FACTORS AFFECTING THE USAGE OF SOCIAL CRM APPLICATIONS

MEHMET NURİ CAN

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Mehmet Nuri Can

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Thesis Abstract

Mehmet Nuri CAN, “Factors Affecting the Usage of Social CRM Applications”

Improvements on internet changed many things in our lives and social media is one of the important changes that happenED. Today, several people spend significant amount of time on social networking sites. This situation also affected business. Customer relationship management (CRM), which is a quite popular concept in the professional world, strategies of companies started to change and they wanted to adopt new technologies to their existing daily activities with the consumers. This is how Social CRM, another new concept, emerged.

In this study, factors affecting social CRM applications usage in Turkey has been researched. Eight potential factors determined by examining the extant literature and the results show that consumers’ existing relationship with brand interacted and their privacy and security concerns are the most influential issues for Turkish consumers’ social CRM applications usage.

Tez Özeti

Mehmet Nuri CAN, Sosyal CRM Uygulamalarının Kullanımında Etkili Olan Faktörler

İnternet teknolojilerindeki gelişim hayatımızda bir çok şeyi değiştirdi ve sosyal medya bu değişimin önde gelen kavramlarından biri haline geldi. Bugün insanlar sosyal ağlarda kayda değer zaman geçirmekteler ve bu gerçeğin iş dünyasına da yansımaları bulunmakta. Günümüz iş hayatında müşteri ilişkileri yönetimi (CRM) stratejileri önemli yer tutarken, firmalar müşteri aktivitelerine sosyal medyayı da adapte etmek istemektedirler. Tüm bu gelişmeler sosyal CRM denilen kavramın ortaya çıkmasını tetikleyen unsurlardır.

Bu çalışma Türk tüketicilerinin sosyal CRM uygulamalarını kullanmalarında etkili olan faktörleri tespit etmek amacıyla gerçekleştirilmiştir. Mevcut literatürün incelenmesinin ardından tüketici davranışlarını etkileyebileceği düşünülen sekiz faktör tespit edilmiştir. Araştırmanın sonuçları tüketicilerin iletişim kurdukları markayla halihazırda sürdürdükleri ilişkileriyle birlikte kişisel bilgilerinin gizliliği ve güvenlik konularındaki hassasiyetlerinin sosyal CRM uygulamalarının kullanılmasında daha çok etkisi olduğunu göstermektedir.

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ABBREVATIONS

CRM: Customer Relationship Management

e-CRM: Electronic CRM

S-CRM: Social CRM

RSS: Really simple syndications

CHAPTER 1

INTRODUCTION

With the rapid development of technology, a new concept has become an important part of our lives. It is the internet. Many things have changed the way with its existence. We have started to follow the news, make our financial operations, make shopping, communicate with our friends and family, contact with our customers or suppliers, watch videos or TV shows and make almost everything we did before by using this new medium.

With the existence of Web 2.0, content generation became significant. Blogs, wikis and other new concepts became important elements of this period and social media was one of the prominent Web 2.0 services. People currently spend a substantial amount of time on those networking sites such as Facebook, Twitter, Google + etc.

Increase in popularity of social networking sites attracted customer relationship management (CRM) specialists. There were several environments which their consumers stand. Those environments could be used to create new sales opportunities, to make marketing activities or to improve customer service efficiency which are all the main subjects of CRM. So we had another new concept “Social CRM” or “CRM 2.0”.

Those opportunities are also relevant for Turkey. Currently the population of Turkey is around 75 million (Turkish Statistical Institute, 2013) and more than 26 million of those people are internet users (Internet Advertising Bureau Turkey, 2013). The research of Ipsos KMG shows that there are 18.1 million social media

users who are over 15 years old (Ipsos KMG, 2013). Those statistics show the potential of Turkey in terms of Social CRM (S-CRM).

Purpose of the Study

This study aims to determine the dynamics that affect social CRM applications with a Turkey perspective. In other words our major purpose is finding answer to the question: What are the factors affecting the usage of social CRM applications in Turkey?

In order to answer this question, extant literature has been reviewed in detail and a theoretical framework has been developed. Then a survey has been prepared according to the elements of the framework and it has been conducted to Turkish consumers via the Internet.

On the following sections of that report, it is possible to find the details of literature review, theoretical framework, analyses and findings of that study. Finally, a summary is available with recommendations for further researches.

CHAPTER 2

LITERATURE REVIEW

The Evolution and the Definition of CRM

Competition was reshaped by the improvement on production techniques and mass marketing concept in the mid-twentieth century (Chen and Popovich, 2003). Consumers began to acquire products more easily. However, as Chen and Popovich (2003) point out, the availability of several product and service offers decreased time spent on purchasing and that made knowing the customer more complicated. Companies needed a strategy to analyze the characteristics and behaviour of their customers and a new concept, Customer Relationship Management, emerged.

The studies of Ling and Yen (2001) and Xu et al (2002) tell that customer relationship management (CRM) started to become popular in 1990s. According to Wu and Wu (2005) the traditional 'four Ps' of marketing - product, price, place, and promotion – leaves its place to CRM, as the current market's conditions force the companies to construct long-term relationships with their customers. The emergence of this concept put forward the customer retention as a business strategy instead of customer acquisition (Faase et al., 2011). Silverstein (2001) asserts that selling a product or service to a current customer is 5 times cheaper than selling to a new customer. Moreover, comprehending consumers by implementing a CRM strategy makes a significant contribution to customer loyalty (Chen and Popovich, 2003).

Until today CRM has been defined by different authors or researchers in different ways. Many of the definitions are strategy focused. However, new ones include the term "technology".

The definition in Faase et al.'s (2011, p. 7) study, depending on the definition of Gartner Group, is more strategy focused: "*CRM is an enterprise-wide business strategy designed to optimize profitability, revenue and customer satisfaction by organizing an enterprise around customer segments, fostering customer-satisfying behaviours and linking processes from customers through suppliers*".

Ngai (2005, p. 583) stresses the importance of "strategy", but the author also adds "technology" to his definition*: CRM as a comprehensive set of strategies for managing those relationships with customers that relate to the overall process of marketing, sales, service, and support within the organization. Moreover, information technology (IT) and information systems (IS) can be used to support and integrate the CRM process to satisfy the needs of the customer*.

Wahab and Ali (2010, p. 91) also follow the same way with a more clear definition: "*CRM is a business strategy that applies the technology to tie together all aspects of a company's business to build long-term customer relationship and customer loyalty*."

Greenberg (2010, p. 413) defines CRM as a strategy plus philosophy while highlighting the importance of technology support: "*CRM is a philosophy and a business strategy supported by a system and a technology designed to improve human interaction in a business environment*."

Nevertheless Goodhue et al. (2002, p.81) prefer not to use a word like "strategy" or "philosophy" and directly focus on technology while defining CRM:

"*Any application or initiative designed to help an organization optimize interactions with customers, suppliers, or prospects via one or more touch points – such as a call center, salesperson, distributor, store, branch office, Web, or e-mail – for the purpose of acquiring, retaining, or cross-selling customers.*"

CRM and Technology

It is clear that CRM should be evaluated as a business concept at first glance. However, the effect of technology for a successful CRM cannot be denied. According to Messner (2005) there are two fields which route the advance in CRM. First one is marketing. The focus of marketing changed from transaction marketing to relationship marketing. Second one is technology. Advance in technology made transforming information management to knowledge management possible (Messner, 2005).

Sen and Sinha (2011) propose an interaction model for customer relationship management. This model involves 4 components, as depicted in the figure below, and one of the critical elements is technology.

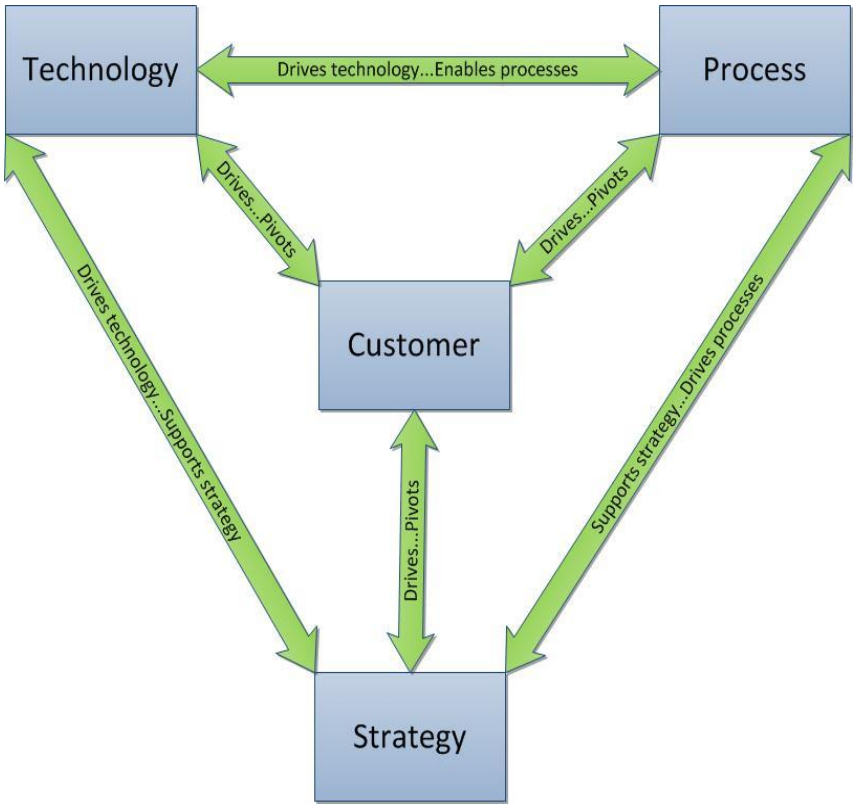

Fig. 1 Interaction model for CRM

Source: Sen, A., & Sinha, A. P. (2011). IT alignment strategies for customer relationship management. *Decision Support Systems, 51*, 609 - 619

Improvements on technology and software applications accelerated the CRM development (Chen and Popovich, 2003). Maximizing the benefits of a CRM strategy requires a comprehensive usage of technology (Greeve and Albers, 2006). Today CRM implementations aims at combining customer management plan of a company with a software infrastructure which is accessible to all enterprise (Finnegan and Currie, 2010). CRM strategies of the enterprises, as Finnegen and Currie (2010, p. 158) point out, "*take full advantage of technology innovations with their ability to collect and analyze data on customer patterns, interpret customer*

behaviour, develop predictive models, respond with timely and effective customized communications, and deliver product and service value to individual customers."

CRM Application Categories and Benefits of CRM Implementations

According to Wahab and Ali (2010), CRM improves the performance of customer service, call center users, sales consultant and eases marketing, sales and customer service processes with the support of technology and human resources. All these improvements evaluated in the category of operational CRM applications (Karimi et al., 2001).

Extensive benefits of the software industry and technology to CRM area created a new concept "e-CRM". Kotorov (2002, p. 220) describes e-CRM as *the application of information and communication technology to increase the scale and scope of customer service.*

In addition to operational CRM applications, as Karimi et al. (2001) asserts, there are also analytical CRM ones which analyze data to improve relationships through data warehouses. Using data mining tools for CRM purposes began to become very common in order to analyze customer with different aspects such as his characteristics and attitudes (Berson et al, 2000). Those tools, as Berson et al. (2000) defines, support an enterprise by summarizing valuable information from huge databases which can be used in its marketing processes for making right CRM choices.

Lastly, collaborative CRM applications can be classified as a different category of CRM products which aims to build communities on the Internet, develops one-to-one marketing etc. (Karimi et al., 2001).

According to Raman et al. (2006) implementing an e-CRM project provides several benefits to an enterprise. They note that a successful CRM implementation

decreases costs and increases customer satisfaction and helps business to create opportunities and to gain competitive advantage. An effective implementation, as Raman et al. (2006) reports, also combines information resources of the company with organizational ones.

Popular CRM Applications

There are several software applications which are focused on customer relationship management processes. Some of them are international and some of them are local. Every year Gartner Group evaluates these applications worldwide in different categories such as contact centers, multichannel campaign management, web customer service, lead management and sales force automation. Since 2011, social CRM has been added to these categories.

Gartner Group assesses these applications according to 2 dimensions; "ability to execute" and "completeness of vision". At the end of this evaluation, applications are grouped in 4 categories: leaders, visionaries, challengers and niche players.

The result of different categories can be seen on the figures below.

Magic Quadrant for CRM Customer Service Contact Centers

At this category 5 different applications stand out as “leaders”. Salesforce.com, Oracle (Siebel), Oracle (RightNow Technologies), Microsoft and Pegasystems have been classified as the leaders of CRM customer service contact centers category (Maoz, 2012).

Fig. 2 Magic quadrant for CRM customer service contact centers

Source: Maoz, M. (2012). Magic Quadrant for CRM Customer Service Contact Centers. Gartner.

Magic Quadrant for CRM Multichannel Campaign Management

At this category 4 different applications stand out as “leaders”. IBM-Unica, SAS, Teradata-Aprimo and Oracle Siebel have been classified as the leaders of CRM multichannel campaign management category (Sarner, 2012).

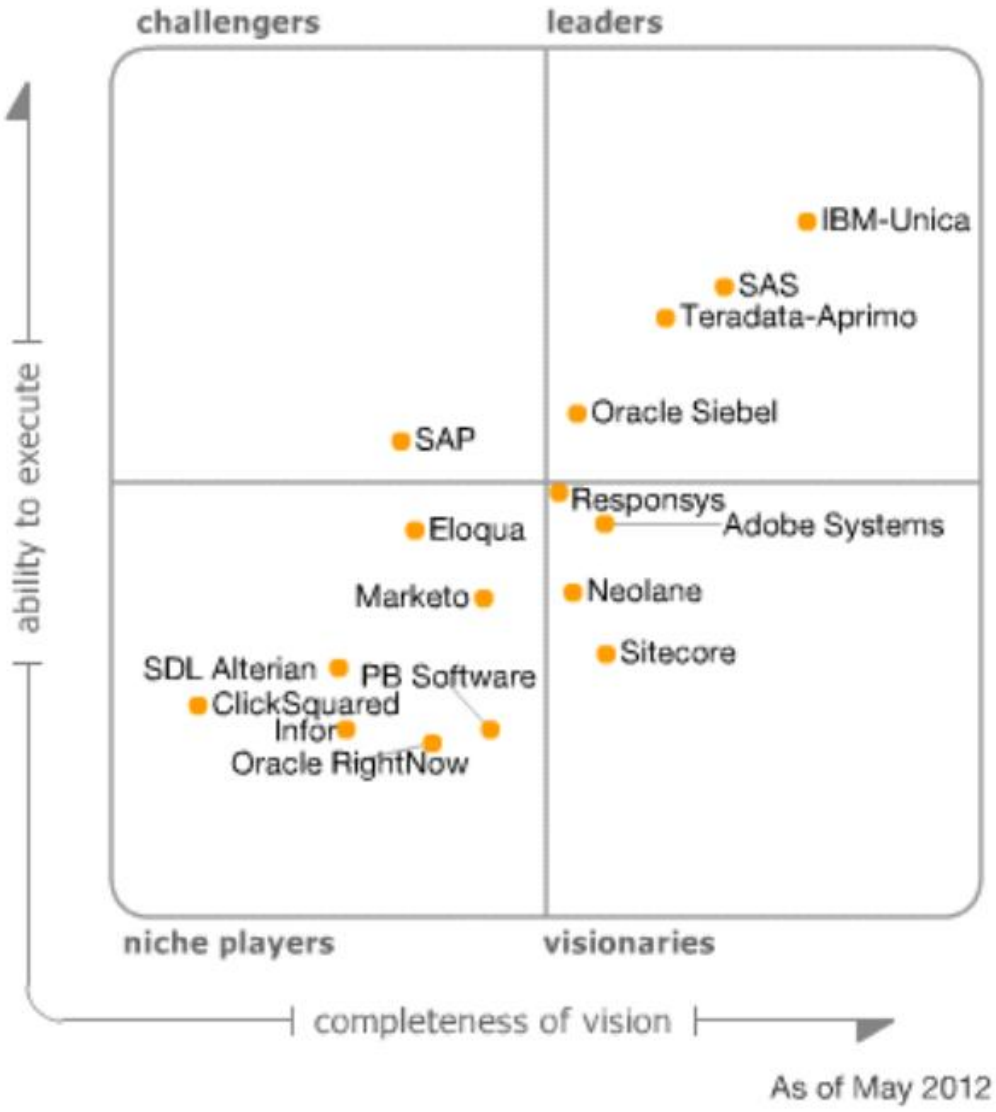

Fig. 3 Magic quadrant for CRM multichannel campaign management

Source: Sarner, A. (2012). *Magic Quadrant for CRM Multichannel Campaign Management.* Gartner.

