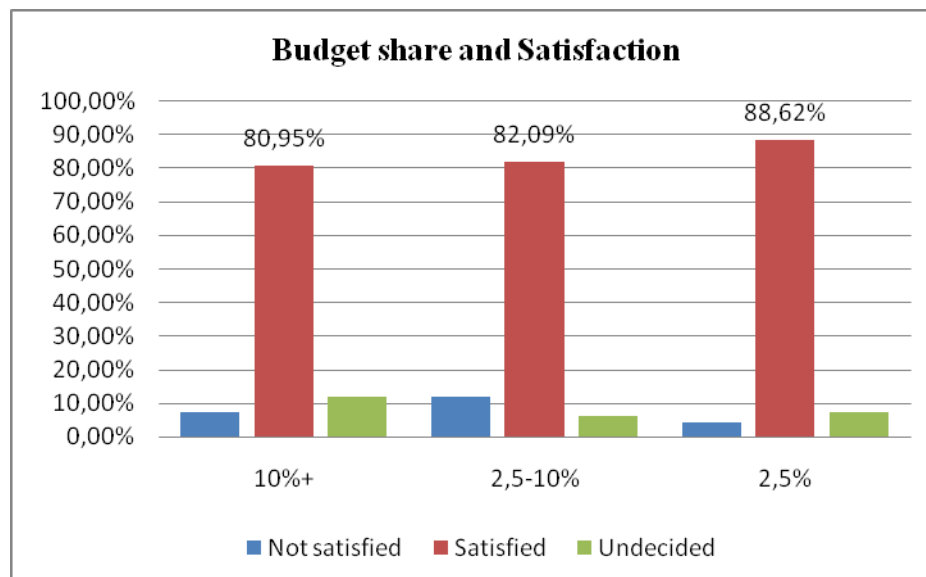


Table 3.22 Share of Online Betting in Declared Budget and Satisfaction



As a result of the analysis, it is possible to argue that, people who see betting as an entertainment activity are satisfied than others who are motivated by other factors including financial benefits.

3.4.2 Analysis of Answers

The responses to each question will be elaborated in this section. A summary descriptive table of importance of each item and related dimension is shown below:

Table 3.23 Summary Descriptive Table of Importance Scores

	N	Range	Minimum	Maximum	Mean	Std. Error	Std. Deviation	Variance
ASU3_IMP Hızlı para çekebilmeniz önemi nedir?	253	3	2	5	4,88	0,02	0,39	0,15
PRI1_IMP Gizliliğin ve güvenliğin sizce önemi nedir?	259	4	1	5	4,86	0,03	0,48	0,23
COM1_IMP Hızlı işlem yapabilmeyiş önemi nedir?	259	3	2	5	4,85	0,02	0,40	0,16
ASU2_IMP Yaptığınız işlemleri iptal edebilmeyiş önemi nedir?	258	4	1	5	4,81	0,03	0,53	0,28
EOU3_IMP Kolayca para transferi yapmanız önemi nedir?	255	3	2	5	4,80	0,03	0,53	0,28
ASU4_IMP İşlemlerde onay vermemiş önemi nedir?	261	4	1	5	4,78	0,04	0,60	0,36
COM2_IMP Sizce profesyonelce hazırlanmış bir siteden işlem yapmanız önemi nedir?	244	3	2	5	4,67	0,04	0,59	0,35
RES3_IMP Telefonla müşteri hizmetlerinden yararlanabilmeyiş önemi nedir?	227	4	1	5	4,67	0,04	0,66	0,43
INF_IMP Oyunlarla ilgili kapsamlı bilgiye ulaşabilmeyiş önemi nedir?	260	4	1	5	4,65	0,04	0,71	0,50
EOU2_IMP Aradığınızı kolayca bulmanız önemi nedir?	233	4	1	5	4,56	0,05	0,84	0,70
PRI2_IMP Rahatsız edilmeden bilgilendirilmeyiş önemi nedir?	256	4	1	5	4,54	0,05	0,82	0,67
RES1_IMP Yardım sayfalarından yararlanabilmeyiş önemi nedir?	243	4	1	5	4,54	0,05	0,73	0,53
ASU1_IMP Diğer ücretler ile ilgili bilgilendirilmeyiş önemi nedir?	227	4	1	5	4,51	0,05	0,82	0,67
RES2_IMP Yazılı iletişim kurabilmeyiş önemi nedir?	240	4	1	5	4,51	0,05	0,77	0,59
FLE3_IMP Size özel uygulamalardan yararlanabilmeyiş önemi nedir?	252	4	1	5	4,50	0,05	0,80	0,64
FLE2_IMP Basit ayarlarla hayatınızı kolaylaştırabilmeyiş önemi nedir?	244	4	1	5	4,47	0,05	0,84	0,71
FUN_IMP Mobil kanallarda görsel tasarımın sizce önemi nedir?	253	4	1	5	4,43	0,05	0,84	0,70
COM3_IMP Kupon kaydetme, piyango aboneliği vb.. farklı servisler kullanabilmeyiş önemi nedir?	252	4	1	5	4,40	0,06	0,92	0,84
EOU1_IMP Hızlı üye olabilmeyiş önemi nedir?	256	4	1	5	4,33	0,06	1,00	1,00
FLE1_IMP Farklı bankalardan işlem gerçekleştirebilmeyiş önemi nedir?	228	4	1	5	4,31	0,08	1,16	1,34

In the table below, the results of the answers are summarized. In the last column, “WA” (Weighted Average=Mean Answer score * Mean Importance score) is added compared to importance table and the table is sorted according to the WA ratings.