Magic Quadrant for Sales Force Automation

At this category 4 different applications stand out as “leaders”. Salesforce.com, Microsoft Dynamics CRM, Oracle (Siebel), and SAP have been classified as the leaders of sales force automation category (Desisto, 2012).

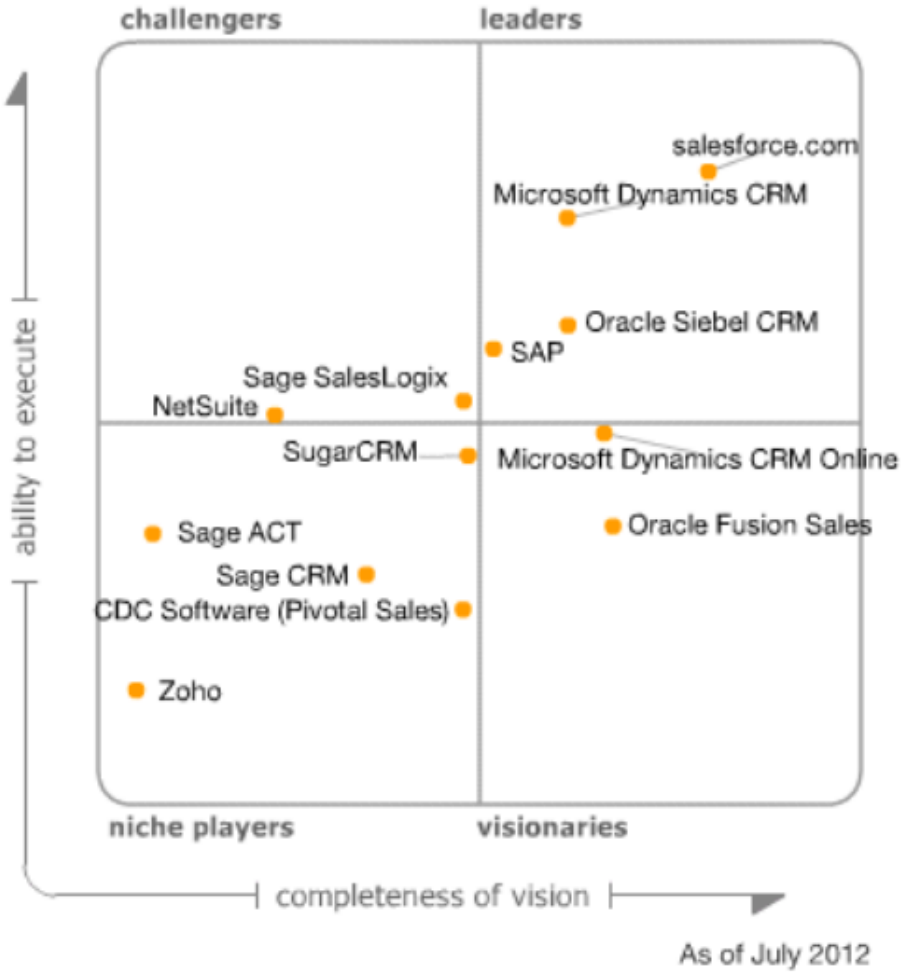

Fig. 4 Magic quadrant for sales force automation

Source: Sarner, A. (2012). *Magic Quadrant for CRM Multichannel Campaign Management.* Gartner.

Magic Quadrant for CRM Lead Management

At this category 2 applications stand out as “leaders”. Eloqua and Marketo have been classified as the leaders of sales force automation category (Fletcher, 2012).

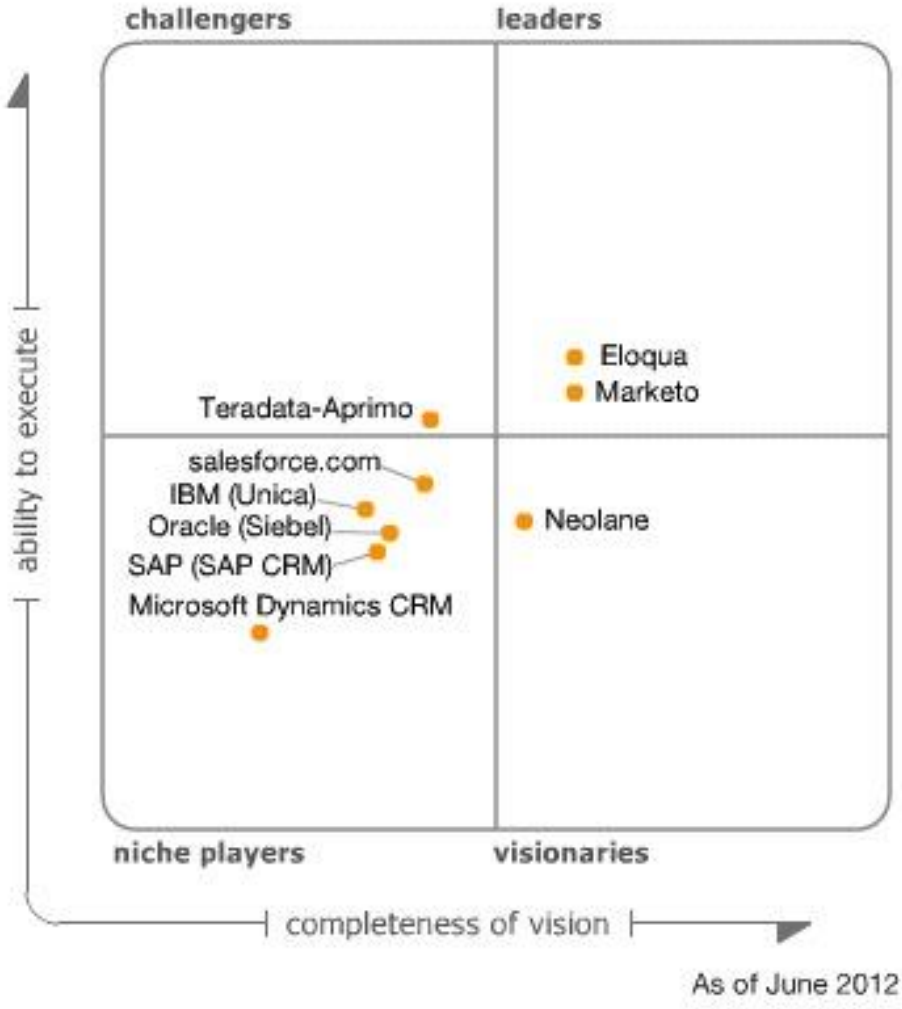

Fig. 5 Magic quadrant for CRM lead management

Source: Fletcher, C. (2012). Magic Quadrant for CRM Lead Management. Gartner.

Magic Quadrant for Social CRM

At this category 3 applications stand out as “leaders”. Salesforce.com, Jive and Lithium have been classified as the leaders of social CRM category (Sarner, et al., 2012).

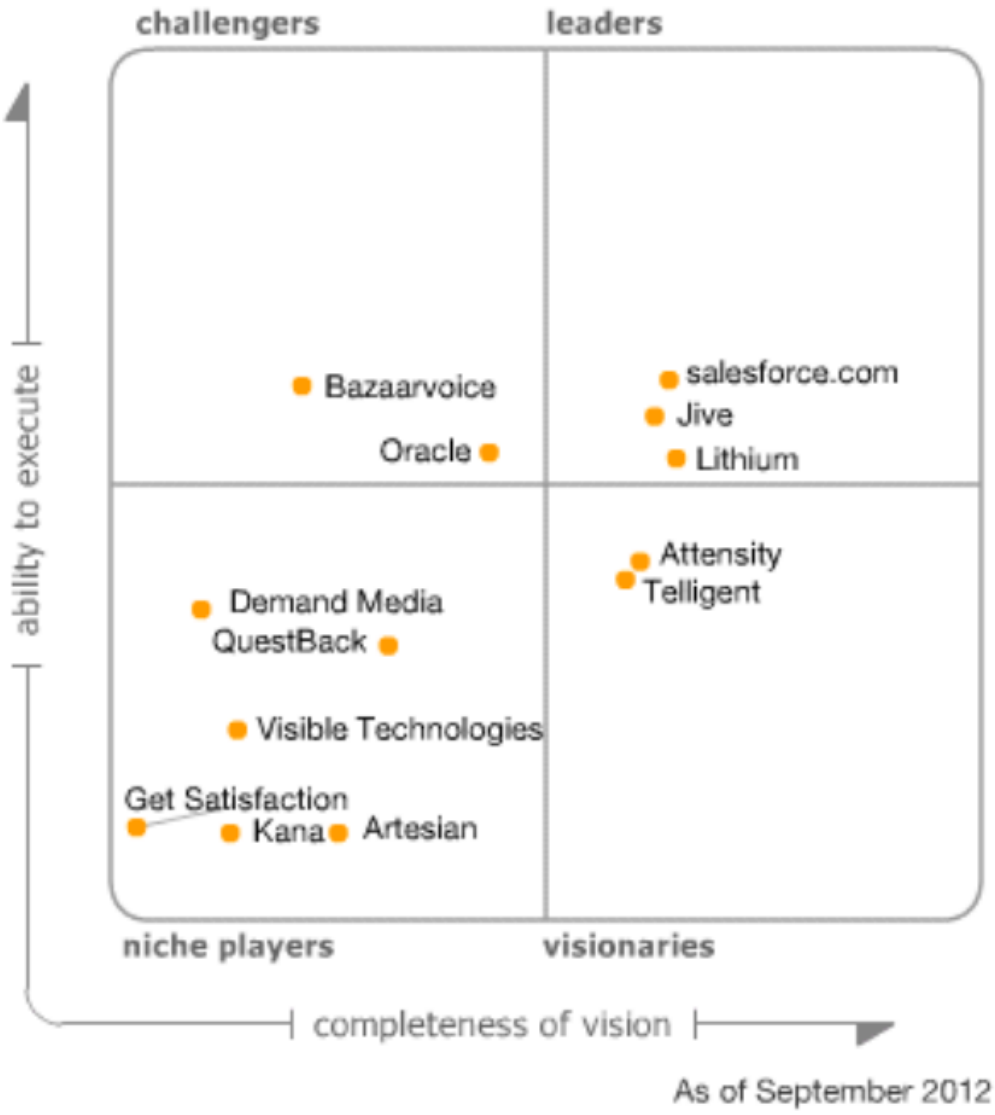

Fig. 6 Magic quadrant for S-CRM

Source: Sarner, A. (2012). *Magic Quadrant for CRM Multichannel Campaign Management.* Gartner.

Web 2.0 and Social Media

Joining outside information is very critical for an effective CRM application and today Web 2.0 based platforms and social networks which let building relationships with consumers are common information sources to integrate with CRM systems (Mohan et al., 2008). Web 2.0 and social networking concepts will be elaborated in order to understand what Social CRM is better.

Web 2.0 and Its Fundamental Aspects

Musser and O'Reilly (2006, p. 4) tell that "*Web 2.0 is a set of economic, social, and technology trends that collectively form the basis for the next generation of the internet – a more mature, distinctive medium characterized by user participation, openness, and network effects*". They also state that this concept is identified in 2004.

Mohan et al. (2008) describes Web 2.0 as follows: "*Web 2.0 is the current trend in World Wide Web technology, and web design, a second generation of web-based communities and hosted services such as social-networking sites, wikis, blogs, and folksonomies*[1]*, which aim to facilitate creativity, collaboration, and sharing among users rather than just using for email and browsing for some information*" (Mohan et al., 2008).

The popularity of Web 2.0 services as data sources is growing, and enterprises tend to integrate this data with their internal applications. Faase et al.

[1] Social tagging environments such as web sites people create photo albums or post content etc.

(2001, p. 6) list the major web 2.0 services which are used commonly by people and enterprises.

1- Blogs: Blogs are web based and public diaries. There are also microblogging tools such as Twitter which are also used by famous people and brands.
2- Wikis: Wikis are the web sites which anyone can contribute to the content.
3- Social Tagging: Categorization of digital content such as photos and videos by using keywords.
4- Multimedia Sharing Websites: Web environments to share and follow content such as videos or photos.
5- RSS: Really simple syndications (RSS) technology is used to inform people about updates on a web based environment.
6- Social Networking Services: Web sites such as Facebook and LinkedIn which make networking available through internet.

They also listed fundamental aspects of Web 2.0 in 7 titles (Faase et al., 2001, p. 5 and 6).

1- User generated content: It stands for *self-publishing, self-expression, and Individual creativity* (Anderson, 2007; Ullrich et al., 2008).
2- Use of group strength (harnessing the power of the crowd): Web 2.0 provides public environments such as wikis in order to combine knowledge of different people.

3- The architecture of participation: Most of the Web 2.0 sites enable an architecture which makes participation easier. Fan pages service on Facebook is one of the most popular examples of that aspect.
4- Data on an epic scale: Data on the web is growing day by day and it is not a barrier for the development of web related subjects. Technology supports the improvement of Web 2.0 by facilitating storage of huge amounts of data which is the major component of Web 2.0.
5- Enabling services: Services provided by Web 2.0 sites can be used by other platforms. For example Facebook or Twitter services are integrated to many CRM applications such as SalesForce.com etc.
6- Lightweight programming models: Programming architecture of Web 2.0 makes adaptation of changes or improvements easier.
7- The open platform: It refers to *desktop-like functionalities* such as online backups etc. and being able to access through multiple environments or devices.

Web 2.0 technologies enables several benefits to companies. According to Bughin et al. (2009), companies like Web 2.0 services, because they can create places to communicate with their customers and reduce their customer service costs. Moreover, it is possible to increase efficiency of marketing activities by using those services. Another advantage Web 2.0 makes available is having more satisfied customers (Bughin et al., 2009).

Social Media

As one of the most common web 2.0 services, networking through social media helps enterprises to reach consumer related data in order to win new customers or to improve relationships with existing ones (Mohan et al., 2008).

According to Kim et al. (2010, p. 1) "*Social media are the emerging digital communication channels which create a user-oriented information sharing ground where any people can generate or subscribe information content as both information provider and consumer.*" Social networking services – Facebook etc. – provides information and experience sharing and communication possibility to their users (Sarner et al., 2010).

Why People Use Social Media?

Majority of the consumers use social media for personal issues such as communicating with their friends and family, following what is happening around them, getting news or entertaining (Baird and Parasnis, 2011). According to Kim et al. (2010), one of the most significant factors which motivate people to use social media is gathering satisfied information. They also notes that perceived usefulness, perceived ease of use, perceived enjoyment, social influences and personal innovativeness are also influential factors for the adoption social media.

Why Companies Should Use Social Media?

There are several social networking sites, and modern people spend a significant amount of time on those networks. The research of Silverpop (2012) ranked 20 leading social network. All of them have millions of members worldwide and that means millions of consumers visit those sites and do something there.