Table 3.24 Summary Weighted Quality Scores

	N	Range	Min	Max	Mean	Std. Dev	Var	WA
ASU4 Kupon yaparken onay talep edilmesi, hata yapma riskimi azaltıyor	261	4	1	5	4,73	0,67	0,44	4,53
ASU2 Hata yaptığımda kuponumu belirtilen süre içerisinde iptal edip, paramı geri alıyorum	255	4	1	5	4,67	0,81	0,65	4,50
BEL Bilyoner.com'un sadık bir kullanıcısı olduğumu veya olacağımı düşünüyorum	260	4	1	5	4,44	0,93	0,86	4,44
ATT Bilyoner.com'u arkadaşlarıma öneririm	260	4	1	5	4,29	1,04	1,09	4,29
EOU3 Kolaylıkla para transferi gerçekleştiriyorum	249	4	1	5	4,35	1,11	1,23	4,18
PRI1 Yaptığım işlemlerin güvenliğinden ve paylaştığım bilgilerin gizliliğinden şüphe duymuyorum	253	4	1	5	4,22	1,03	1,05	4,10
ASU3 Kazanıp para çekmek istediğimde 1 gün içerisinde gerçekleşiyor, beklemiyorum	219	4	1	5	4,13	1,21	1,47	4,03
EOU1 Bilyoner.com'a kolayca ve hızlı bir şekilde üye oldum, kaybolmadan hemen işlem yaptım	261	4	1	5	4,48	0,91	0,82	3,88
COM1 Tüm ekranlar her zaman hızlı yükleniyor, beklemiyorum	259	4	1	5	3,98	1,17	1,38	3,86
PRI2 E-posta adresime ya da cep telefonuma isteğim dışında mesajlar gelmiyor, bana gönderilen mesajlardan rahatsız olmuyorum	251	4	1	5	4,23	1,18	1,40	3,84
SAT Bilyoner.com'dan genel olarak memnunum	260	4	1	5	4,22	0,99	0,98	3,75
COM2 Mobil kanalların profesyonelce hazırlanmış olduğunu, hem yenilikçi hem de yaratıcı olduğunu düşünüyorum	234	4	1	5	3,89	1,15	1,31	3,64
FLE2 Bilyoner.com'un sunduğu e-posta, SMS uyarıları vb. ayarlar sayesinde sonuçları kolayca takip ediyorum	223	4	1	5	4,00	1,29	1,67	3,58
RES3 Müşteri hizmetlerini aradığımda sorularıma tatmin edici cevaplar alıyorum	177	4	1	5	3,77	1,31	1,71	3,52
INF Oyunlarla ilgili yeterli detay ve kapsamda güncel, anlaşılır ve güvenilir bilgi sunuluyor	260	4	1	5	3,77	1,30	1,69	3,50
ASU1 Para transferi, wap bağlantısı gibi servis ücretleriyle ilgili detaylı bilgi yer alıyor, öngörmediğim ücretler tarafıma yansımıyor	213	4	1	5	3,81	1,38	1,91	3,44
COM3 Bilyoner.com'un yasal şans oyunları ile ilgili benzerlerinden farklı ve çeşitli ürün ve servisler sunduğunu düşünüyorum	253	4	1	5	3,89	1,33	1,78	3,42
FUN Görsel tasarımı genel olarak beğeniyorum	260	4	1	5	3,85	1,19	1,41	3,41
RES1 Yardım sayfalarında sorularıma cevaplar buluyorum	218	4	1	5	3,74	1,21	1,46	3,40
EOU2 Wapta ve Java uygulamasında aradığımı kolaylıkla buluyorum, kaybolmuyorum	207	4	1	5	3,72	1,39	1,94	3,40
RES2 Gerektiğinde e-posta ya da web sayfasındaki form sayesinde sorularıma yanıt alıyorum	203	4	1	5	3,68	1,37	1,87	3,32
FLE1 Farklı bankalarla çalışıyorum, hepsinden para transferi yapabiliyorum	204	4	1	5	3,83	1,34	1,80	3,30
FLE3 Bana özel kişiselleştirilmiş içerikler, fırsatlar, kampanyalar sunulduğunu düşünüyorum	251	4	1	5	3,28	1,46	2,14	2,95

3.5 Measuring Service Quality

Customer perceived service quality, is the perceived outcome of a set of components, with different importance levels. The formula is identical with the SERVPERF instrument by Cronin and Taylor and modified SERVQUAL instrument.

$$SQ_i = \sum_{j=1}^k I_{ij}(P_{ij})$$

SQ_i = perceived service quality of individual 'i'

k = number of service attributes/items

P = perception of individual 'i' with respect to performance of a service firm on attribute 'j'

I = perception of importance of each attribute

The research proposes to use a quality score with a maximum of 1.0 which can be computed as a result of the proposed survey instrument, dividing weighted average score by the maximum possible number. So, the calculation of weights of each dimension is presented below:

Table 3.25 Weighted Quality Scores of Dimensions

ASU	4,12
PRI	3,97
EOU	3,82
COM	3,64
INF	3,50
RES	3,42
FUN	3,41
FLE	3,28
AVERAGE	3,64

The service quality score is calculated as 0,728 (3,64 / 5).

The overall satisfaction score is computed as 4,22. During questionnaire formation phase, a dilemma was either to include belongingness (loyalty) and attitude (recommendation) as a dimension or outcome of satisfaction. Average of 10 dimensions including both is 3,79 whereas without them, it is only 3,64. There is a strong relationship between these three concepts, customer satisfaction, loyalty and attitude towards the service. Even if overall quality score is much lower, users of a service can be satisfied. There may be several reasons for this as mentioned in the literature review. One of the important ones is that the service offered is not in operating in a perfectly competitive environment. Customers are satisfied, see themselves as loyal customers and even recommend the service to friends. Is it because they do not have many alternatives, or other alternatives are not legal is subject to further research.

Another important finding obtained reading comments on the notes section of the survey is that people do not want to recommend even if they are highly satisfied, since they see betting as a bad habit or addiction and do not want to recommend at all to anyone. Another reason not recommending even if satisfied may occur especially for horse racing bettors. Since it is not a fixed- odds game, introducing a source with much information leading to success is decreasing the chance of winning higher amounts.

Assurance and Privacy are the two dimensions with highest average scores, followed by ease of use being the third. As a result of the above mentioned descriptive results, it is possible to say that these three dimensions are the most important ones. Within the items of Assurance, ASU1 (information about service charges etc are provided...) is the lowest score, answered by only 213 people.

On the other side, Flexibility, Fun and Responsiveness have the lowest scores. The reason for fun is obvious; most bettors do not care for visual appeal in mobile, and use this channel only when they do not have access to Internet. The reason for a low score for responsiveness comes from the preferences; most users do not prefer to look at help pages or send an e-mail and wait. The customer representative should be able to solve problems when the user calls the service. Flexibility was though an interesting

dimension with low score. People are unaware of the options by the service provider, or do not feel treated as personal. This item needs further investigation.

The use of other Bivariate correlation methods for consistency is recommended. Bivariate (Pearson) Correlation is a measure which separately tests the strength of the relationship of each independent variable (dimension or item in a dimension) with the dependent variable which is overall satisfaction. One of the major critics using this measure is that many attributes are similarly correlated with the dependent variable.

Table 3.26 Pearson's Correlation Matrix

	Pearson's Correlation Coefficient	Covariance
FLE3WEI	0,383	0,039
COM3WEI	0,379	0,040
INFWEI	0,364	0,034
COM2WEI	0,345	0,029
COM1WEI	0,328	0,028
FLE2WEI	0,323	0,032
PRI2WEI	0,318	0,029
EOU2WEI	0,312	0,033
ASU2WEI	0,302	0,021
FUNWEI	0,293	0,026
ASU4WEI	0,285	0,018
RES4WEI	0,284	0,030
RES3WEI	0,283	0,030
PRI1WEI	0,256	0,020
EOU3WEI	0,249	0,022
ASU3WEI	0,232	0,021
RES2WEI	0,223	0,021
FLE1WEI	0,177	0,019
ASU1WEI	0,166	0,018
EOU1WEI	0,154	0,013

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

To evaluate each of the independent variables' affect on Satisfaction, we look at the Coefficients Table below. Unexpectedly there are several items with negative Beta values, which should be interpreted that there is a negative relationship between satisfaction and these items. RES2 with a Beta of -0,365 theoretically indicates that users are not much interested in help pages, and it is not important whether they can find answers to their questions or not. A closer look to this item in relation with other items of Responsiveness show that people rather prefer getting in direct touch with a customer representative or receive answer to their questions via e-mail.

The coefficient table in the next page gives a similar result to Pearson correlation coefficients and again Assurance and Privacy are the most important dimensions of service quality which leads to customer satisfaction along with Attitude and belongingness.

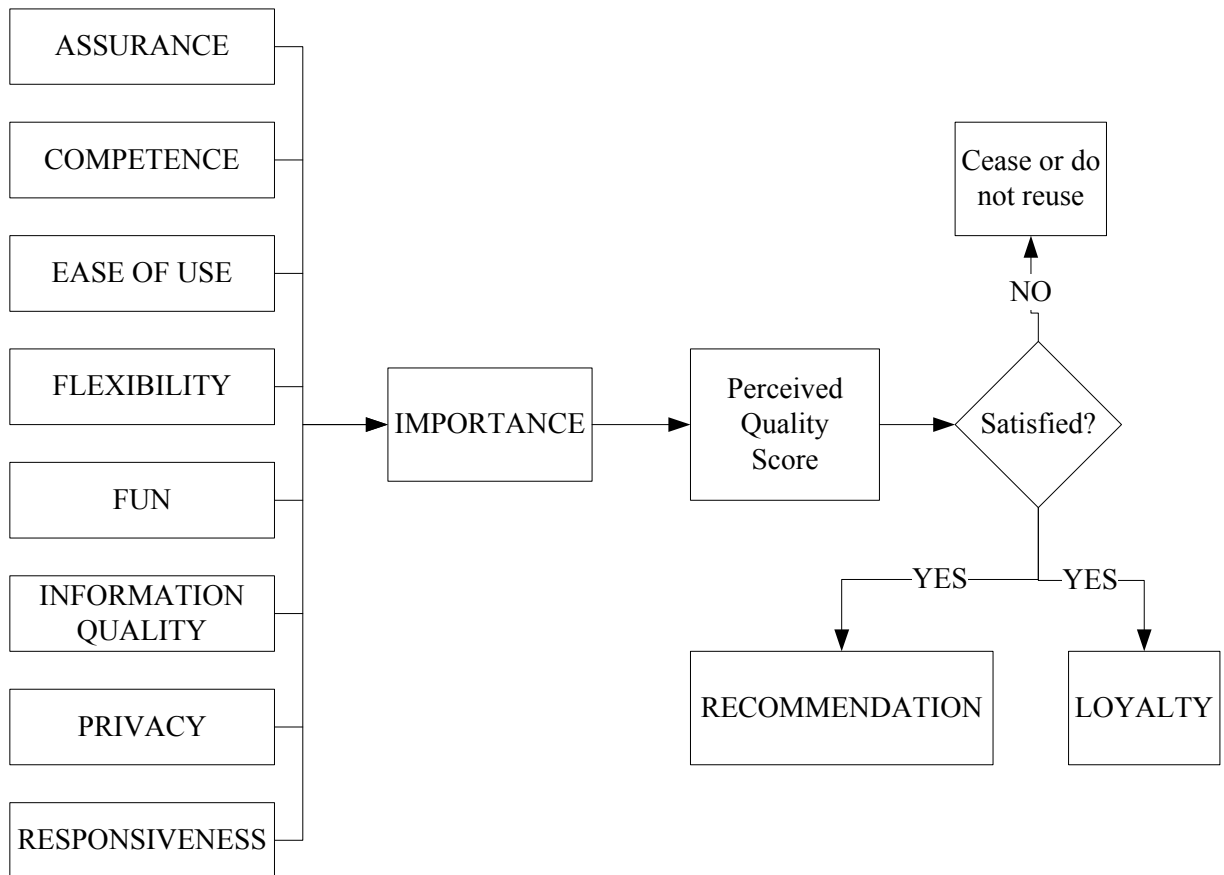
Table 3.27 Coefficients Matrix

		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B		Collinearity Statistics	
Model		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	-,535	,131		-4,086	,000	-,796	-,273		
	EOU1WEI	-7,395E-02	,110	-,058	-,671	,505	-,294	,146	,444	2,251
	EOU2WEI	,111	,097	,101	1,141	,258	-,083	,304	,426	2,348
	EOU3WEI	-7,608E-02	,126	-,062	-,605	,548	-,328	,175	,322	3,103
	FLE1WEI	2,200E-02	,105	,022	,208	,836	-,189	,233	,315	3,179
	ASU1WEI	-4,850E-02	,101	-,044	-,482	,632	-,250	,153	,411	2,434
	PRI1WEI	,312	,138	,223	2,269	,027	,037	,587	,350	2,860
	ASU4WEI	,291	,165	,165	1,763	,083	-,039	,621	,382	2,618
	ASU2WEI	,211	,140	,144	1,503	,138	-,070	,491	,367	2,727
	INFWEI	1,483E-02	,134	,013	,111	,912	-,253	,283	,248	4,038
	FUNWEI	,105	,110	,090	,955	,343	-,115	,325	,376	2,663
	COM1WEI	-,265	,106	-,210	-2,498	,015	-,478	-,053	,477	2,095
	COM2WEI	,208	,164	,176	1,269	,209	-,120	,536	,174	5,732
	RES2WEI	-,435	,109	-,365	-3,991	,000	-,653	-,217	,402	2,490
	RES3WEI	5,537E-02	,124	,051	,447	,656	-,192	,303	,254	3,934
	RES4WEI	9,611E-02	,129	,083	,747	,458	-,161	,353	,270	3,698
	ASU3WEI	-,245	,142	-,195	-1,726	,089	-,528	,039	,265	3,777
	COM3WEI	,102	,103	,085	,991	,325	-,103	,307	,454	2,203
	PRI2WEI	2,307E-02	,088	,019	,263	,793	-,152	,198	,657	1,522
	FLE2WEI	-7,886E-02	,099	-,072	-,793	,431	-,278	,120	,412	2,426
	FLE3WEI	,105	,102	,097	1,033	,305	-,098	,308	,385	2,597
	BELWEI	,238	,182	,127	1,305	,197	-,127	,603	,354	2,826
	ATTWEI	,933	,173	,577	5,402	,000	,588	1,279	,295	3,387

a Dependent Variable: SAT I am satisfied with the XYZ.

As a result of all analysis, the model is modified as seen in the figure below. However, as clearly seen in the demographics section, the questionnaire can be conducted among subgroups with certain characteristics; people who play games of luck for fun and who play for money in general.

Figure 3.4 Final Model of Service Quality Framework



Chapter 4

Conclusion and Discussion

In this final chapter of the thesis, the contribution of the study is summarized and evaluated, and suggestion for future research is presented.

4.1 Summary of the Study

The main purpose of the study was to develop a service quality measurement framework for mobile betting services. The starting point for this has been to look at the theoretical and empirical studies in the literature. Special emphasis was given on the questionnaire design, such that the questionnaires were applicable in business and could, ex-post, be useful in managerial decision making. During the research process it has been proven that “real customers” are unwilling to fill in long questionnaires unless they are somehow rewarded like market research firms do. And when this is the case the answers are biased; either respondents just fill in the blanks randomly or give higher points with the anticipation of being rewarded more. So, one of the most difficult parts of the study was to shorten and consolidate the questionnaire to represent more attributes of a single dimension. In the first survey most of the respondents did not answer many of the questions, either because the survey was too long or they did not have enough experience on every step of the customer life cycle. So, in the second pilot survey, only five main questions were asked and a bonus (credit worth 1 YTL) was offered to every 10th respondent. Surprisingly more than 4000 people responded in less than 48 hours.