The social networking sites which have more than 100 million member are listed below (Silverpop, 2012):

- Facebook: 1billion +
- Twitter: 500 million +
- Google + : 400 million +
- Weibo: 300 million +
- RenRen: 250 million +
- LinkedIn: 175 million +
- Badoo: 150 million +
- Instagram: 100 million +

Baird and Parasnis (2011) states that companies can take several benefits by using social media. Those benefits are summarized as follows:

- Revenue from social commerce
- Cost savings (by using social media for customer care or research)
- Rapid and viral distribution of offers and content
- Mining data for brand monitoring and valuable customer insights

By staying in touch with consumers via social networking channels and renewing their social media strategy companies can constantly improve their business (Baird and Parasnis, 2011).

Social CRM

After examining two components of S-CRM, i.e. “CRM” and “Social”, in this part it will be detailed what S-CRM is, which benefits it can gain to consumers and businesses, how those parties are perceiving S-CRM, what kind of S-CRM applications are currently available and existing S-CRM challenges.

Social CRM Definition

Gartner Group (2013) defines Social CRM as a “*business strategy that entails the extension of marketing, sales and customer service processes to include the active participation of customers or visitors to an Internet channel (Web or mobile) with the goal of fostering participation in the business process*”.

Faase et al. (2001) focuses on “*two-way interaction between the customer and the firm*”: “*Social CRM is a CRM strategy that uses Web 2.0 services to create engagement between the customer and the firm, which results in mutually beneficial value*”.

Wang and Owyang has a shorter definition: “*the company’s response to the customer’s ownership of the conversation*”.

Instead of defining Social CRM as a different concept Greenberg (2009) prefers to describe CRM by including social parameters: “*CRM is a philosophy and a business strategy, supported by a technology platform, business rules, workflow, processes and social characteristics, designed to engage the customer in a collaborative conversation in order to provide mutually beneficial value in a trusted and transparent business environment. It's the company's response to the customer's ownership of the conversation*”.

New Customer Touch Points

Traditional CRM (CRM 1.0) offers numerous channels to interact with customers. Cipriani (2008) lists those touch points as follows: Phone, fax, e-mail, service, letters, personal contact, company website, SMS, instant messenger, chat, and media.

Social CRM (CRM 2.0) continues to use those channels as a communication point. However, there are new alternative touch points Social CRM offers which provide to reach customers directly (Cipriani, 2008). They are blogs, microblogs, price comparison websites, RSS, podcast, wikis, social networks, widgets, video sharing, photo sharing, forums, auction websites, slides sharing, reviews and ratings in retail sites, social bookmarking, and wish lists.

Benefits of Social CRM to Business

Existing social CRM channels, an enterprise can gain several benefits. Sarner et al. (2010, p. 5), point out that a company can *codevelop new products or services, generate brand awareness, aid information gathering and evaluation decisions, offer price comparisons, assist the selling process, enable peer-to-peer customer support or in marketing support for postpurchase dissonance.*

Read (2001) refers to the opinions of Doug Heintzman, Director of Strategy at IBM Colloboration Solutions, while explaining the benefits of Social CRM. By using social CRM channels, enterprises stay in touch with their customers frequently and this affects customer satisfaction and retention in a positive manner. Moreover, constant communication with them creates new opportunities for repeat sales or cross selling. IBM Director also thinks that decreasing after sales costs, improving the business regularly, gaining competitive advantage are the other positive contributions of social CRM applications (Read, 2011).

In addition to the benefits summarized above, Lacy et al. (2013) notes that social CRM makes contribution to the design of business strategy by providing direct feedback of customers.

Why People Engage with Businesses on Social Media?

Sarner et al. (2010) explores the advantages that consumers take by engaging with businesses on social media. Firstly, social CRM applications make accessing reliable information on products or services and companies. Secondly, consumers can direct the relationship between them and brands, and control the content of the knowledge they want to take instead of information that companies promote. Moreover, social CRM channels make being able to connect all the pre-purchase, purchase and post-purchase stages activities of consumers possible. Lastly consumers can satisfy their *emotional needs, such as self-esteem, respect, belonging and friendship* through social media (Sarner et al, 2010).

The research of Baird and Parasnis (2011) delves deeper the reasons consumers build relationship with companies through social networking channels. The findings are listed below with the percentages.

- Discount (61%)
- Purchase (55%)
- Reviews and product rankings (53%)
- General information (53 %)
- Exclusive information (52%)
- Learn about new products (51%)
- Submit opinion on current products/services (49%)
- Customer service (37%)
- Event participation (34%)

- Feel connected (33%)
- Submit ideas for new products/services (30%)
- Be part of a community (22%)

Gap between Business's and Consumers' Perception

As mentioned above, Baird and Parasnis (2010) examine what consumers expect from social media while they interact with companies. In the same research, they also ask for the opinions of the businesses about why their consumers interact with them on social media. The results are quite interesting. There is a significant gap between business's and consumers' perception. The gap is figured in their research as follows (Baird and Parasnis, 2010).

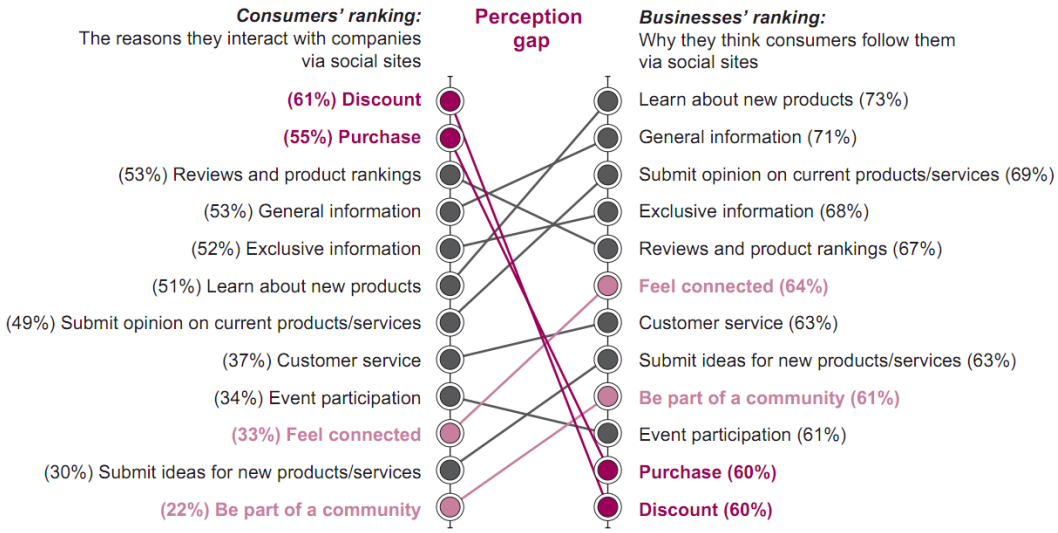

Fig. 7 Perception gap

Baird, C. H., & Parasnis, G. (2011). *From Social Media to Social CRM - What Customers Want.* IBM Institute for Business Value.

This perception gap proves that using social media in the business needs significant amount of development in order to make a meaningful value for companies.

Current Social CRM Applications and Their Functionalities

Faase et al. (2011) assert that social CRM applications make contribution to all CRM domain such as *customer behaviour, customer interaction, marketing, and customer lifetime value*. However, they prove that marketing domain is the leading one (Faase et al., 2011).

The research of Sarner et al. (2010) evaluates social CRM applications according to the department in which they used. They show that customer service departments are getting maximum value from CRM 2.0 by decreasing call deflection.

Marketing departments also derive benefit from social CRM especially for *product development* and *enabling product reviews at the evaluation stage of a buying process*. Sales departments are at the beginning to get the advantages of social CRM applications. Lead generation and opportunity creation through social media are some examples of CRM 2.0 applications in sales domain (Sarner et al., 2010).

Sarner et al. (2010), also grouped social CRM uses cases according to departments which are related to CRM concept.

Marketing uses social CRM applications for idea management, new product or service proposition and market research, new product or service launch to market, social campaigns, social event networking, public relations (used for awareness, reputation, crisis management, damage limitation), and brand reputation promotion and defense. Customer service departments use those applications for community peer-to-peer support, service customer feedback (surveys), service listen and respond and service process analysis. Lastly, sales get benefits of CRM 2.0 in social sales prospecting and research and sales social collaboration (Sarner et al., 2010).

Challenges of Social CRM

While social CRM applications are improved day by day, there are some subjects which businesses need to think about. Read (2011) states that privacy, security and intellectual property concerns are the major challenges of social CRM. Social media channels include the most personal data of the people, and engaging with brands can cause to those concerns.

According to Liu-Thompkins (2010) scalability, churning data into information and return on investment are the biggest obstacles of social CRM. Social media is a big area to interact with consumers, however remaining scalable and cost-effective is not easy for such environments which are difficult to control. Moreover,

there are limitless information about people on social networks, but converting this data to meaningful information is generally very complex. Besides, measuring return on investment is another issue which is hard to do (Liu-Thompkins, 2010).

Lacy et al. (2013), list the top 5 challenges of social CRM as follows:

1. Creating a company-wide shift to customer centricity
2. Accepting that reaping the benefits of social CRM requires patience
3. Sifting through the overload of information generated in social media
4. Meeting customers in media that your company doesn’t own
5. Adjusting brand-speak to actual conversations

CHAPTER 3

THEORETICAL FRAMEWORK

After a thorough review of literature on the subject of factors affecting social CRM applications usage, 8 main independent variables that may highly affect the usage have identified.

It will be analyzed in the following sections of the paper of the coefficients of each independent variable according to Turkish users. Before that step, each independent variable will be identified and defined.

- *Social and Communication Needs*: Needs such as sharing ideas on current or new product and services of a brand, participating to an organization or event about a brand, *feeling connected,* being a part of the community (Baird and Parasnis, 2011), satisfaction of emotional needs (*self – esteem, respect, belonging and friendship*), *personalization of interactions with an organization and products or services offer* (Sarner et. al, 2010) have effect on social CRM applications usage.
- *Social Influences:* According to Kim et al. (2010) social influences, such as suggestion of a friend, can have a direct effect on the users' adoption of social media. This factor can also play a significant role in the usage of social CRM applications.
- *Need of Information Search*: People can use social CRM applications in order to make reviews and product rankings, to get general or privileged information about a brand, to explore new products, to get customer service

(Baird and Parasnis, 2011), and to *access to more trusted and independent information on products* (Sarner et. al, 2010).

- *Financial Incentives*: Discount opportunities and making purchase can attract people to use social CRM applications (Baird and Parasnis, 2011). According to Sarner et al. (2010) price comparision availability is another factor . Lastly, giving gifts to people can take a significant role in order to follow those applications.
- *Consumer Innovativeness*: Some people like trying out new technology products or systems, and this can be a reason to give a chance to a social CRM application (Kim et al., 2010).
- *Privacy & Security Concerns*: *Sensibility to personal data sharing* and p*rivacy, security and intellectual property concerns* can avoid people to try out social CRM applications (Read, 2011).
- *Application Related Factors*: If *perceived ease of use* and *perceived enjoyment* of the applications are positive, their usage can increase (Kim et al., 2010).
- *Relationship with the Brand Interacted*: People can prefer to use the social CRM applications of the brands which they already have a relationship. Purchasing frequency (Greenberg, 2010), passion for the brand, trust to the brand (Baird and Parasnis, 2011) and sector of the brand can be major identifiers to measure the effect of that relationship on the usage.

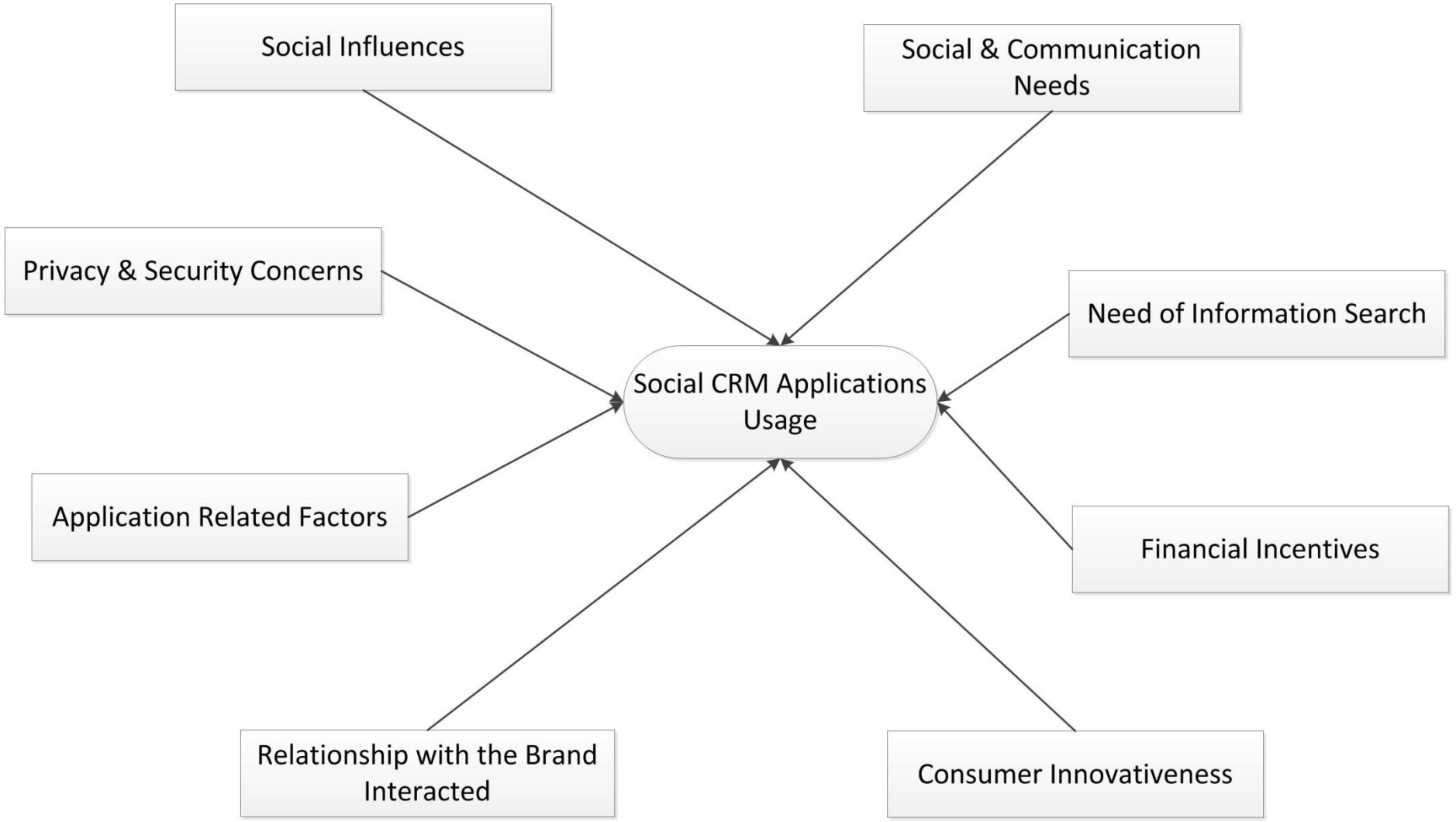

Fig. 8 Theoretical framework

Hypothesis to Be Tested

H_1: S-CRM applications usage is determined by: a. social influences, b. social and communication needs, c. need of information search, d. financial incentives, e. consumer innovativeness, f. relationship with brand interacted, g. application related factors, h. privacy and security concerns.

H_2: There is a relationship between females and males in terms of following a brand page, account or application.

H_3: There is a difference between males and females with respect to the relationship with brand interacted.

H_4: There is a difference between male and female with respect to privacy and security concerns.

H_5: Younger people have a higher frequency of following a brand page, account or application.