Customers perceived service quality was conceptualized with overall satisfaction level with the service offering and the relation between customer satisfaction, attitude

towards loyalty and recommendation was investigated as well. At the preliminary research phase, extra emphasis was placed on avoiding the overlap of dependent and independent variables, and in particular two dimensions were not included as mentioned before; attitude and belongingness.

As described in detail in research methodology, attitude and belongingness could be interpreted as dependent variables. In the final survey and during the data analysis, these were included because of the special settings in Turkey; limited competition as a result of Internet based betting ban, which is a measure taken by the government to collect more tax revenues.

These two items indeed need special emphasis. The domain is described as betting, and it is a part of a greater domain within entertainment. Belongingness is presented with different types of questions in the literature as an independent variable. Typical questions were “I would like to visit the site again in the future” or “the site conveys a sense of community”. Only during reliability analysis these dimension were included. For a better understanding, in the pilot survey, instead of mobile, service offering was evaluated by all users; and most of them were Internet users. This clearly showed that for each and every channel and platform, same dimensions can be used but questions shall be refined, as it has been in the research.

4.2 Theoretical Implications/Contribution

To the best of my knowledge there is no published research found on the quality of betting or mobile betting services in Turkey or in other countries. Betting as an electronic service is a very rapidly growing sector and there is hard competition all over the world. Customer behavior is monitored continuously, CRM activities are run and one-to-one marketing is applied in several examples known through personal connections. It is a fact that there are several ways of measuring service quality by means of surveys and other methods but a general framework does not exist in the sector. The model created in this research can easily be adapted for service quality measurement of betting via different channels only by adapting the items in the questionnaire to the relevant medium.

One of the major contributions of the study is the sampling method used; instead of convenience sampling of professional market research companies, a significant percentage of actual customers participated in the survey and therefore the validity and reliability of the instrument is properly tested.

The user - provider interactions in previous research which have been summarized in literature review did not include pre stages of user - provider interactions such as first contact or enrollment. The first interaction with the site usually includes a membership/enrolment process. This research also includes this process and the importance from customers' perspective shows, it is a dimension not to be neglected.

I believe the most important contribution of my thesis is the re-conceptualization of the service quality models. Customer perceived service quality including all aspects of user-provider interactions is formulated with 8 dimensions, and the final service quality score is obtained from the weighted averages, and an overall satisfaction level metric is developed.

4.3 Comparison with Similar Studies

There are several research elaborated in the literature review in depth. As discussed in the literature review section much of previous research, except the E-S-QUAL lack providing a real service quality measurement framework for electronic services. They rather measure overall satisfaction or provide a guideline for web designers to create better websites.

Most of the instruments conducted were tested only by students. Students cannot always be real or target customers. Only E-S-QUAL has been tested with real customers that satisfy certain criteria instead of the convenience sampling, or the classroom environment. The superiority of my research comes from the sample size and characteristics of the customer being real bettors who use the service and have day-to-day interactions with the site and experience all different aspects of the user-provider interactions.

Previous research is also deficient in this regard; most of that research only concentrates on a single phase of the interaction, post and pre interactions are not considered. Even Parasuraman et. al., in their E-S-QUAL study focus on the interactions with the site once the membership is completed. It is also important, not only for mobile betting but also for other electronic services, to enroll quickly. Impulse shopping is also possible in e-environments and problems observed at that stage stop further interaction before one has been established.

In the literature review, the lack of customization or personalization in previous research including E-S-QUAL has been criticized however; it may be possible that in early stages of the research this dimension has been omitted. Customer inquiries used in the preparation phase clearly indicated a need for customization attributes. Nevertheless, the analysis of the survey indicated this as the least important item. The reason may be lack of competition, and thus the need for differentiation is not as significant compared with the multinational examples.

As of today, Internet or mobile users are not used to service interruptions as it has been the case during the early stages of the development of these services. Therefore there are no questions in the survey measuring system availability or speed. Company XYZ offers the service with over 99.98% availability within the last year. Therefore questions about this dimension are dropped since these would artificially increase the quality score. However, it has been observed that clients, who have enrolled more than a year ago, still have prejudices about connection performance. If the tool is going to be used for comparison of providers of different sites, these questions omitted may be modified and supplemented.

Questions related to “fun” have been eliminated in preliminary stage as a result of Factor Analysis; only one item was enough to explain the attitude which has been the emotional appeal towards visualization; and therefore customers were asked whether they like the visual appearance of the site. In E-S- QUAL this dimension has been eliminated, agreeing that these “do not fall within the conceptual domain of service quality.” However, since betting is seen as entertainment for most of the bettors, I have decided to add this dimension. However, obviously many users see betting not only as entertainment but also as a way to make money, and for those individuals visual appeal of the site does not matter as long as it functions well. However, more questions on “fun” dimension may be included to assess the motivation of the bettors and subgroup the sample according to motivation type (fun versus money).

4.4 Research Limitations

The most important shortcoming of this thesis is that the survey is not conducted in a properly competitive environment. It may be expected that in such an environment, the service quality score could have been higher than the satisfaction level for my data. The switching costs are low, but existing competition is not offering a comparable level of service quality and therefore the switching only takes place in case of service interruptions, unanswered customer requests or unsatisfactory answers to questions and when other service charges are applied. When the competitor is financing money transfer from the bank to the betting account, in several cases, customers admit that as a reason to switch and hold or cease service usage. However, this last reason may only be a marketing strategy in early stages of a service offering. When number of customer increases or banks start to charge higher amounts, costs increase and this privilege may only be offered to a limited number of customers.

Another important limitation is again the setting; this research only reflects the behavior of Turkish bettors living in Turkey. Even if the previous research in literature conducted in several other countries like United States, England or Holland is creating a theoretical basis for the validity of the dimensions, their importance may differ from country to country. It may be possible that assurance is not the most important construct only because of cultural differences. As it can be seen in Appendix J, Americans primarily play online for convenience, ease and comfort. Privacy is not listed within the first three factors.

In the survey, only one important item of the post-usage interaction has been eliminated, which is part of assurance dimension. There is another dimensions listed in the latest work of Parasuraman et al (2005), and it is called “compensation”. The questionnaire item was “XYZ compensates me for problems it creates”. The reason of eliminating this item was that there are not many users who have experienced such a problem. However, it is evident that such an action is one of the most important contributors of customer

satisfaction. In the past, when an error occurred, users were compensated with a similar action and an important part of them keep being daily visitors. If this item was included a selection of the sample would have to be made, and the answers would be biased, increasing the mean score.

Another major issue not included in the research is social responsibility. Since betting, except horse racing, is a new phenomenon in Turkey, there is very limited data. However, it is a fact that within a very short period of time, all organizations will start responsible gaming projects to protect players from undesired outcomes. As it has been mentioned in the previous chapter, when people start to pursue to recover their losses, it may easily lead to addiction. Therefore, authorities and service providers ought to be organized and take necessary measures to minimize a potential social problem.

4.5 Suggestions for Future Research

One of the most important problems during the research process has been collecting reliable and unbiased data through online surveys. There are several alternatives methods for this such as dispensing via e-mail or providing a link on the website only visible / accessible to users who are target samples. It is strictly recommended to use a link visible to only to target sample and not to offer any bonus for not receiving biased answers. Especially in betting, people take the time for filling in the questionnaires while they wait for results.