H_6: There is a difference between age groups with respect to the relationship with the brand interacted.

H_7: There is a difference between age groups with respect to privacy and security concerns.

H_8: The consumers with a higher education level have a higher frequency of following a brand page, account or application.

H_9: There is a difference between education level with respect to the relationship with the brand interacted.

H_{10}: There is a difference between education level with respect to the effect of the respondents' privacy and security concerns on following its page, account or application.

H_{11}: There is a difference between male and female with respect to social media usage frequency.

H_{12}: There is a difference between male and female with respect to the effect of financial incentives on following a brand page, account or application.

H_{13}: There is a difference between male and female with respect to the effect of need of information search on following a brand page, account or application.

H_{14}: There's a difference between age groups with respect to social media usage frequency.

H_{15}: There is a difference between age groups with respect to the effect of ease of use on following a brand page, account or application.

H_{16}: There is a negative relationship between social media usage frequency and the effect of privacy concerns on following a brand page, account or application.

H_{17}: There is a positive relationship between the effect of purchasing frequency and the effect of sector of the brand on following its page, account or application.

H_{18}: There is a positive relationship between the effect of loyalty and the effect of sector of the brand on following its page, account or application.

H_{19}: There is a difference between people who make a complaint about a brand on the Internet and who do not make with respect to the effect of loyalty on following a brand page, account or application.

H_{20}: There is a positive relationship between the effect of loyalty and effect of financial incentives on following a brand page, account or application.

H_{21}: There is a positive relationship between the effect of loyalty and the effect of social and communication needs on following a brand page, account or application.

H_{22}: There is a positive relationship between the effect of sector of the brand and effect of financial incentives on following a brand page, account or application.

H_{23}: There is a positive relationship between the effect of need of information search and the effect of social and communication needs on following a brand page, account or application.

H_{24}: There is a negative relationship between the effect of social and communication needs and the effect of privacy concerns on following a brand page, account or application.

H_{25}: There is a positive relationship between the effect of social and communication needs and the effect of perceived enjoyment on following a brand page, account or application.

H_{26}: There is a positive relationship between the effect of social and communication needs and the effect of recommendation of a friend on following a brand page, account or application.

H_{27}: There is a negative relationship between the effect of privacy concerns and the effect of personal innovativeness on following a brand page, account or application.

H_{28}: There is a negative relationship between the effect of privacy concerns and the effect of perceived enjoyment on following a brand page, account or application.

H_{29}: There is a negative relationship between the effect of privacy concerns and the effect of recommendation of a friend on following a brand page, account or application.

H_{30}: There is a positive relationship between the effect of perceived ease of use and the effect of perceived enjoyment on following a brand page, account or application.

CHAPTER 4

RESEARCH METHODOLOGY

After determination of the purpose of the study and examination of existing literature, a questionnaire was developed by using the variables determined in the theoretical framework in order to collect primary data. A pilot study was conducted to 5 people who are familiar with MIS and marketing issues. The survey was revised according to their feedbacks.

Convenience sampling was done in order to collect data. The final version of the survey has been implemented online to Turkish consumers for almost 40 days through different online channels such as direct e-mails, e-mail groups, Facebook and LinkedIn messages and groups. Cross-sectional data collected via those channels.

Data collection started at the beginning of May 2013, and it is finalized on 09.06.2013. A total of 441 respondents participated to the survey. Some of them have been eliminated because of invalid data, and finally analyses have been done for the responses of 435 people.

After data gathering period, the results were exported to SPSS 16. A total of 82 variables were defined to the application. Recoding was implemented to some of them. Moreover, some new variables were created by taking average of existing variables.

Goodness of data was measured and descriptive statistics was found by using SPSS. Detailed statistical analyses between variables was done by using regression, correlation, cross-tab, t-test and ANOVA methods.

Questionnaire Development

The survey which was prepared to measure factors affecting Turkish consumers'' S-CRM applications usage include 18 questions and 82 variables. The details of each question have been explained below.

- *Q1 - Internet Usage Frequency*: Average daily internet usage frequency of the respondents has been asked. Options have been given on an ordinal scale.
- *Q2 – Social Media Usage Frequency*: The list of the most popular 20 social networking sites have been obtained from Silverpop web site's research. Another one which is frequently used in Turkey has been added. The usage frequency has been asked as a Likert scale question.
- *Q3 – Following a Brand on Social Media*: The respondents have been asked whether they are following any page, application or account of a brand on social networking sites. Actually those alternatives are the most common types of S-CRM applications. In other words, that question directly measures whether the respondents are using any S-CRM application or not. However, "S-CRM" concept did not used in this and other questions in order to explain what is asked clearly. Instead of that, it is preferred to give those alternatives as examples. A similar question had been asked in another survey called "Facebook and Brands" (Kuzuloğlu, 2012).The content of the question has been widen according to the goal of our research.
- *Q4 – Number of Brands Followed*: The respondents have been asked for how many brands' S-CRM applications they are currently following on social media sites. A similar question had been asked in another survey (Kuzuloğlu, 2012).The content of the question has been widen according to the goal of our research.

- *Q5 – Meeting Channel of S-CRM Application*: The respondents have been asked how they knew about the page, application or account of the brands they follow on social media. The responses were multi-choice. A similar question had been asked in another survey (Kuzuloğlu, 2012).The content of the question has been modified according to the goal of our research.
- *Q6 - The Effect of Brand Related Factors*: This is a likert scale question which includes 6 variables to measure the effect of consumers' relationship built to the brand on social CRM applications usage. Purchasing frequency (Greenberg, 2010), usage frequency, passion for the brand, trust to the brand, its openness (Baird and Parasnis, 2011) and its sector are the variables used.
- *Q7 – The Effect of Financial Incentives, Need of Information Search, Social and Communication Needs*: This is a likert scale question which includes 14 variables to measure the effect of consumers' financial incentives, need of information search, social and communication needs on social CRM applications usage. Discount opportunities, making purchase, making reviews and product rankings, getting general or privileged information about a brand, exploring new products, getting customer service, sharing ideas on current or new product and services of the brand, participating to an organization or event about a brand, feeling connected, being a part of the community (Baird and Parasnis, 2011), price comparison, accessing more trusted and independent information on products, satisfaction of emotional needs (Sarner et. al, 2010) and gift chance were the variables used.
- *Q8 – Cancelling to Follow a Brand on Social Media*: The respondents have been asked whether they have ever canceled to follow any page, application or account of a brand on social networking sites. A similar question had been asked

in another survey (Kuzuloğlu, 2012).The content of the question has been widen according to the goal of our research.

- *Q9 – The Reasons of Cancellation*: The respondents have been asked for the reasons of their cancellation of any brand page, application or account on social networking sites. A similar question had been asked in another survey (Kuzuloğlu, 2012).The content of the question has been widen according to the goal of our research.
- *Q10 – Making Complaint*: The respondents have been asked for whether they have ever make a complaint about a brand on a social networking site. A similar question had been asked in another survey (Kuzuloğlu, 2012).
- *Q11 – Complaint Channels*: The respondents have been asked which channels they used for making complaint. The responses were multi-choice. A similar question had been asked in another survey (Kuzuloğlu, 2012).The content of the question has been modified according to the goal of our research.
- *Q12 – Suggestion to a Friend*: The respondents have been asked for whether they have ever suggested to a friend for following a page, account or application of a brand on a social networking site. A similar question had been asked in another survey (Kuzuloğlu, 2012).
- *Q13 – The effect of Privacy & Security Concerns, Application Related Factors, Consumer Innovativeness, Social Influences*: This is a likert scale question which includes 7 variables to measure the effect of consumers' privacy and security concerns, application related factors (perceived ease of use and enjoyment), consumer innovativeness, social and communication needs (recommendation of a trusted friend) on social CRM applications usage (Kim, Kim and Kim, 2010).

CHAPTER 5

ANALYSES AND FINDINGS

Descriptive Statistics

Frequencies

Gender

In terms of gender distribution, 184 of the respondents were female and 167 of them were male. The percentage of the females in valid data were 52,4 %, and the percentage of the males in valid data were 47,6 (%). 83 of the respondents did not give answer to that question.

Table 1 Gender of Respondents

	Frequency	Percent	Valid Percent
Female	184	42,4	52,4
Male	167	38,5	47,6
Total	351	80,9	100
Missing	83	19,1	

Age

Seven categories were used to collect age of the respondents. Those categories are 17 years and under 17 years, 18 - 24 years, 25 – 34 years, 35 – 44 years, 45 – 54 years, 55 – 64 years, 65 years and over 65 years.

Table 2 Age of Respondents

	Frequency	Percent	Valid Percent
18 - 24	65	15,0	18,5
25 - 34	203	46,8	57,8
35 - 44	60	13,8	17,1
45 - 54	17	3,9	4,8
55 - 64	6	1,4	1,7
Total	351	80,9	100,0
Missing	83	19,1	

57,8 % of respondents who answered this question are between 25 and 34 years old. People between 55 and 64 years old is the group which has the smallest percentage, 1,7 %. 83 of the respondents did not answer that question.

In order to obtain more meaningful results in the hypotheses, age variable was recoded and combined “45 – 54”, and “55 – 64” groups to one group. New results are given on the table below.

Table 3 Age of Respondents – Recoded

		Frequency	Percent	Valid Percent
Valid	18 - 24	65	15,0	18,5
	25 - 34	203	46,8	57,8
	35 - 44	60	13,8	17,1
	45 - 64	23	5,3	6,6
	Total	351	80,9	100,0
Missing	System	83	19,1	
Total		434	100,0	

Education Level

Five categories were used to collect education of the respondents. Those categories are primary school, high school, undergraduate, graduate, and doctorate.

Table 4 Education Level of Respondents

	Frequency	Percent	Valid Percent
High School	4	,9	1,1
Undergraduate	198	45,6	56,4
Graduate	130	30,0	37,0
Doctorate	19	4,4	5,4
Total	351	80,9	100,0
Missing	83	19,1	

56,4 % of respondents who answered this question are undergraduate. People who graduated from high school is the group which has the smallest percentage, 1,1 %. 83 of the respondents did not answer that question.

In order to obtain more meaningful results in the hypotheses, education level variable was recoded and combined “High School” and “Undergraduate” values. New results are given on the table below.

Table 5 Education Level of Respondents - Recoded

		Frequency	Percent	Valid Percent
Valid	High School and Undergraduate	202	46,5	57,5
	Graduate	130	30,0	37,0
	Doctorate	19	4,4	5,4
	Total	351	80,9	100,0
Missing	System	83	19,1	

Profession

14 categories were used to collect education of the respondents. Those categories are lawyer or adjudicator or prosecuting attorney, journalist or writer, trade, bank employee, teacher or academician, psychology, doctor or nurse or pharmacist, developer or system analyst or system support specialist, consultant, engineer, actor or musician or artist, student, executive manager, and other. The results are shown on the table below.

Table 6 Profession of Respondent

	Frequency	Percent	Valid Percent
No answer	83	19,1	19,1
Other	64	14,7	14,7
Engineer	52	12	12
Student	50	11,5	11,5
Bank Employee	40	9,2	9,2
Executive Manager	38	8,8	8,8
Teacher / Academician	36	8,3	8,3
Developer / System An. / Sys. Sup. Spec.	32	7,4	7,4
Consultant	20	4,6	4,6
Lawyer / Adjudicator / Prosecuting Attorney	5	1,2	1,2
Psychology	5	1,2	1,2
Actor / Musician / Artist	4	0,9	0,9
Trade	3	0,7	0,7
Journalist / Writer	2	0,5	0,5
Total	434	100	100

Internet Usage Frequency

Five categories were used to ask daily internet usage frequency of the respondents. Those categories are never, 1 – 2 hours, 3 – 5 hours, 6 – 9 hours, and 10 + hours.

Table 7 Internet Usage Frequency of Respondents

	Frequency	Percent
1 - 2 hours	75	17,3
3 - 5 hours	146	33,6
6 - 9 hours	116	26,7
10+ hours	97	22,4
Total	434	100,0

All of the respondents are connecting to the Internet every day. 33,6 % of total 434 respondents are connecting to the Internet daily between 3 to 5 hours.

Social Media Usage

The usage frequency of 21 social networking sites were asked to the respondents in a likert scale question. 20 of them are the ones which have the most number of users worldwide. One option (Last.fm) was added by the researcher, because it is quite popular in in Turkey. Lastly "other" option was also added.

Major social networking sites which are used by Turkish consumers with their usage rates are listed below.

- Facebook: 90,5 %
- LinkedIn: 85,6 %
- Twitter: 71,2 %
- Google +: 60,3 %
- Instagram: 45 %
- Foursquare: 39,2 %

The results of each option are given on the table below. The values show percentages.

Table 8 Social Networking Sites Usage Frequency (%)

	I never use	I rarely use	I averagely use	I frequently use	I always use
Facebook	9,5	11,8	26,2	26,7	25,8
Twitter	28,8	27,7	16,1	16,3	11,1
Google+	39,7	27,6	10	10,5	12,4
Weibo	98,2	1,3	0,3	0,3	0
RenRen	98,5	0,8	0,3	0,5	0
LinkedIn	14,4	21,1	31,9	22,8	9,8
Badoo	95,8	2,7	1,2	0,2	0
Instagram	55	16,1	12,5	8,6	7,8
Yelp	95,5	3,5	0,5	0,3	0,3
Tumblr	85,5	9	3,3	2	0,3
Flickr	89,1	7,5	3,2	0,2	0
Orkut	98,5	1,5	0	0	0
MySpace	91,2	7	1	0,5	0,2
Foursquare	61,8	13,6	12,7	8,2	3,7
Pinterest	79,2	12,7	5,1	2,5	0,5
Soundcloud	87,6	5,8	4,8	1,5	0,3
Xing	88,6	10,4	1	0	0
Friendster	99	0,8	0,3	0	0
Path	98,2	1	0,5	0,3	0
GetGlue	97	1,8	0,5	0,8	0
Last.fm	81,5	12,9	3	1,8	0,8
Other	76,1	13,3	7,7	1,9	1,1

Following a Brand Page, Account or Application

Respondents were asked whether they are following page, account or application of any brand through social networking sites.

65,2 % of 434 respondents are following page, account or application of any brand. The details are given on the table below.

Table 9 Following a Brand Page, Account or Application

	Frequency	Percent	Valid Percent
Yes	283	65,2	65,2
No	151	34,8	34,8
Total	434	100,0	100,0

Information Channel of Pages, Accounts or Applications Followed

The respondents who follow a page, account or application of any brand via social networking sites were asked how they started to follow them. More than one answer could be chosen for that question. The alternatives are friend suggestion, traditional advertisements, internet advertisements, internet search about the brand, general internet search, company web site and other.

Friend suggestion and internet advertisements are the major channels which cause the following activity. The details are given on the table below.

Table 10 Information Channels Distribution

	Frequency	Percent
Friend Suggestion	141	49,82
Internet Ads	130	45,94
Internet Search (Brand Related)	113	39,93
Company Website	94	33,22
Internet Search (General)	62	21,91
Traditional Ads	56	19,79
Other	15	5,3
Total	283	100

Unfollowing a Brand Page, Account, or Application

Respondents were asked whether they stopped to follow a page, an account or an application of any brand through social networking sites.

59,2 % of 365 respondents are cancelled to follow a page, an account or an application of any brand. 69 respondents did not answer this question. The details are given on the table below.

Table 11 Unfollowing a Brand Page, Account or Application

	Frequency	Percent	Valid Percent
Yes	216	49,8	59,2
No	149	34,3	40,8
Total	365	84,1	100,0
Missing	69	15,9	

Unfollowing Reasons

The respondents who stopped to follow a page, an account or an application of any brand via social networking sites were asked why they did that. More than one answer could be chosen for that question. The alternatives are end of gift or discount period, no added value, too many post, out of date content, privacy concerns, dissatisfaction, different follower profiles, other.