Cultural difference must be considered when the model is applied in another country. Also the validity and importance of the quality dimensions may change in time. As it is the case in this research, availability is an unnecessary item that has been eliminated as technology progressed. Other issues may vary similarly in time and become obsolete.

Since the importance weighting is part of the model, there is no need to change the dimensions; however, questions shall be revised in various contexts. While this study has explored characteristics of the dimensions and differences in the perceived importance among customers, future research may deepen the reasons of the differences among customer segments. In this study, such differences were not explored in detail, since it is not a part of the main research question I have started with. However, since extensive customer data is available, it may be subject to further research.

Besides the questions used in the survey, collection of other supplementary data such as motivation for playing, playing hours, playing locations will enable better analysis of the explored dimensions. In the case of the thesis, since much data was available about user behavior, these were not included in the survey.

4.6 Managerial Implications

This research aimed to create a service quality measurement framework for mobile betting services. At this final stage, it also provides a tool which can be easily adopted for both mobile and other channels of betting. The results of my survey can be utilized for several purposes such as measuring the quality of a betting service, measuring the quality of a mobile service with some modifications or comparison of two or more similar services in one single survey.

As a result of this questionnaire and the methodology I have used, customers' perceptions and relative importance for each attribute could be determined. Gaps or discrepancies between management perceptions will be explored and all that will help especially in the daily operations of the business. There are several methods used in daily operations for defining product management priorities. The results will enable to shape a more successful product development roadmap, by prioritizing items from a customer point of view, eliminating unnecessary work to be done and allow optimization of resources.

Communication with customers shall be reshaped according to their preferences obtained from the survey, which cannot be determined using gaming data available in databases. Time of messages sent to users or odds or events communicated to users are some of the examples of applications to be modified as a result of the outcomes. An often repeated motto in interactive marketing is "It costs five times more to acquire a new customer than to retain an existing one". For creating stickiness in customer loyalty, this tool can be easily adopted to collect information and act accordingly.

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Appendix A1:

22 statements of the SERVQUAL instrument – (E)

DIRECTIONS: This survey deals with your opinions of——— services. Please show the extent to which you think firms offering —— services should possess the features described by each statement. Do this by picking one of the seven numbers next to each statement. If you strongly agree that these firms should possess a feature, circle the number 7. If you strongly disagree that these firms should possess a feature, circle 1. If your feelings are not strong, circle one of the numbers in the middle. There are no right or wrong answers. All we are interested in is a number that best shows your expectations about firms offering —— services.

- E1. They should have up-to-date equipment.
- E2. Their physical facilities should be visually appealing.
- E3. Their employees should be well dressed and appear neat.
- E4. The appearance of the physical facilities of these firms should be in keeping with the type of services provided.
- E5. When these firms promise to do something by a certain time, they should do so.
- E6. When customers have problems, these firms should be sympathetic and reassuring.
- E7. These firms should be dependable.
- E8. They should provide their services at the time they promise to do so.
- E9. They should keep their records accurately.
- E10. They shouldn't be expected to tell customers exactly when services will be performed. (-)
- E11. It is not realistic for customers to expect prompt service from employees of these firms. (-)
- E12. Their employees don't always have to be willing to help customers. (-)
- E13. It is okay if they are too busy to respond to customer requests promptly. (-)
- E14. Customers should be able to trust employees of these firms.
- E15. Customers should be able to feel safe in their transactions with these firms' employees.
- E16. Their employees should be polite.
- E17. Their employees should get adequate support from these firms to do their jobs well.
- E18. These firms should not be expected to give customers individual attention. (-)
- E19. Employees of these firms cannot be expected to give customers personal attention. (-)
- E20. It is unrealistic to expect employees to know what the needs of their customers are. (-)
- E21. It is unrealistic to expect these firms to have their customers' best interests at heart. (-)
- E22. They shouldn't be expected to have operating hours convenient to all their customers. (-)

Appendix A2:

22 statements of the SERVQUAL instrument- (P)

DIRECTIONS: The following set of statements relate to your feelings about XYZ. For each statement, please show the extent to which you believe XYZ has the feature described by the statement. Once again, circling a 7 means that you strongly agree that XYZ has that feature, and circling a 1 means that you strongly disagree. You may circle any of the numbers in the middle that show how strong your feelings are. There are no right or wrong answers. All we are interested in is a number that best shows your perceptions about XYZ.

- P1. XYZ has up-to-date equipment.
- P2. XYZ's physical facilities are visually appealing.
- P3. XYZ's employees are well dressed and appear neat.
- P4. The appearance of the physical facilities of XYZ is in keeping with the type of services provided.
- P5. When XYZ promises to do something by a certain time, it does so.
- P6. When you have problems, XYZ is sympathetic and reassuring.
- P7. XYZ is dependable.
- P8. XYZ provides its services at the time it promises to do so.
- P9. XYZ keeps its records accurately.
- P10. XYZ does not tell customers exactly when services will be performed. (-)
- P11. You do not receive prompt service from XYZ's employees. (-)
- P12. Employees of XYZ are not always willing to help customers. (-)
- P13. Employees of XYZ are too busy to respond to customer requests promptly. (-)
- P14. You can trust employees of XYZ.
- P15. You feel safe in your transactions with XYZ's employees.
- P16. Employees of XYZ are polite.
- P17. Employees get adequate support from XYZ to do their jobs well.
- P18. XYZ does not give you individual attention. (-)
- P19. Employees of XYZ do not give you personal attention. (-)
- P20. Employees of XYZ do not know what your needs are. (-)
- P21. XYZ does not have your best interests at heart. (-)
- P22. XYZ does not have operating hours convenient to all their customers. (-)

Depicted from Parasuraman, A, Zeithaml, VA and Berry, LL (1988) SERVQUAL: a multi-item scale for measuring consumer perceptions of the service quality. Journal of Retailing, Vol. 64, No. 1, pp. 38

Appendix B: WebQual Dimensions by Construct

Quality	Description
Usability	
1	I find the site easy to learn to operate
2	My interaction with the site is clear and understandable
3	I find the site easy to navigate
4	I find the site easy to use
5	The site has an attractive appearance
6	The design is appropriate to the type of site
7	The site conveys a sense of competency
8	The site creates a positive experience for me
Information Quality	
9	Provides accurate information
10	Provides believable information
11	Provides timely information
12	Provides relevant information
13	Provides easy to understand information
14	Provides information at the right level of detail
15	Presents the information in an appropriate format
Interaction Quality	
16	Has a good reputation
17	It feels safe to complete transactions
18	My personal information feels secure
19	Creates a sense of personalization
20	Conveys a sense of community
21	Makes it easy to communicate with the organization
22	I feel confident that goods/services will be delivered as promised

Appendix C:

E-S-QUAL and E-RecS-Qual Dimensions and Items

E-S-Qual Dimensions:

Respondents rated the Web site's performance on each scale item using a 5-point scale (1 = strongly disagree, 5 = strongly agree). The items below are grouped by dimension for expositional convenience; they appeared in random order on the survey.

Efficiency

- EFF1 This site makes it easy to find what I need.
- EFF2 It makes it easy to get anywhere on the site.
- EFF3 It enables me to complete a transaction quickly.
- EFF4 Information at this site is well organized.
- EFF5 It loads its pages fast.
- EFF6 This site is simple to use.
- EFF7 This site enables me to get on to it quickly.
- EFF8 This site is well organized.