79,63 % of 216 respondents cancel to follow a brand page, account or application because of too many content were posted. Another item chosen frequently has no added value with 62,50 percentage. The details are given on the table below.

Table 12 Unfollowing Reasons

	Frequency	Percent
Too Many Post	172	79,63
No Added Value	135	62,5
Out of Date Content	78	36,11
Dissatisfaction	74	34,26
Privacy Concerns	63	29,17
End of Gift/Discount Period	40	18,52
Different Follower Profiles	37	17,13
Other	6	2,78
Total	216	

Complaint through Web/Social Media

Respondents were asked whether they have ever made a complaint through internet or social networking sites.

54,4 % of 362 respondents has made complaint through those channels. 72 respondents did not answer that question. The details are given on the table below.

Table 13 Complaint through Web / Social Media

	Frequency	Percent	Valid Percent
Yes	197	45,4	54,4
No	165	38,0	45,6
Total	362	83,4	100,0
Missing	72	16,6	

Complaint Channels

The respondents who made complaint through internet or social networking sites were asked which specific channel they used. More than one answer could be chosen for that question. The alternatives are complaint web sites, Facebook page of the brand, Twitter, other social media page/account/application of the brand, company web site, live chat and other.

60,41 % of 197 respondents makes complaint through company website. Another item chosen frequently is complaint web sites such as sikayetvar.com etc. with 55,33 percentage. Facebook page of the brand were chosen by 59 respondents. The details are given on the table below.

Table 14 Complaint Channels

	Frequency	Percent
Company Web Site	119	60,41
Complaint web sites	109	55,33
Twitter	71	36,04
Facebook Page of the Brand	59	29,95
Live Chat	49	24,87
Other Social Media Page/Account/App of the Brand	21	10,66
Other	7	3,55
Total	197	

Mean Values and Standard Deviations

Mean values and standard deviations of each scale variable question were calculated.

Negatively directed questions were italicized. The details are given on the tables below.

Question 2

This question ask the usage frequency of social networking sites.

Table 15 Means of Items in Social Media Usage

	N	Mean	Std. Deviation
Facebook	431	3,47	1,255
Twitter	423	2,53	1,350
Google_Plus	421	2,28	1,397
Weibo	397	1,03	,212
RenRen	397	1,03	,250
LinkedIn	417	2,93	1,186
Badoo	401	1,06	,337
Instagram	409	1,98	1,313
Yelp	397	1,06	,339
Tumblr	399	1,23	,625
Flickr	402	1,15	,453
Orkut	397	1,02	,122
MySpace	400	1,12	,427
Foursquare	403	1,78	1,168
Pinterest	394	1,32	,732
Soundcloud	396	1,21	,620
Xing	396	1,12	,359
Friendster	395	1,01	,133
Path	391	1,03	,230
GetGlue	396	1,05	,322
Lastfm	395	1,27	,677
Other social networking sites	377	1,38	,794

The value of the answers are:

- 1: I never use
- 2: I rarely use
- 3: I averagely use
- 4: I frequently use
- 5: I always use

Question 6

In this question, the effect of brand related factors to S-CRM applications usage was aimed to measure.

Table 16 Means of Items in Question 6

	N	Mean	Std. Deviation
purchasing frequency	366	3,47	1,176
brand passion	366	3,62	1,198
brand loyalty	366	3,42	1,251
brand trust	366	3,65	1,198
openness and transparency	366	3,54	1,246
brand sector	366	3,25	1,246

The value of the answers are:

- 1: It never affects
- 2: It does not affect
- 3: Neither not affect nor affects
- 4: It affects
- 5: It strongly affects

Question 7

In this question, the effect of financial incentives, need of information search, social and communication needs to S-CRM applications usage was aimed to measure.

Table 17 Means of Items in Question 7

	N	Mean	Std. Deviation
discount opportunity	366	3,64	1,203
purchasing	366	3,56	1,093
commenting	366	3,85	1,064
taking general information about brand	366	3,68	1,003
taking personalized information about brand	366	3,63	1,045
event participation	366	3,12	1,194
submitting opinion	366	3,37	1,141
feeling connected	366	3,19	1,203
making complaint	366	3,72	1,128
being part of a community	366	2,55	1,239
to be respected	366	2,16	1,199
friendship	366	2,18	1,179
making price comparision	366	3,57	1,191
gift opportunity	366	3,57	1,245

The value of the answers are:

- 1: It never affects
- 2: It does not affect
- 3: Neither not affect nor affects
- 4: It affects
- 5: It strongly affects

Question 13

In this question, the effect of privacy and security concerns, application related factors, consumer innovativeness, and social influences to S-CRM applications usage was aimed to measure.

Table 18 Means of Items in Question 13

	N	Mean	Std. Deviation
privacy 1	353	2,48	1,133
ease of use of the application	353	3,60	1,029
enjoyment of the applcation	353	3,46	1,089
privacy 2	353	2,95	1,200
suggestion of a friend	353	3,32	1,065
personal innovativeness	353	3,35	,997
privacy 3	353	4,14	1,120

The value of the answers are:

- 1: Strongly Agree
- 2: Agree
- 3: Neither Agree Nor Disagree
- 4: Disagree
- 5: Strongly Disagree

Goodness of Data

Reliability statistics analysis was implemented for 6 of 8 independent variable groups in order to observe precision of measurement. The variables of those groups were asked as multi – item scale questions in our survey. Other 2 independent variable groups of our framework - "Social Influences" and "Personal Innovativeness" -, have both one sub-items, so this analysis was not implemented to those variables. Furthermore "Application Related Factors" has two sub-items. In order to make a reliability statistics analysis, it is needed to have at least 3 variables. However, reliability analysis was implemented to this title with the acceptance of its limitation.

Reverse coding were implemented for negatively directed questions.

Except one, each variable group's Cronbach's Alpha value is over 0,60. Cronbach's Alpha value ranges between 0 and 1, and 0.60 is the threshold of acceptable internal consistency value (George & Mallery, 2003). Most of our variables at the multi-item scale groups can be used for further analysis at that research.

Reliability and item-total statistics of each question group is given below.

Relationship with the Brand Interacted

There were 6 multi-item scale questions which aim at measuring the effect of relationship with the brand interacted on social CRM applications usage. Reliability statistics analysis was implemented for those 6 variables. The explanations of the variables are:

- Consumers' purchasing frequency of the brand interacted
- Consumers' passion of the brand interacted
- Consumers' loyalty to the brand interacted
- Consumers' trust to the brand interacted

- Consumers' openness to the brand interacted
- Sector of the brand interacted

Reliability and item-total statistics tables are given below.

Table 19 Reliability Statistics of Relationship with the Brand Interacted

Cronbach's Alpha	N of Items
,868	6

Table 20 Item-Total Statistics of Relationship with the Brand Interacted

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
purch_freq	17,48	23,088	,693	,842
passion	17,33	22,899	,695	,841
loyalty	17,53	22,524	,692	,842
trust	17,30	22,193	,769	,828
openness	17,40	22,718	,676	,844
sector	17,69	24,717	,487	,877

Cronbach's Alpha value is more than 0,60 and that means our existing scale to measure relationship of consumers with the brands interacted is reliable.

Social and Communication Needs

There were 6 multi-item scale questions which aim at measuring the effect of consumers' social and communication needs on social CRM applications usage. Reliability statistics analysis was implemented for those 6 variables. The explanations of the variables are:

- Event participation will of consumers to use a social CRM application
- Submitting opinion will of consumers to use a social CRM application
- Feeling connected will of consumers to use a social CRM application
- Being a part of the community will of consumers to use a social CRM application
- Respect need of consumers to use a social CRM application
- Friendship need of consumers to use a social CRM application

Reliability and item-total statistics tables are given below.

Table 21 Reliability Statistics of Social and Communication Needs

Cronbach's Alpha	N of Items
,849	6

Table 22 Item – Total Statistics of Social and Communication Needs

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
event_participation	13,45	21,722	,541	,841
submit_opinion	13,19	22,195	,527	,842
feel_connected	13,37	20,662	,645	,821
being_part_of_a_comm	14,02	19,274	,768	,796
respect	14,41	20,593	,656	,819
friendship	14,39	20,764	,653	,819

Cronbach's Alpha value is more than 0,60 and that means our existing scale to measure social and communication needs of consumers is reliable.

Need of Information Search

There were 4 multi-item scale questions which aim at measuring the effect of consumers' need of information search on social CRM applications usage. Reliability statistics analysis was implemented for those 4 variables. The explanations of the variables are:

- Consumers' will of accessing comments about the brand interacted
- Consumers' will of taking general information about the brand interacted
- Consumers' will of taking personalized information about the brand interacted
- Consumers' will of making a complaint about the brand interacted

Reliability and item-total statistics tables are given below.

Table 23 Reliability Statistics of Need of Information Search

Cronbach's Alpha	N of Items
,814	4

Table 24 Item – Total Statistics of Need of Information Search

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
comment	11,04	6,928	,624	,770
general_info	11,20	6,927	,686	,743
personalized_info	11,25	6,785	,675	,746
making_complaint	11,16	6,976	,556	,805

Cronbach’s Alpha value is more than 0,60 and that means our existing scale to measure need of information search of consumers is reliable.

Financial Incentives

There were 4 multi-item scale questions which aim at measuring the effect of consumers' financial incentives on social CRM applications usage. Reliability statistics analysis was implemented for those 4 variables. The explanations of the variables are:

- Consumers' will of taking a discount
- Consumers' will of purchasing
- Consumers' will price comparison
- Consumers' will of winning a gift

Reliability and item-total statistics tables are given below.

Table 25 Reliability Statistics of Financial Incentives

Cronbach's Alpha	N of Items
,806	4

Table 26 Item-Total Statistics of Financial Incentives

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
discount	10,70	7,942	,707	,714
purchasing	10,79	9,001	,608	,764
price_comp	10,77	9,131	,505	,811
gift	10,78	7,900	,676	,729

Cronbach's Alpha value is more than 0,60 and that means our existing scale to measure financial incentives of consumers is reliable.

Privacy & Security Concerns

There were 3 multi-item scale questions which aim at measuring the effect of consumers' privacy and security concerns on social CRM applications usage. Reliability statistics analysis was implemented for those 3 variables. The explanations of the variables are:

- Consumers' will of sharing personal information with a brand whose products or services have been used by the consumer.
- Consumers' will of sharing personal information with any brand
- Consumers' will of sharing personal information on a platform which was not perceived secure enough by the consumer

Reliability and item-total statistics tables are given below.

Table 27 Reliability Statistics of Privacy & Security Concerns

Cronbach's Alpha	N of Items
,533	3

Table 28 Item – Total Statistics of Privacy & Security Concerns

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
privacy1 recode	7,0907	3,259	,399	,346
privacy2	7,6572	3,027	,409	,323
privacy3	6,4759	3,869	,239	,600

Cronbach's Alpha value is less than 0,60 and that means our existing scale to measure privacy and security concerns of consumers is not reliable enough. However, if third item is deleted, the Cronbach's Alpha value will be 0,60. In other words the analysis will be reliable with 2 variables. For this reason, the average of first 2 variables will be used as "Privacy and Security Concerns" variable in the hypotheses.

Application Related Factors

There were 2 multi-item scale questions which aim at measuring the effect of consumers' privacy and security concerns on social CRM applications usage. Reliability statistics analysis was implemented for those 2 variables. The explanations of the variables are:

- Consumers' perceived ease of use of the application.
- Consumers' perceived enjoyment of the application

Reliability and item-total statistics tables are given below.

Table 29 Reliability Statistics of Application Related Factors

Cronbach's Alpha	N of Items
,773	2

Table 30 Item – Total Statistics of Application Related Factors

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
ease_of_use	3,46	1,186	,630	.[a]
enjoyment	3,60	1,059	,630	.[a]

a. The value is negative due to a negative average covariance among items. This violates reliability model assumptions. You may want to check item codings.

Cronbach's Alpha value of the last line is more than 0,60 and that means our existing scale to measure application related factors is reliable.

Hypothesis Tested

The results of the 30 hypothesis tested are shown on the table below.

Table 31 The Results of Hypothesis Tested

H	Independent Variable(s)	Result
1	S-CRM applications usage is determined by: a. social influences, b. social and communication needs, c. need of information search, d. financial incentives, e. consumer innovativeness, f. relationship with brand interacted, g. application related factors, h. privacy and security concerns.	Approved
2	There is a relationship between females and males in terms of following a brand page, account or application.	Approved
3	There is a difference between males and females with respect to the relationship with brand interacted.	Approved
4	There is a difference between male and female with respect to privacy and security concerns.	Rejected
5	Younger people have a higher frequency of following a brand page, account or application.	Approved
6	There is a difference between age groups with respect to the relationship with the brand interacted.	Approved
7	There is a difference between age groups with respect to privacy and security concerns.	Rejected
8	The consumers with a higher education level have a higher frequency of following a brand page, account or application.	Rejected
9	There is a difference between education level with respect to the relationship with the brand interacted.	Rejected
10	There is a difference between education level with respect to the effect of the respondents' privacy and security concerns on following its page, account or application.	Rejected
11	There is a difference between male and female with respect to social media usage frequency.	Approved
12	There is a difference between male and female with respect to the effect of financial incentives on following a brand page, account or application.	Approved
13	There is a difference between male and female with respect to the effect of need of information search on following a brand page, account or application.	Approved
14	There's a difference between age groups with respect to social media usage frequency.	Approved
15	There is a difference between age groups with respect to the effect of ease of use on following a brand page, account or application.	Approved
16	There is a negative relationship between social media usage frequency and the effect of privacy concerns on following a brand page, account or application.	Approved
17	There is a positive relationship between the effect of purchasing frequency and the effect of sector of the brand on following its page, account or application.	Approved
18	There is a positive relationship between the effect of loyalty and the effect of sector of the brand on following its page, account or application.	Approved
19	There is a difference between people who make a complaint about a brand on the Internet and who do not make with respect to the effect of loyalty on following a brand page, account or application.	Approved
20	There is a positive relationship between the effect of loyalty and effect of financial incentives on following a brand page, account or application.	Approved
21	There is a positive relationship between the effect of loyalty and the effect of social and communication needs on following a brand page, account or application.	Approved
22	There is a positive relationship between the effect of sector of the brand and effect of financial incentives on following a brand page, account or application.	Approved
23	There is a positive relationship between the effect of need of information search and the effect of social and communication needs on following a brand page, account or application.	Approved
24	There is a negative relationship between the effect of social and communication needs and the effect of privacy concerns on following a brand page, account or application.	Approved
25	There is a positive relationship between the effect of social and communication needs and the effect of perceived enjoyment on following a brand page, account or application.	Approved
26	There is a positive relationship between the effect of social and communication needs and the effect of recommendation of a friend on following a brand page, account or application.	Approved
27	There is a negative relationship between the effect of privacy concerns and the effect of personal innovativeness on following a brand page, account or application.	Approved
28	There is a negative relationship between the effect of privacy concerns and the effect of perceived enjoyment on following a brand page, account or application.	Approved
29	There is a negative relationship between the effect of privacy concerns and the effect of recommendation of a friend on following a brand page, account or application.	Approved
30	There is a positive relationship between the effect of perceived ease of use and the effect of perceived enjoyment on following a brand page, account or application.	Approved

H_1: S-CRM applications usage is determined by: a. social influences, b. social and communication needs, c. need of information search, d. financial incentives, e. consumer innovativeness, f. relationship with brand interacted, g. application related factors, h. privacy and security concerns.

This hypothesis is developed to see effect of all independent variables in the theoretical framework on respondents' usage of social CRM applications (as dependent variable).

For the dependent variable, 4th question in the survey is used. That question is a conditional one of 3th question. 3rd one is asking whether the respondents are using S-CRM application of any brand and the people who answered 3th question as "Yes" were asked how many brands' S-CRM applications they are following in 4th question.