System Availability

- SYS1 This site is always available for business.
- SYS2 This site launches and runs right away.
- SYS3 This site does not crash.
- SYS4 Pages at this site do not freeze after I enter my order information.

Fulfillment

- FUL1 It delivers orders when promised.
- FUL2 This site makes items available for delivery within a suitable time frame.
- FUL3 It quickly delivers what I order.
- FUL4 It sends out the items ordered.
- FUL5 It has in stock the items the company claims to have.
- FUL6 It is truthful about its offerings.
- FUL7 It makes accurate promises about delivery of products.

Privacy

- PRI1 It protects information about my Web-shopping behavior.
- PRI2 It does not share my personal information with other sites.
- PRI3 This site protects information about my credit card.

E-RecS-Qual Dimensions

Respondents rated the Web site's performance on each scale item using a 5-point scale (1 = strongly disagree, 5 = strongly agree). The items below are grouped by dimension for expositional convenience; they appeared in random order on the survey.

Responsiveness

- RES1 It provides me with convenient options for returning items.
- RES2 This site handles product returns well.
- RES3 This site offers a meaningful guarantee.
- RES4 It tells me what to do if my transaction is not processed.
- RES5 It takes care of problems promptly.

Compensation

- COM1 This site compensates me for problems it creates.
- COM2 It compensates me when what I ordered doesn't arrive on time.
- COM3 It picks up items I want to return from my home or business.

Contact

- CON1 This site provides a telephone number to reach the company.
- CON2 This site has customer service representatives available online.
- CON3 It offers the ability to speak to a live person if there is a problem

Perceived Value

The value measure consisted of four items; respondents rated the Web site on each item using a scale of 1 (poor) to 10 (excellent).

1. The prices of the products and services available at this site (how economical the site is).
2. The overall convenience of using this site.
3. The extent to which the site gives you a feeling of being in control.
4. The overall value you get from this site for your money and effort.

Loyalty Intentions

Loyalty measure consisted of five behavioral items; respondents indicated their likelihood of engaging in each behavior on a point scale (1 = very unlikely, 5 = very likely). How likely are you to...

1. Say positive things about this site to other people?
2. Recommend this site to someone who seeks your advice?
3. Encourage friends and others to do business with this site?
4. Consider this site to be your first choice for future transactions?
5. Do more business with this site in the coming months?

Depicted from Parasuraman A, Zeithaml VA, Malhotra A (2005) E-S-QUAL, Multiple-Item Scale for Assessing Electronic Service Quality, Journal of Service Research, Volume 7, No. X, Month 2005 pp 19

Appendix D:

WebQual Items by Construct

USEFULNESS:

Informational Fit-to-Task

The information on the Web site is pretty much what I need to carry out my tasks.
The Web site adequately meets my information needs.
The information on the Web site is effective.

Tailored Communications

The Web site allows me to interact with it to receive tailored information.
The Web site has interactive features, which help me accomplish my task.
I can interact with the Web site in order to get information tailored to my specific needs.

Trust

I feel safe in my transactions with the Web site.
I trust the Web site to keep my personal information safe.
I trust the Web site administrators will not misuse my personal information.

Response Time

When I use the Web site there is very little waiting time between my actions and the Web site's response.
The Web site loads quickly.
The Web site takes long to load.

EASE OF USE:

Ease of Understanding

The display pages within the Web site are easy to read.
The text on the Web site is easy to read.
The Web site labels are easy to understand.

Intuitive Operations

Learning to operate the Web site is easy for me.
It would be easy for me to become skillful at using the Web site.
I find the Web site easy to use.

ENTERTAINMENT:

Visual Appeal

The Web site is visually pleasing.

The Web site displays visually pleasing design.

The Web site is visually appealing.

Innovativeness

The Web site is innovative.

The Web site design is innovative.

The Web site is creative.

Emotional Appeal

I feel happy when I use the Web site.

I feel cheerful when I use the Web site.

I feel sociable when I use the Web site.

COMPLIMENTARY RELATIONSHIP:

Consistent Image

The Web site projects an image consistent with the company's image.

The Web site fits with my image of the company.

The Web site's image matches that of the company.

On-Line Completeness

The Web site allows transactions on-line.

All my business with the company can be completed via the Web site.

Most all business processes can be completed via the Web site.

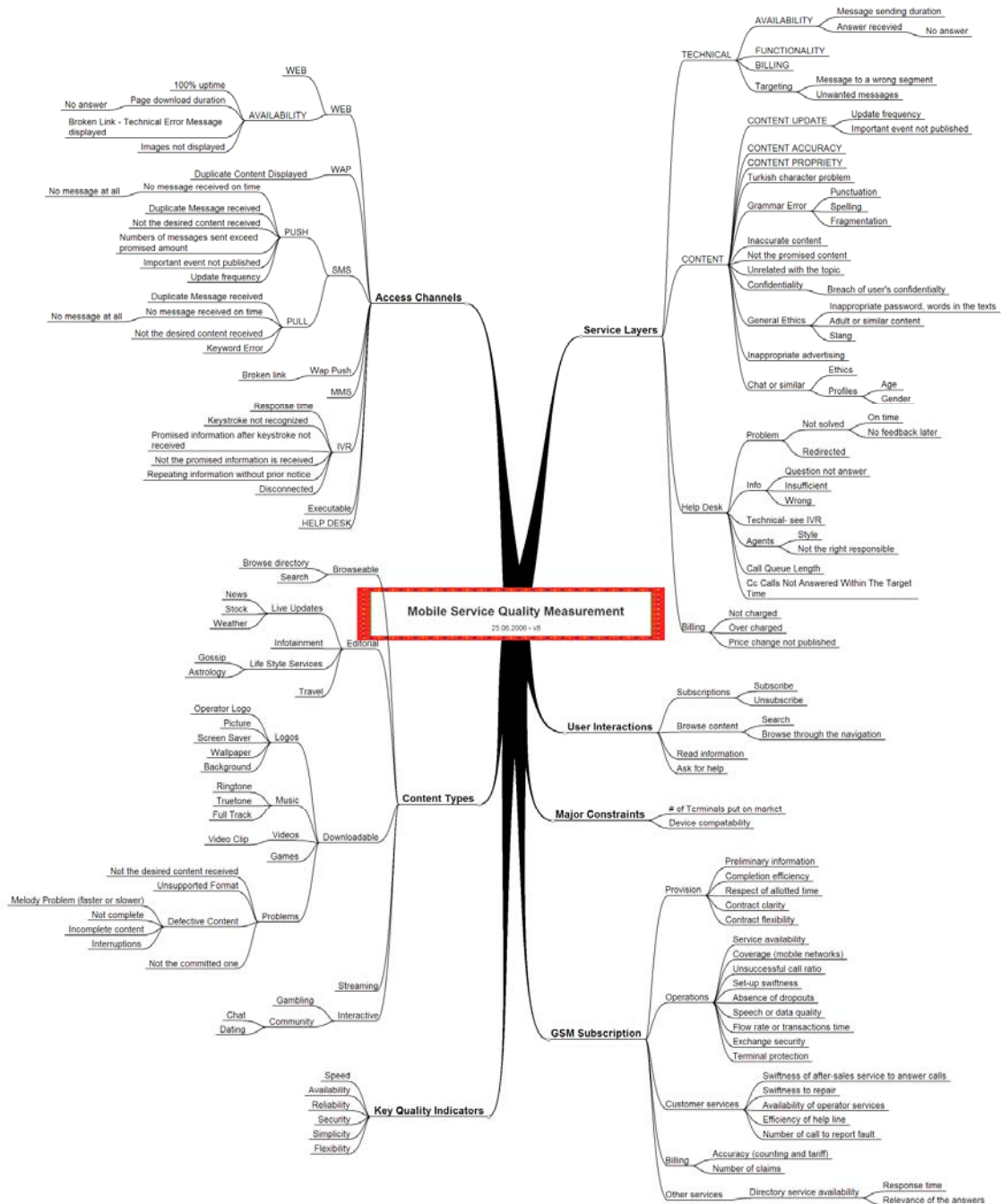
Relative Advantage

It is easier to use the Web site to complete my business with the company than it is to telephone, fax, or mail a representative.