Multiple linear regression analysis with stepwise method is implemented for those variables. This analysis aims to find the relationship between an independent variable and two or more dependent variables (Anderson, Sweeney, & Williams, 2011).

The results of the test show that consumers' relationship with brand interacted and their privacy and security concerns have statistically significant effect on social CRM applications usage. Other 6 variables do not have significant impact on social CRM applications usage.

Table 32 Regression Analysis for Hypothesis 1 - ANOVA

ANOVA[c]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	12,519	1	12,51	11,349	,001[a]
	Residual	261,431	237	1,10		
	Total	273,950	238			
2	Regression	20,010	2	10,00	9,298	,000[b]
	Residual	253,940	236	1,07		
	Total	273,950	238			
a. Predictors: (Constant), avg relationship with the brand						
b. Predictors: (Constant), avg relationship with the brand, avg privacy sec						
c. Dependent Variable: Number of brands followed						

R Square values on the model summary table present what percentage of variability in the social CRM applications usage is accounted for by relationship with the brand interacted and privacy and security concerns. The second model will be used, because our 2 independent variables were included to that one. According to the values shown on the table, 7,3 % of the variance was accounted for.

Table 33 Regression Analysis for Hypothesis 1 – Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,214[a]	,046	,042	1,050
2	,270[b]	,073	,065	1,037
a. Predictors: (Constant), avg relationship with the brand				
b. Predictors: (Constant), avg relationship with the brand, avg privacy sec				

As seen on coefficients table the formulation of this relationship is;

Y = usage of social CRM applications

X1 = relationship with the brand interacted

X2 = privacy and security concerns

Y = 1,627 + 0,238 X1 – 0,196 X2

The formulation on the second model provided on coefficients table shows that consumers' relationship with the brand interacted on social networking sites has a positive effect on the usage of social CRM applications. Nevertheless, their privacy and security concerns decrease the usage of those applications.

Table 34 Regression Analysis for Hypothesis 1 - Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,812	,326		2,489	,014
	avg relationship with the brand	,293	,087	,214	3,369	,001
2	(Constant)	1,627	,446		3,645	,000
	avg relationship with the brand	,238	,088	,174	2,692	,008
	avg privacy sec	-,196	,074	-,170	-2,639	,009
a. Dependent Variable: Number of brands followed						

As mentioned above, there are 6 other variables included to this regression analysis as independent variables and the results prove that they don't have a direct effect on the usage of social CRM applications.

Table 35 Regression Analysis for Hypothesis 1 – Excluded Variables

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics
						Tolerance
1	suggestion of a friend	,031[a]	,454	,651	,030	,879
	avg social and comm needs	,057[a]	,841	,401	,055	,877
	avg need of info search	-,048[a]	-,645	,519	-,042	,726
	avg financial incentives	-,090[a]	-1,326	,186	-,086	,871
	personal innovativeness	,107[a]	1,633	,104	,106	,932
	avg app related factors	,103[a]	1,488	,138	,096	,829
	avg privacy sec	-,170[a]	-2,639	,009	-,169	,944
2	suggestion of a friend	,005[b]	,079	,937	,005	,860
	avg social and comm needs	,040[b]	,590	,555	,038	,868
	avg need of info search	-,048[b]	-,650	,516	-,042	,726
	avg financial incentives	-,088[b]	-1,310	,191	-,085	,871
	personal innovativeness	,082[b]	1,245	,215	,081	,909
	avg app related factors	,063[b]	,883	,378	,058	,779
a. Predictors in the Model: (Constant), avg relationship with the brand						
b. Predictors in the Model: (Constant), avg relationship with the brand, avg privacy sec						
c. Dependent Variable: Number of brands followed						

H_2: There is a relationship between females and males in terms of following a brand page, account or application.

In the analysis, it is found that 72,3 percent of female consumers are following a S-CRM application and this rate is 63,5 percent for male consumers. However, the result of the cross tabulation test shows that the hypothesis is not statistically supported. The significance level which is 0.049 proves that. It is less than 0.05.

Table 36 Crosstab Analysis for Hypothesis 2 – Case Processing Summary

	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Gender of the Respondents * Following a brand page, account or app.	351	80,9%	83	19,1%	434	100,0%

Table 37 Crosstab Analysis for Hypothesis 2 – Chi – Square Tests

Chi-Square Tests					
	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	3,127[a]	1	,077		
Continuity Correction[b]	2,735	1	,098		
Likelihood Ratio	3,127	1	,077		
Fisher's Exact Test				,086	,049
Linear-by-Linear Association	3,118	1	,077		
N of Valid Cases	351				
a. 0 cells (,0%) have expected count less than 5. The minimum expected count is 53,29.					
b. Computed only for a 2x2 table					

Table 38 Crosstab Analysis for Hypothesis 2 Crosstabulation

			Usage of social CRM applications		
			No	Yes	Total
Gender of the Respondents	Female	Count	51	133	184
		% within Gender of the Respondents	27,7%	72,3%	100,0%
		% of Total	14,5%	37,9%	52,4%
	Male	Count	61	106	167
		% within Gender of the Respondents	36,5%	63,5%	100,0%
		% of Total	17,4%	30,2%	47,6%
	Total	Count	112	239	351
		% within Gender of the Respondents	31,9%	68,1%	100,0%
		% of Total	31,9%	68,1%	100,0%

H_3: There is a difference between males and females with respect to the relationship with brand interacted.

In this hypothesis, it is aimed to see that if there is a difference between males and females with respect to effect of relationship with brand interacted on following a brand page, account or application.

The results of the t-Test prove that H3 is supported. In other words, there is a meaningful relationship between the variables, because the significance value is 0,010. Moreover, mean values on the Group Statistics table show that the effect of the relationship with brand interacted on following a S-CRM application is more for female consumers than males. Mean value is 3,63 for females and 3,38 for males.

Table 39 t-Test Analysis for Hypothesis 3 – Significance Level

		t	Sig (2-tailed)
avg relationship with the brand	Equal variances assumed	2,605	,010
	Equal variances notassumed	2,581	,010

Table 40 t-Test Analysis for Hypothesis 3 – Group Statistics

	Gender	N	Mean	Std. Deviation	Std. Error Mean
avg relationship with the brand	Female	184	3,63	,83577	,061
	Male	167	3,38	1,01282	,078

H_4: There is a difference between males and females with respect to privacy and security concerns.

In this hypothesis, it is aimed to see that if there is a difference between males and females with respect to effect of privacy and security concerns on following a brand page, account or application.

The results of the t-Test prove that H4 is rejected. In other words, the relationship between those variables is not meaningful, because the significance level is over 0.05.

Table 41 t-Test Analysis for Hypothesis 4 – Significance Level

		t	Sig (2-tailed)
privacy and security concerns	Equal variances assumed	-1,605	,109
	Equal variances notassumed	-1,614	,108

Table 42 t-Test Analysis for Hypothesis 4 – Group Statistics

	Gender	N	Mean	Std. Deviation	Std. Error Mean
avg privacy sec	Female	184	3,15	1,03604	,076
	Male	167	3,32	,92314	,071

H_5: Younger people have a higher frequency of following a brand page, account or application.

In this analysis, it is found that 89,2 percent of consumers who are between 18 and 24 are following a S-CRM application. This rate is 67,0 percent for people between 25 and 34 and 50,0 for people between 35 and 44. The result of the cross tabulation test shows that the hypothesis is statistically supported. The significance value is 0,00.

Table 43 Crosstab Analysis for Hypothesis 5 – Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Age of the respondent * Following a brand page, account or app.	351	80,9%	83	19,1%	434	100,0%

Table 44 Crosstab Analysis for Hypothesis 5 – Chi – Square Tests

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	22,607a	3	,000
Likelihood Ratio	24,774	3	,000
Linear-by-Linear Association	14,527	1	,000
N of Valid Cases	351		
a. 0 cells (,0%) have expected count less than 5. The minimum expected count is 7,34.			

Table 45 Crosstab Analysis for Hypothesis 5 – Group Statistics

			Following a brand page, account or app.		Total
			Yes	No	
Age of the Respondent	18 - 24	Count	58	7	65
		% within Age of the Respondent	89,2%	10,8%	100,0%
		% of Total	16,5%	2,0%	18,5%
	25 - 34	Count	136	67	203
		% within Age of the Respondent	67,0%	33,0%	100,0%
		% of Total	38,7%	19,1%	57,8%
	35 - 44	Count	30	30	60
		% within Age of the Respondent 2	50,0%	50,0%	100,0%
		% of Total	8,5%	8,5%	17,1%
	45 - 64	Count	15	8	23
		% within Age of the Respondent	65,2%	34,8%	100,0%
		% of Total	4,3%	2,3%	6,6%
Total		Count	239	112	351
		% within Age of the Respondent	68,1%	31,9%	100,0%
		% of Total	68,1%	31,9%	100,0%

H_6: There is a difference between age groups with respect to the relationship with the brand interacted.

In this hypothesis, it is aimed to see that if there is a difference between age of the respondent and effect of the relationship with the brand interacted on any social networking environment.

In order to make this analysis the average of the 6 scale variable questions which aim at measuring respondents' relationship with the brand interacted is computed. Anova analysis is implemented between this computed variable and respondents' age groups.

The result of the statistical test finds that there is meaningful relationship among those variables, because significance value is 0,00.

The biggest mean value is 3,90 which belongs to the respondents who are between 18 and 24 years old. In other words those people are the ones whose relationship with the brand interacted mostly affects their social networking sites usage.

Table 46 Anova Analysis for Hypothesis 6 – Significance Level

avg relationship with the brand					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	13,467	3	4,48	5,363	,001
Within Groups	290,441	347	,83		
Total	303,909	350			

Table 47 Anova Analysis for Hypothesis 6 – Descriptives

avg relationship with the brand								
	N	Mean	Std. Dev.	Std. Error	95% Confidence Interval for Mean		Min	Max
					Lower Bound	Upper Bound		
18 - 24	65	3,90	,64878	,08047	3,7418	4,0633	1,67	5,00
25 - 34	203	3,47	,93664	,06574	3,3433	3,6025	1,00	5,00
35 - 44	60	3,29	1,02860	,13279	3,0259	3,5574	1,00	5,00
45 - 64	23	3,39	1,04157	,21718	2,9409	3,8417	1,00	4,83
Total	351	3,51	,93183	,04974	3,4183	3,6140	1,00	5,00

H_7: There is a difference between age groups with respect to privacy and security concerns.

In this hypothesis, it is aimed to see that if there is a difference between age of the respondent and effect of privacy and security concerns on any social networking environment.

In order to make this analysis the average of 2 scale questions which aim at measuring the effect of privacy and security concerns is computed. Anova analysis is implemented between this computed variable and respondents' age groups.

The result of the statistical test finds that there is not meaningful relationship among those variables, because significance value is 0,205 which is over 0,05.

Table 48 Anova Analysis for Hypothesis 7 – Significance Level

avg privacy sec					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	4,743	3	1,58	1,634	,181
Within Groups	335,644	347	,96		
Total	340,386	350			

Table 49 Anova Analysis for Hypothesis 7 – Descriptives

Descriptives								
avg privacy sec								
	N	Mean	Std. Dev.	Std. Error	95% Confidence Interval for Mean		Min	Max
					Lower Bound	Upper Bound		
18 - 24	65	3,05	1,03502	,12838	2,7974	3,3103	1,00	5,00
25 - 34	203	3,25	,96902	,06801	3,1221	3,3903	1,00	5,00
35 - 44	60	3,25	,98075	,12661	2,9966	3,5034	1,00	5,00
45 - 64	23	3,56	,96888	,20203	3,1462	3,9842	2,00	5,00
Total	351	3,23	,98617	,05264	3,1344	3,3414	1,00	5,00

H_8: The consumers with a higher education level have a higher frequency of following a brand page, account or application.

In this analysis, it is found that 57,9 percent of people who graduated from doctorate degree are following a S-CRM application and this rate is higher for people with a lower education level. This shows that the hypothesis is not accepted. Moreover, the result of the cross tabulation test proves that the hypothesis is not statistically supported. The significance level is 0.363.

The respondents are divided into 3 groups in terms of education level. However, the last group - doctorate - only includes 4,4 % of the respondents. This situation can be the major reason of why H_8 is not statistically significant.

Table 50 Crosstab Analysis for Hypothesis 8 – Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Education Level * Following a brand page, account or app.	351	80,9%	83	19,1%	434	100,0%

Table 51 Crosstab Analysis for Hypothesis 8 – Chi – Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2,026a	2	,363
Likelihood Ratio	1,989	2	,370
Linear-by-Linear Association	1,997	1	,158
N of Valid Cases	351		
a. 0 cells (,0%) have expected count less than 5. The minimum expected count is 6,06.			

Table 52 Crosstab Analysis for Hypothesis 8 – Group Statistics

			Usage of social CRM applications		
			No	Yes	Total
Education Level	High School and Undergraduate	Count	59	143	202
		% within Education Level	29,2%	70,8%	100,0%
		% of Total	16,8%	40,7%	57,5%
	Graduate	Count	45	85	130
		% within Education Level	34,6%	65,4%	100,0%
		% of Total	12,8%	24,2%	37,0%
	Doctorate	Count	8	11	19
		% within Education Level	42,1%	57,9%	100,0%
		% of Total	2,3%	3,1%	5,4%
	Total	Count	112	239	351
		% within Education Level	31,9%	68,1%	100,0%
		% of Total	31,9%	68,1%	100,0%

H_9: There is a difference between education level with respect to the relationship with the brand interacted.

In this hypothesis, it is aimed to see that if there is a difference between the respondents' education level and effect of the relationship with the brand interacted on any social networking environment.

In order to make this analysis the average of the 6 scale variable questions which aim at measuring respondents' relationship with the brand interacted is computed. Anova analysis is implemented between this computed variable and respondents' education level.

The result of the statistical test finds that there is no meaningful relationship among those variables, because significance value is over 0,05.

The respondents are divided into 3 groups in terms of education level. However, the last group - doctorate - only includes 4,4 % of the respondents. This situation can be the major reason of why H_9 is not statistically significant.

Table 53 Anova Analysis for Hypothesis 9 – Significance Level

avg relationship with the brand					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1,881	2	,94	1,084	,340
Within Groups	302,028	348	,86		
Total	303,909	350			

Table 54 Anova Analysis for Hypothesis 9 – Descriptives

avg relationship with the brand								
	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Min	Max
					Lower Bound	Upper Bound		
High School and Undergraduate	202	3,55	,91439	,06434	3,4317	3,6854	1,00	5,00
Graduate	130	3,42	,98634	,08651	3,2558	3,5981	1,00	5,00
Doctorate	19	3,67	,68600	,15738	3,3448	4,0061	2,00	4,83
Total	351	3,51	,93183	,04974	3,4183	3,6140	1,00	5,00

H_{10}: There is a difference between education level with respect to the effect of the respondents' privacy and security concerns on following its page, account or application.

In this hypothesis, it is aimed to see that if there is a difference between education level of the respondent and effect of privacy and security concerns on any social networking environment.

In order to make this analysis the average of 2 scale questions which aim at measuring the effect of privacy and security concerns is computed. Anova analysis is implemented between this computed variable and respondents' education level.

The result of the statistical test finds that there is not meaningful relationship among those variables, because significance is 0,738 which is over 0,05.

The respondents are divided into 3 groups in terms of education level. However, the last group - doctorate - only includes 4,4 % of the respondents. This situation can be the major reason of why H_{10} is not statistically significant.

Table 55 Anova Analysis for Hypothesis 10 – Significance Level

avg privacy sec					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	,595	2	,29	,304	,738
Within Groups	339,791	348	,97		
Total	340,386	350			

Table 56 Anova Analysis for Hypothesis 10 – Descriptives

avg privacy sec								
	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Min	Max
					Lower Bound	Upper Bound		
High School and Undergraduate	202	3,26	,98639	,06940	3,1305	3,4042	1,00	5,00
Graduate	130	3,18	1,00220	,08790	3,0107	3,3585	1,00	5,00
Doctorate	19	3,28	,90240	,20702	2,8545	3,7244	1,50	5,00
Total	351	3,23	,98617	,05264	3,1344	3,3414	1,00	5,00

H_{11}: There is a difference between males and females with respect to social media usage frequency.

In this hypothesis, it is aimed to see that if there is a difference between males and females with respect to social media usage frequency.

In order to make this analysis the average of the most popular 5 social networking sites' usage frequencies is computed.

The results of the t-Test prove that H_{11} is accepted. In other words, there is a meaningful relationship between the variables, because the significance value is 0,003. Moreover, mean values on the Group Statistics table show that female consumers use social media more than males. Mean value is 2,53 for females and 2,34 for males.

Table 57 t-Test Analysis for Hypothesis 11 – Significance Level

		t	Sig (2-tailed)
avg social media usage	Equal variances assumed	2,962	,003
	Equal variances notassumed	2,955	,003

Table 58 t-Test Analysis for Hypothesis 11 – Group Statistics

	Gender	N	Mean	Std. Deviation	Std. Error Mean
avg social media usage	Female	168	2,53	,55427	,042
	Male	155	2,34	,58999	,047

H_{12}: There is a difference between males and females with respect to the effect of financial incentives on following a brand page, account or application.

The impact of financial incentives on following a company's brand page or account shows difference among males and females.

In this hypothesis, it is aimed to see that if there is a difference between men and women with respect to effect of financial incentives on following a brand page, account or application on social networking sites.

In order to make this analysis the average of the 4 scale questions which aim at measuring the effect of the financial incentives is computed.

The results of the t-Test prove that H_{12} is supported. In other words, there is a meaningful relationship between the variables, because the significance level is 0,00. Moreover, mean values on the Group Statistics table show that the effect of financial incentives on following a S-CRM application is more for female consumers than males. Mean value is 3,78 for females and 3,41 for males.

Table 59 t-Test Analysis for Hypothesis 12 – Significance Level

		t	Sig (2-tailed)
avg_financial incentives	Equal variances assumed	3,836	,00
	Equal variances notassumed	3,785	,00

Table 60 t-Test Analysis for Hypothesis 12 – Group Statistics

	Gender	N	Mean	Std. Deviation	Std. Error Mean
avg_financial_incentives	Female	184	3,78	,76518	,056
	Male	167	3,41	1,01579	,078

H_{13}: There is a difference between males and females with respect to the effect of need of information search on following a brand page, account or application.

In this hypothesis, it is aimed to see that if there is a difference between men and women with respect to effect of need of information search on following a brand page, account or application on social networking sites.

In order to make this analysis the average of the 4 scale questions which aim at measuring the effect of the financial incentives is computed.

The results of the t-Test prove that H_{13} is accepted. In other words, there is a meaningful relationship between the variables, because the significance level is 0,00. Moreover, mean values on the Group Statistics table show that the effect of need of information search on following a S-CRM application is more for female consumers than males. Mean value is 3,89 for females and 3,58 for males.

Table 61 t-Test Analysis for Hypothesis 13 - Significance Level

		T	Sig (2-tailed)
Avg need of information search	Equal variances assumed	3,672	,00
	Equal variances notassumed	3,628	,00

Table 62 t-Test Analysis for Hypothesis 13 - Group Statistics

	Gender	N	Mean	Std. Deviation	Std. Error Mean
Avg need of information search	Female	184	3,89	,69516	,051
	Male	167	3,58	,89773	,069

H_{14}: There's a difference between age groups with respect to social media usage frequency.

In this hypothesis, it is aimed to see that if there is a difference between age of the respondent and his social media sites usage frequency.

In order to make this analysis the average of the most popular 5 social networking sites' usage frequencies is computed. Those web sites are Facebook, LinkedIn, Twitter, Google + and Instagram. Moreover, age groups also recoded into 3 categories according to their frequencies.

The result of the statistical test finds that there is meaningful relationship among those variables, because the F-value is 0 and that means there is a significant difference between those age groups.

The biggest mean value is 2,86 which belongs to the respondents who are between 18 and 24 years old. In other words those people are the ones who use social networking sites mostly.

Table 63 Anova Analysis for Hypothesis 14 – Significance Level

avg_social_media_usage					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	10,105	3	3,36	6,550	,000
Within Groups	167,127	325	,51		
Total	177,232	328			

Table 64 Anova Analysis for Hypothesis 14 – Descriptives

avg_social_media_usage								
	N	Mean	Std. Dev.	Std. Error	95% Confidence Interval for Mean		Min	Max
					Lower Bound	Upper Bound		
18 - 24	64	2,86	,66114	,08264	2,7036	3,0339	1,40	4,00
25 - 34	190	2,70	,76500	,05550	2,5989	2,8179	1,20	4,60
35 - 44	55	2,35	,62146	,08380	2,1884	2,5244	1,00	3,80
45 - 64	20	2,36	,65406	,14625	2,0539	2,6661	1,00	3,80
Total	329	2,65	,73508	,04053	2,5799	2,7393	1,00	4,60

H_{15}: There is a difference between age groups with respect to the effect of ease of use on following a brand page, account or application.

In this hypothesis, it is aimed to see that if there is a difference between age of the respondent and effect of his perceived ease of use of the page, environment of the account or application. Anova analysis is implemented between those variables.

The result of the statistical test finds that there is meaningful relationship among those variables, because significance is 0,04 which is lower than 0,05.

The biggest mean value is 3,98 which belongs to the respondents who are between 18 and 24 years old. In other words those people are the ones whose perceived ease of use of the page, environment of the account or application mostly affects their social networking sites usage.

Table 65 Anova Analysis for Hypothesis 15 – Significance Level

perceived ease of use					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	11,819	3	3,94	3,863	,010
Within Groups	353,924	347	1,02		
Total	365,744	350			

Table 66 Anova Analysis for Hypothesis 15 – Descriptives

perceived ease of use								
	N	Mean	Std. Dev.	Std. Error	95% Confidence Interval for Mean		Min	Max
					Lower Bound	Upper Bound		
18 - 24	65	3,98	,800	,099	3,79	4,18	2	5
25 - 34	203	3,51	1,069	,075	3,36	3,66	1	5
35 - 44	60	3,52	1,000	,129	3,26	3,77	1	5
45 - 64	23	3,65	1,027	,214	3,21	4,10	1	5
Total	351	3,61	1,022	,055	3,50	3,71	1	5

H_{16}: There is a negative relationship between social media usage frequency and the effect of privacy concerns on following a brand page, account or application.

This hypothesis maintains that as privacy concerns of respondents differ, people's social media usage frequency changes.

In order to make this analysis the average of the most popular 5 social networking sites' usage frequencies and 2 privacy and security concerns question are computed. Correlation analysis is implemented to those computed variables to measure the correctness of the hypothesis.

The findings show that there is a meaningful and very strong relationship between those variables, because the significance value is 0,00. Pearson Correlation value is – 0,241 and it proves that there is a negative correlation among the variables.

Table 67 Correlations Analysis for Hypothesis 16

		avg social media usage	avg privacy sec
avg social media usage	Pearson Correlation	1,000	-,241**
	Sig. (2-tailed)		,000
	N	397,000	330
avg privacy sec	Pearson Correlation	-,241**	1,000
	Sig. (2-tailed)	,000	
	N	330	353,000
**. Correlation is significant at the 0.01 level (2-tailed).			

H_{17}: There is a positive relationship between the effect of purchasing frequency and the effect of sector of the brand on following its page, account or application.

This hypothesis maintains that as the effect of respondent's purchasing frequency of the products of brand interacted on using social CRM applications differs, the effect the sector, which brand interacted belongs, on using social CRM applications changes. Correlation analysis is implemented to those variables to measure the correctness of the hypothesis.

The findings show that there is a meaningful relationship between those variables, because the significance level is 0,00. Pearson Correlation value is 0,431 and it proves that there is a positive correlation among the variables.

Table 68 Correlations Analysis for Hypothesis 17

		purch_freq	sector
purch_freq	Pearson Correlation	1,000	,431**
	Sig. (2-tailed)		,000
	N	366,000	366
sector	Pearson Correlation	,431**	1,000
	Sig. (2-tailed)	,000	
	N	366	366,000
**. Correlation is significant at the 0.01 level (2-tailed).			

H_{18}: There is a positive relationship between the effect of loyalty and the effect of sector of the brand on following its page, account or application.

This hypothesis claims that as the effect of respondent's loyalty to the brand interacted on using social CRM applications differs, the effect of the sector, which brand interacted belongs, on using social CRM applications changes. Correlation analysis is implemented to those variables to measure the correctness of the hypothesis.

The findings show that there is a meaningful relationship between those variables, because the significance value is 0,00. Pearson Correlation value is 0,454 and it proves that there is a positive correlation among the variables.

Table 69 Correlations Analysis for Hypothesis 18

		sector	avg loyalty
sector	Pearson Correlation	1,000	,454**
	Sig. (2-tailed)		,000
	N	366,000	366
avg loyalty	Pearson Correlation	,454**	1,000
	Sig. (2-tailed)	,000	
	N	366	366,000
**. Correlation is significant at the 0.01 level (2-tailed).			

H_{19}: There is a difference between people who make a complaint about a brand on the Internet and who do not make with respect to the effect of loyalty on following a brand page, account or application.

In this hypothesis, it is aimed to see that if there is a difference between people who make a complaint about a brand on the Internet and who do not make with respect to the effect of loyalty on following a brand page, account or application.

In order to make this analysis the average of the 4 scale questions which aim at measuring the effect of loyalty to the brand interacted is computed.

The results of the t-Test prove that H_{19} is supported. In other words, there is almost a meaningful relationship between the variables, because the significance value is 0.005. Moreover, mean values on the Group Statistics table show that the effect of loyalty on following a S-CRM application is more for people who make a complaint about a brand on the Internet. Mean value is 3,68 for that group and 3,38 for the other one.

Table 70 t-Test Analysis for Hypothesis 19 – Significance Level

		t	Sig (2-tailed)
avg_loyalty	Equal variances assumed	2,814	,005
	Equal variances not assumed	2,770	,006

Table 71 t-Test Analysis for Hypothesis 19 – Group Statistics

	Complaint	N	Mean	Std. Deviation	Std. Error Mean
avg_loyalty	Yes	197	3,68	,91601	,065
	No	165	3,38	1,09334	,085

H_{20}: There is a positive relationship between the effect of loyalty and effect of financial incentives on following a brand page, account or application.

This hypothesis claims that as the effect of respondent's loyalty to the brand interacted on using social CRM applications differs, the effect of financial incentives on using social CRM applications changes.

In order to make this analysis the average of 4 scale questions which aim at measuring the effect of loyalty to the brand interacted and 4 financial incentives questions are computed. Correlation analysis is implemented to those computed variables to measure the correctness of the hypothesis.

The findings show that there is a meaningful relationship between those variables, because the significance value is 0,00. Pearson Correlation value is 0,367 and it proves that there is a positive correlation among the variables.

Table 72 Correlations Analysis for Hypothesis 20

		avg_loyalty	avg_financial_incentives
avg_loyalty	Pearson Correlation	1,000	,367**
	Sig. (2-tailed)		,000
	N	366,000	366
avg_financial_incentives	Pearson Correlation	,367**	1,000
	Sig. (2-tailed)	,000	
	N	366	366,000
**. Correlation is significant at the 0.01 level (2-tailed).			

H_{21}: There is a positive relationship between the effect of loyalty and the effect of social and communication needs on following a brand page, account or application.

This hypothesis maintains that as the effect of respondent's loyalty to the brand interacted on using social CRM applications differs, the effect of social and communication needs on using social CRM applications changes.

In order to make this analysis the average of 4 scale questions which aim at measuring the effect of loyalty to the brand interacted and 6 social and communication needs questions are computed. Correlation analysis is implemented to those computed variables to measure the correctness of the hypothesis.

The findings show that there is a meaningful relationship between those variables, because the significance level is 0,00. Pearson Correlation value is 0,369 and it proves that there is a positive correlation among the variables.

Table 73 Correlations Analysis for Hypothesis 21

		avg_loyalty	avg_social_and_comm_needs
avg_loyalty	Pearson Correlation	1,000	,369**
	Sig. (2-tailed)		,000
	N	366,000	366
avg_social_and_comm_needs	Pearson Correlation	,369**	1,000
	Sig. (2-tailed)	,000	
	N	366	366,000
**. Correlation is significant at the 0.01 level (2-tailed).			

H_{22}: There is a positive relationship between the effect of sector of the brand and effect of financial incentives on following a brand page, account or application.

This hypothesis maintains that as the effect of respondent's financial incentives on using social CRM applications differs, the effect of the sector of the brand on using social CRM applications changes.

In order to make this analysis the average of 4 scale questions which aim at measuring the effect of financial incentives is computed. Correlation analysis is implemented to the variables to measure the correctness of the hypothesis.

The findings show that there is a meaningful relationship between those variables, because the significance level is 0,00 Pearson Correlation value is 0,390 and it proves that there is a positive correlation among those variables.

Table 74 Correlations Analysis for Hypothesis 22

		avg_financial_incentives	Sector
avg_financial_incentives	Pearson Correlation	1,000	,390**
	Sig. (2-tailed)		,000
	N	366,000	366
Sector	Pearson Correlation	,390**	1,000
	Sig. (2-tailed)	,000	
	N	366	366,000
**. Correlation is significant at the 0.01 level (2-tailed).			

H_{23}: There is a positive relationship between the effect of need of information search and the effect of social and communication needs on following a brand page, account or application.

This hypothesis maintains that as the effect of respondent's need of information search on using social CRM applications differs, the effect of respondent's social and communication needs on using social CRM applications changes.

In order to make this analysis the average of 4 scale questions which aim at measuring the effect of respondent's need of information search and 6 social and communication needs questions are computed. Correlation analysis is implemented to those computed variables to measure the correctness of the hypothesis.

The findings show that there is a meaningful and strong relationship between those variables, because the significance level is 0,00. Pearson Correlation value is 0,569 and it proves that there is a positive correlation among the variables.

Table 75 Correlations Analysis for Hypothesis 23

		avg need of info search	avg social and comm needs
avg need of info search	Pearson Correlation	1,000	,569**
	Sig. (2-tailed)		,000
	N	366,000	366
avg social and comm needs	Pearson Correlation	,569**	1,000
	Sig. (2-tailed)	,000	
	N	366	366,000
**. Correlation is significant at the 0.01 level (2-tailed).			

H_{24}: There is a negative relationship between the effect of social and communication needs and the effect of privacy concerns on following a brand page, account or application.

This hypothesis maintains that as the effect of respondent's privacy and security concerns on using social CRM applications differs, the effect of respondent's social and communication needs on using social CRM applications changes.

In order to make this analysis the average of 2 scale questions which aim at measuring the effect of privacy and security concerns and 6 social and communication needs questions are computed. Correlation analysis is implemented to those computed variables to measure the correctness of the hypothesis.

The findings show that there is a meaningful relationship between those variables, because the significance value is 0,00. Moreover, Pearson Correlation value is -0,211 which proves that the direction of the relationship is negative.

Table 76 Correlations Analysis for Hypothesis 24

		avg social and comm needs	avg privacy sec
avg social and comm needs	Pearson Correlation	1,000	-,211**
	Sig. (2-tailed)		,000
	N	366,000	353
avg privacy sec	Pearson Correlation	-,211**	1,000
	Sig. (2-tailed)	,000	
	N	353	353,000
**. Correlation is significant at the 0.01 level (2-tailed).			