The Web site is easier to use than calling an organizational representative agent on the phone.

The Web site is an alternative to calling customer service or sales.

Appendix E: Dimensions of Mobile content



Appendix F:
First Pilot Survey Questions

#	Questionnaire Item	Construct
1	Ücretlendirme konusunda yeterli bilgi veriliyor.	Assurance
2	Kolay ve hızlı bir şekilde satın aldım	Ease of Use
3	Hemen kullanmaya başladım	Ease of Use
4	Kullanışlı bir navigasyona sahip	Ease of Use
5	İçerikleri rahat okuyabiliyorum	Ease of Use
6	Aradığımı kolayca bulabiliyorum	Ease of Use
7	Yaptığım işlemlerin ve paylaştığım bilgilerin güvenliğinden şüphe duymuyorum	Privacy
8	İstersem ürünü sorunsuz bir şekilde geri verip ücret iadesi alabilirim.	Assurance
9	Alternatif satın alma, ödeme, iade yöntemleri mevcut	Flexibility
10	Doğru bilgi sunuluyor	Information Quality
11	Güncel bilgi sunuluyor	Information Quality
12	Güvenilir bilgi sunuluyor	Information Quality
13	Yeterli detay ve kapsamda bilgi sunuluyor	Information Quality
14	İlgisiz içeriklere yer verilmiyor	Information Quality
15	İçerik kolay anlaşılıyor	Information Quality
16	İçerik beni eğlendiriyor	Fun
17	kullanmaktan keyif alıyorum	Fun
18	Görsel olarak cezbedici	Fun
19	Yenilikçi bir ürün	Competence
20	Yaratıcı bir ürün	Competence
21	Profesyonelce hazırlanmış	Competence
22	Gerçekleştirdiğim işlemler hızla tamamlanıyor	Competence
23	İstedğim gibi özelleştirebiliyorum, işimi kolaylaştırıyor	Flexibility
24	Kişiselleştirilmiş içerik sunuyor	Flexibility
25	Kendimi kullanan topluluğun bir parçası hissediyorum	Belongingness
26	Her ihtiyaç duyduğumda kolayca yardım alabilirim.	Belongingness
27	Taleplerim hızla sonuçlandırılır.	Belongingness
28	Geniş bir ürün yelpazesine sahip	Assurance
29	Özel ürünler bulabiliyorum	Assurance
30	Diğer kanallara göre farklı avantajlar sağlıyor	Assurance
31	Sürekli kullanmak isterim	Attitude
32	Arkadaşlarıma öneririm	Attitude

Appendix G: Second Pilot Survey Questions

1. Sunduğumuz hizmetten memnun musunuz?

Çok memnunum
Memnunum
Kararsızım
Memnun değilim
Hiç memnun değilim

2. Sizin için önem derecesini belirtip daha sonra bizi bu kriterlere göre lütfen değerlendiriniz.
(5 en yüksek, 1 en düşük)

Sizce Önemi	Sizce Biz Nasılız?
Tasarım	
Kullanım kolaylığı	
İçerik	
Hız	
Müşteri hizmetleri	
Hesaba para yatırma kolaylığı	

3. Yakınlarımıza sitemize üye olmasını tavsiye eder misiniz?

Kesinlikle tavsiye ederim
Tavsiye ederim
Kararsızım
Tavsiye etmem
Kesinlikle tavsiye etmem

4. Sitemiz dışında nerelerden oyun oynuyorsunuz?

Sadece sizden
Yurtdışı sitelerinden
İddaa bayilerinden
Ganyan bayilerinden
Milli Piyango bayilerinden

5. Aşağıdaki hizmet kanallarımızdan hangilerini biliyorsunuz?

İnternet
Cep telefonu uygulamaları (Java, SMS, WAP)
Digitürk Kanal 575
Müşteri Hizmetleri

Appendix H:
Final Survey Questions and Dimensions

	Questionnaire Item	Component
1	Siteye kolayca ve hızlı bir şekilde üye oldum, ilk girişte kaybolmadan hemen işlem yapabildim	Ease of Use
2	Sitede aradığımı kolaylıkla buluyorum, kaybolmuyorum	Ease of Use
3	Sitenin tasarımını genel olarak beğeniyorum	Fun
4	Kolaylıkla para transferi gerçekleştirdim, anında hesabıma geçti	Ease of Use
5	Farklı bankalarla çalışıyorum, hepsinden işlem gerçekleştirebiliyorum	Flexibility
6	Servis ücretleriyle ilgili detaylı bilgi yer alıyor, öngörmediğim ücretler yansımadı	Assurance
7	Yaptığım işlemlerin güvenliğinden ve paylaştığım bilgilerin gizliliğinden şüphe duymuyorum	Privacy
8	İşlemlerde onay talep edilmesi, hata yapma riskimi azaltıyor	Responsiveness
9	Hata yaptığımda işlemi belirtilen süre içerisinde iptal edip, paramı geri alabiliyorum	Assurance
10	Yeterli detay ve kapsamda güncel, anlaşılır ve güvenilir bilgi sunuluyor	Information Quality
11	Sayfalar her zaman hızlı yükleniyor, beklemiyorum	Competence
12	Yardım sayfalarında sorularıma cevaplar buluyorum	Responsiveness
13	Gerektiğinde müşteri hizmetlerinden sorularıma tatmin edici cevaplar alıyorum	Responsiveness
14	Kazanıp para çekmek istediğimde 1 gün içerisinde gerçekleşti, beklemedim	Ease of Use
15	Şans oyunları ile ilgili benzerlerinden farklı ve çeşitli ürünler sunuyor	Assurance
16	İsteğim dışında mesajlar gelmiyor, bana gönderilen mesajlardan rahatsız olmuyorum	Privacy
17	Alternatiflerine göre farklı avantajlar sağlıyor	Assurance
18	Sitenin sunduğu ayarlar sayesinde işimi kolaylaştırabiliyorum	Flexibility
19	Bana özel kişiselleştirilmiş içerikler, fırsatlar, kampanyalar sunuyor	Flexibility
20	Profesyonelce hazırlanmış, hem yenilikçi hem de yaratıcı bir site	Competence
21	Sitede zaman geçirmek beni eğlendiriyor; kullanmaktan keyif alıyorum	Fun
22	XZY.com'un sadık bir kullanıcısıyım ve arkadaşlarıma öneriyorum	Belongingness
23	Sitede geçirdiğim zamanın ve harcadığım paranın karşılığını aldığımı düşünüyorum	Attitude

Appendix I: Questionnaire Screen

Bilyoner'in Mobil Kanallarından memnun musunuz?

Saygıdeğer Üyemiz,

Bu anketin amacı mobil kanallarımızın kalitesini siz değerli üyelerimizin görüşleri doğrultusunda değerlendirmektir. Anketi doldururken lütfen aşağıda yer alan değerlendirme kriterlerini göz önünde bulundurun:

1- Kesinlikle Katılmıyorum
2- Katılmıyorum
3- Kararsızım
4- Katılıyorum
5- Kesinlikle Katılıyorum

Değerlendirdiğiniz konuların önemini belirtirken de benzer şekilde puanlamanız gerekiyor.

1- Hiç Önemli Değil
2- Önemli değil
3- Ne önemli ne de önemsiz
4- Önemli
5- Çok Önemli

Soruların doğru ya da yanlış cevapları yok, sadece sizin açınızdan önem ve kaliteyi belirlemeye çalışacaksınız. Cevap vermekte çok zorlanırsanız "F" (Fikirim yok) şıkkını işaretleyebilirsiniz.

[1][2][3][4][5][F]

1) Bilyoner'e kolayca ve hızlı bir şekilde üye oldum, kaybolmadan hemen işlem yaptım	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...Hızlı üye olabilmemenizin önemi nedir?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2) Wapta ve Java uygulamasında aradığımı kolaylıkla buluyorum, kaybolmuyorum	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...Aradığınızı kolayca bulmanızın önemi nedir?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3) Kolaylıkla para transferi gerçekleştiriyorum	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...Kolayca para transferi yapmanızın önemi nedir?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4) Farklı bankalarla çalışıyorum, hepsinden para transferi yapabiliyorum	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...Farklı bankalardan işlem gerçekleştirebilmeniz önemi nedir?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5) Para transferi, wap bağlantısı gibi servis ücretleriyle ilgili detaylı bilgi yer alıyor, öngörmediğim ücretler tarafıma yansımıyor	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...Diğer ücretler ile ilgili bilgilendirilmeniz önemi nedir?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6) Yaptığım işlemlerin güvenliğinden ve paylaştığım bilgilerin gizliliğinden şüphe duymuyorum	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...Gizliliğin ve güvenliğin sizce önemi nedir?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7) Kupon yaparken onay talep edilmesi, hata yapma riskimi azaltıyor	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...İşlemlerde onay vermeniz önemi nedir?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8) Hata yaptığımda kuponumu belirtilen süre içerisinde iptal edip, paramı geri alıyorum	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...Yaptığınız işlemleri iptal edebilmeniz önemi nedir?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9) Oyunlarla ilgili yeterli detay ve kapsamda güncel, anlaşılır ve güvenilir bilgi sunuluyor	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...Oyunlarla ilgili kapsamlı bilgiye ulaşabilmeniz önemi nedir?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10) Görsel tasarımı genel olarak beğeniyorum	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...Mobil kanallarda görsel tasarımın sizce önemi nedir?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11) Tüm ekranlar her zaman hızlı yükleniyor, beklemiyorum	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...Hızlı işlem yapabilmemenizin önemi nedir?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

- 12) Mobil kanalların profesyonelce hazırlanmış olduğunu, hem yenilikçi hem de yaratıcı olduğunu düşünüyorum
 ...Sizce profesyonelce hazırlanmış bir siteden işlem yapmanızın önemi nedir?
- 13) Yardım sayfalarında sorularına cevaplar buluyorum
 ...Yardım sayfalarından yararlanabilmeniz önemi nedir?
- 14) Gerektiğinde e-posta ya da web sayfasındaki form sayesinde sorularına yanıt alıyorum
 ...Yazılı iletişim kurabilmeniz önemi nedir?
- 15) Müşteri hizmetlerini aradığımda sorularına tatmin edici cevaplar alıyorum
 ...Telefonla müşteri hizmetlerinden yararlanabilmeniz önemi nedir?
- 16) Kazanıp para çekmek istediğimde 1 gün içerisinde gerçekleşiyor, beklemiyorum
 ...Hızlı para çekebilmeniz önemi nedir?
- 17) Bilyoner'in yasal şans oyunları ile ilgili benzerlerinden farklı ve çeşitli ürün ve servisler sunduğunu düşünüyorum
 ...Kupon kaydetme, piyango aboneliği vb farklı servisler kullanabilmeniz önemi nedir?
- 18) E-posta adresime ya da cep telefonuma isteğim dışında mesajlar gelmiyor, bana gönderilen mesajlardan rahatsız olmuyorum
 ...Rahatsız edilmeden bilgilendirilmeniz önemi nedir?
- 19) Bilyoner'in sunduğu e-posta, SMS uyarıları vb ayarlar sayesinde sonuçları kolayca takip ediyorum
 ...Basit ayarlarla hayatınızı kolaylaştırabilmeniz önemi nedir?
- 20) Bana özel kişiselleştirilmiş içerikler, fırsatlar, kampanyalar sunulduğunu düşünüyorum
 ...Size özel uygulamalardan yararlanabilmeniz önemi nedir?
- 21) Bilyoner.com'un sadık bir kullanıcısı olduğumu veya olacağımı düşünüyorum
- 22) Bilyoner.com'dan genel olarak memnunum
- 23) Bilyoner.com'ü arkadaşlarıma öneririm

Yaş

Cinsiyetiniz

Medeni durumunuz

Eğitim durumunuz:

Çalıştığınız sektör:

Gelir durumunuz

Eklemek istediğiniz diğer yorumlarınızı buraya yazabilirsiniz: [0 | 330]

Kaydet

Appendix J:
**Reasons for preferring Internet gambling versus gambling at a
land-based venue**

Reason	Percentage of all reasons given by respondents*
Convenience	12.9%
Ease	12.2%
Comfort	11.7%
Distance from casino	10.0%
Privacy	9.8%
Dislike land-based clientele	5.1%
Dislike crowds	4.7%
Dislike noise	4.1%
Dislike smoke	3.9%
High speed of game play	3.8%
Leisurely pace of game play	3.1%
Lower overall expenditure	3.0%
More fun	3.0%
Preference for Internet interface	2.5%
Higher potential wins	1.8%
Safety concerns	1.6%
Lower secondary costs	1.0%
Aversion to casino atmosphere	0.7%
Land-based gambling illegal	0.5%
Disability	0.4%
Other	4.3%

*Respondents could offer multiple reasons.

Source: Wood et al. 2007

VITA

Curriculum Vitae

Ali İlhan Tireli was born in Istanbul, in 1975. He received his BS degree in International Relations & Political Sciences, in 1999 from Marmara University and Executive MBA degree from Bilgi University & Manchester Business School in 2001. Since 1997, he has been working at private technology companies, coordinating Internet and Mobile Internet business. During this time he had experience in Mobile & Internet Portal Management and Development, Usability Studies, Quality Assurance, Content & Project Management and Service Design, Development & Integration. His research interests include service quality and usability.