H_{25}: There is a positive relationship between the effect of social and communication needs and the effect of perceived enjoyment on following a brand page, account or application.

This hypothesis maintains that as the effect of respondent's social and communication needs on using social CRM applications differs, the effect of his perceived enjoyment on using social CRM applications changes.

In order to make this analysis the average of 6 scale questions which aim at measuring the effect of social and communication needs is computed. Correlation analysis is implemented to the variables to measure the correctness of the hypothesis.

The findings show that there is a meaningful relationship between those variables, because the significance value is 0,00. Pearson Correlation value is 0,286 and it proves that there is a positive correlation among those variables.

Table 77 Correlations Analysis for Hypothesis 25

		avg social and comm needs	enjoyment
avg social and comm needs	Pearson Correlation	1,000	,286**
	Sig. (2-tailed)		,000
	N	366,000	353
enjoyment	Pearson Correlation	,286**	1,000
	Sig. (2-tailed)	,000	
	N	353	353,000
**. Correlation is significant at the 0.01 level (2-tailed).			

H_{26}: There is a positive relationship between the effect of social and communication needs and the effect of recommendation of a friend on following a brand page, account or application.

This hypothesis maintains that as the effect of recommendation of a friend on using social CRM applications differs, the effect of respondent's social and communication needs on using social CRM applications changes.

In order to make this analysis the average of 6 social and communication needs questions is computed. Correlation analysis is implemented to the variables to measure the correctness of the hypothesis.

The findings show that there is a meaningful and strong relationship between those variables, because the significance value is 0,00. Pearson Correlation value is 0,275 and it proves that there is a positive correlation among the variables.

Table 78 Correlations Analysis for Hypothesis 26

		avg social and comm needs	suggestion of a friend
avg social and comm needs	Pearson Correlation	1,000	,275**
	Sig. (2-tailed)		,000
	N	366,000	353
suggestion of a friend	Pearson Correlation	,275**	1,000
	Sig. (2-tailed)	,000	
	N	353	353,000
**. Correlation is significant at the 0.01 level (2-tailed).			

H_{27}: There is a negative relationship between the effect of privacy concerns and the effect of personal innovativeness on following a brand page, account or application.

This hypothesis maintains that as the effect of respondent's personal innovativeness differs, the effect of privacy and security concerns on using social CRM applications changes.

In order to make this analysis the average of 2 privacy and security concerns questions is computed. Correlation analysis is implemented to the variables to measure the correctness of the hypothesis.

The findings show that there is a meaningful relationship between those variables, because the significance value is 0,00. Moreover, Pearson Correlation value is -0,209 which proves that the direction of the relationship is negative.

Table 79 Correlations Analysis for Hypothesis 27

		personal innovativeness	avg privacy sec
personal innovativeness	Pearson Correlation	1,000	-,209**
	Sig. (2-tailed)		,000
	N	353,000	353
avg privacy sec	Pearson Correlation	-,209**	1,000
	Sig. (2-tailed)	,000	
	N	353	353,000
**. Correlation is significant at the 0.01 level (2-tailed).			

H_{28}: There is a negative relationship between the effect of privacy concerns and the effect of perceived enjoyment on following a brand page, account or application.

This hypothesis maintains that as the effect of respondent's perceived enjoyment differs, the effect of privacy and security concerns on using social CRM applications changes.

In order to make this analysis the average of 2 privacy and security concerns questions is computed. Correlation analysis is implemented to the variables to measure the correctness of the hypothesis.

The findings show that there is a meaningful relationship between those variables, because the significance value is 0,00. Pearson Correlation value is – 0,225 and it proves that there is a negative correlation among those variables.

Table 80 Correlations Analysis for Hypothesis 28

		perceived enjoyment	avg privacy sec
perceived enjoyment	Pearson Correlation	1,000	-,225**
	Sig. (2-tailed)		,000
	N	353	353
avg privacy sec	Pearson Correlation	-,225**	1,000
	Sig. (2-tailed)	,000	
	N	353	353
**. Correlation is significant at the 0.01 level (2-tailed).			

H_{29}: There is a negative relationship between the effect of privacy concerns and the effect of recommendation of a friend on following a brand page, account or application.

This hypothesis asserts that as the effect of suggestion of a respondent's friend on using social CRM applications differs, the effect of privacy and security concerns on using social CRM applications changes.

In order to make this analysis the average of 2 privacy and security concerns questions is computed. Correlation analysis is implemented to the variables to measure the correctness of the hypothesis.

The findings show that there is a meaningful relationship between those variables, because the significance value is 0,00. Pearson Correlation value is – 0,202 and it proves that there is a negative correlation among the variables.

Table 81 Correlations Analysis for Hypothesis 29

		suggestion of a friend	avg privacy sec
suggestion of a friend	Pearson Correlation	1,000	-,202**
	Sig. (2-tailed)		,000
	N	353,000	353
avg privacy sec	Pearson Correlation	-,202**	1,000
	Sig. (2-tailed)	,000	
	N	353	353,000
**. Correlation is significant at the 0.01 level (2-tailed).			

H_{30}: There is a positive relationship between the effect of perceived ease of use and the effect of perceived enjoyment on following a brand page, account or application.

This hypothesis claims that as the effect of respondent's perceived ease of use on using social CRM applications differs, the effect of perceived enjoyment on using social CRM applications changes. Correlation analysis is implemented to the variables to measure the correctness of the hypothesis.

The findings show that there is a meaningful and strong relationship between those variables, because the significance value is 0,00. Pearson Correlation value is 0,630 and it proves that there is a positive correlation among the variables.

Table 82 Correlations Analysis for Hypothesis 30

		ease of use	enjoyment
ease of use	Pearson Correlation	1,000	,630**
	Sig. (2-tailed)		,000
	N	353,000	353
enjoyment	Pearson Correlation	,630**	1,000
	Sig. (2-tailed)	,000	
	N	353	353,000
**. Correlation is significant at the 0.01 level (2-tailed).			

The Summary of the Results

In that section, the summary tables are given which make interpretation of the results easier.

The usage of S-CRM applications in terms of gender is given on the table below.

Table 83 The Usage of S-CRM Applications - Gender

Gender	No	Yes
Female	27,7 %	72,3 %
Male	36,5 %	63,5 %

The usage of S-CRM applications in terms of age groups is given on the table below.

Table 84 The Usage of S-CRM Applications - Age

Age	No	Yes
18 - 24	10,8 %	89,2 %
25 - 34	33,0 %	67,0 %
35 - 44	50,0 %	50,0 %
45- 64	34,8 %	65,2 %

The usage of S-CRM applications in terms of education level is given on the table below.

Table 85 The Usage of S-CRM Applications – Education Level

Education Level	No	Yes
High School & Undergraduate	29,2 %	70,8 %
Graduate	34,6 %	65,4 %
Doctorate	42,1 %	57,9 %

The results of the difference tests with respect to gender are given on the table below.

Table 86 The Results of the Difference Tests – Gender

	N	Mean	t	Significance
Relationship with brand interacted			2,605	,010
Male	167	3,38		
Female	184	3,63		
Social media usage frequency			2,962	,003
Male	155	2,34		
Female	168	2,53		
Financial incentives			3,836	,00
Male	167	3,41		
Female	184	3,78		
Need of information search			3,672	,00
Male	167	3,58		
Female	184	3,89		

The results of the difference tests with respect to age groups are given on the table below.

Table 87 The Results of the Difference Tests – Age Groups

	N	Mean	F	Significance
Relationship with brand interacted			5,363	,001
18 – 24	65	3,90		
25 - 34	203	3,47		
35 – 44	60	3,39		
45 - 64	23	3,51		
Social media usage frequency			6,550	,000
18 – 24	64	2,86		
25 - 34	190	2,70		
35 – 44	55	2,35		
45 - 64	20	2,65		
Ease of use			3,863	,010
18 – 24	65	3,98		
25 - 34	203	3,51		
35 – 44	60	3,52		
45 - 64	23	3,65		

CHAPTER 6

CONCLUSION

This research aimed at measuring the factors affecting the usage of social CRM applications in Turkey. After a detailed literature review, a questionnaire was prepared to find the awareness level and test the hypothesis set. Besides our major purpose, the survey also gave a chance to measure the relationship between different variables, so 30 hypotheses are developed. The results show that 25 of them are supported.

The results of this survey show that 65,2 % of the respondents are currently following a brand page, account or application on any social networking site. This is really a crucial level, and it shows the high potential of social CRM. If the companies in Turkey could use social CRM applications effectively, they can increase the efficiency of their CRM strategy which means being able to create new sales opportunities, improving the success of marketing activities and giving more satisfactory customer service.

The findings also display that people frequently use the internet and social media for other types of relationship with the brands such as making complaint. 54,4 % of the respondents stated that they made a complaint through those channels at least once. Many of Turkish consumers are using the internet and social networking sites to manage their relationship with brands they interact.

It is tried to measure effect of the 8 variables included to the theoretical framework to our dependent variable – social CRM applications usage – in the first hypothesis. As it is seen in the explanations of first hypothesis, 2 of the 8 variables (relationship with the brand interacted, need of information search, privacy and security

concerns, social and communication needs, application related factors, respondents' demographics, financial incentives and consumer innovativeness) have a predictive effect on social CRM applications usage in Turkey.

The relationship with the brand interacted has a positive influence on the usage. Turkish consumers have a tendency to interact to brands which they already have a relationship. This is an important opportunity for brands to know their existing customers better. People are sharing their personal information directly or indirectly on social networking sites. They share their relationships, favorite teams, artists, books, hobbies etc. This type of data is difficult to get from a customer via classical communication channels such as appointments, phone calls or e-mails. Companies can develop special S-CRM programs for their current customers and find a way to obtain this valuable customer data. It can be used for new analyses, making different types of customer segmentation or create new campaigns.

The test proves that consumers' privacy and security concerns impress S-CRM applications usage negatively. Moreover, H_{16} demonstrates that the relationship between social media usage frequency and privacy concerns of consumers is also negative. Today many S-CRM applications – such as Facebook or LinkedIn apps – claim to reach personal information of consumers which they put on the related platform. Of course obtaining this data is invaluable for companies. However, the amount of requested data can prevent consumers from using those apps. Brands should be more careful when demanding personal data and they should not claim to reach unnecessary information which they will not use in any analysis or campaign.

As it is mentioned above, consumers tend to use S-CRM applications of the brands which they are already familiar. In order to acquire potential customers, the amount of data which is requested from leads can be limited at the initial stage of the

relationship. This strategy can prevent hesitation of potential customers for using S-CRM applications due to privacy concerns. After converting those leads to existing customers, more information can be asked in order to know those customers better.

H_{28} proves that the relationship between the effect of privacy concerns and the effect of perceived enjoyment on following a brand page, account or application is negative. In order to reduce the unwanted effect of privacy and security concerns, enjoyment level of the applications can be increased. For example, a Facebook game which offers fun can attract consumers and they can disregard their privacy and security concerns to share their personal data for the sake of the game.

H_{29} presents another factor which reduce the effect of privacy concerns. It shows that there is a negative relationship between the effect of privacy concerns and the effect of recommendation of a friend on following S-CRM applications. Brands can encourage their current applications' users to make recommendations to their friends. Strategies can be developed in order to build referral systems, so that companies can reach more consumers via social networks.

One of the independent variables in the theoretical framework is financial incentives. H_1 demonstrates that it does not have statistically significant influence on S-CRM application usage. Actually this result is a little bit different from my expectation. I was thinking that financial incentives would be one of the major factors which affect S-CRM applications usage positively. It is possible to observe several S-CRM applications which use financial incentives of consumers to increase the usage. Delivering gifts such as cars, mobile devices or giving discounts are very common implementations of attracting people for using those applications. However, the findings of the analysis show that majority of Turkish consumers do not care about these type of motivations.

The first hypothesis also confirms that the need of information search, social and communication needs and consumer innovativeness have no substantial impact on S-CRM usage. Consumers probably satisfy those needs through different channels such as the Internet or other traditional methods and S-CRM applications are not mature enough to satisfy them.

The findings prove that young people have a stronger tendency to use S-CRM applications (H_5) and they use social media more frequently (H_{14}). Furthermore, the ease of use of those applications is important for young people (H_{15}). All those results illustrate that a customized strategy for younger consumers in social media is needed. Their habits, patterns and attitudes should be considered, and brand should find a way to attract that valuable consumer group.

In 5 of the hypotheses (H_3, H_4, H_{11}, H_{12}, and H_{15}), it is aimed at measuring the differences between men and women. All of them were approved, however the mean values were not very far from each other. So it is possible to state that social CRM related issues are not differentiated with gender very strongly.

As it is stated in hypothesis 11, women spend more time in social networking sites than men. Moreover, their mean values in the hypotheses which measure the effect of financial incentives (H_{12}) and need of information search (H_{13}) are higher than males. Those results can be valuable for the brands which target to reach female consumers. Those companies can form their social media strategies by considering these findings.

Hypothesis 19 has an interesting result. The effect of loyalty on S-CRM applications usage are higher for people who make complaint through the Internet, when compared to those who do not make. Brands should not assume those people, who declare their matters through public environments, as troublesome customers. Adversely, they are the consumers who pay importance to loyalty. If their problems can

be solved at the right time, it is possible to convert those customers to loyal ones. As it is known, increasing the loyalty of the consumers is one of the biggest goals of many customer relationship management programs.

In H_8, it is observed that the consumers with a higher education level have a lower percentage of S-CRM applications usage. Normally, it can be expected that people with a higher education level can adapt to a new concept such as S-CRM applications better. However, the age is a key motive at that point. People with a doctorate or graduate degree are older than undergraduate ones. It is clear that younger people can adopt to technology related concepts easier than older ones.

Limitations of the Study

Although the reliability statistics of this study is highly satisfactory, there is a point to remember when evaluating the results. In order to analyze the hypotheses, cross – sectional data was collected. Convenience sampling was done, and finding has been evaluated on the sample group. For the current respondent group, the findings are relevant. However, it is difficult to assess that the results are supported for most of the respondents. Different results can be obtained on different sample groups. This issue can be evaluated as the major limitation of the study.

Further Research

After the evaluation of experiences acquired from this study, it can be recommended to the potential researchers that focusing on the perception of the companies' - which operate in Turkey- attitudes towards social CRM. By comparing consumers' and businesses' perceptions, the effectiveness of social CRM applications can be improved.

Moreover, conducting a survey on a larger respondent group which also includes people who are not active internet users can give a better idea about social CRM applications usage in Turkey.

APPENDICES

SAMPLE QUESTIONNAIRE (TURKISH)

Türkiye'de Sosyal CRM Uygulamalarının Kullanımını Etkileyen Faktörler

Sayın katılımcı,

Bu anket, Boğaziçi Üniversitesi Yönetim Bilişim Sistemleri bölümünde hazırlanan "Türkiye'de Sosyal CRM Uygulamalarının Kullanımını Etkileyen Faktörler" konulu yüksek lisans tezi için veri toplamak amacıyla düzenlenmiştir.

İsminiz hiç bir şekilde not edilmeyecek ve verdiğiniz cevaplar saklı tutulacaktır. Cevaplarınız akademik amaçlar dışında kullanılmayacaktır.

Ankete katılıp soruları cevaplayanlar arasından belirlenecek 10 kişiye Alain de Botton'ın "Çalışmanın Mutluluğu ve Sıkıntısı" isimli kitabı hediye edilecektir. Kitap hediye edilecek 10 kişiye elektronik posta adresleri üzerinden ulaşılacaktır. Elektronik posta adresi paylaşımı tercihe bağlıdır. Elektronik posta adresiniz kesinlikle 3. şahıslarla paylaşılmayacaktır.

Anketi doldurmak yaklaşık 5 dakika zamanınızı alacaktır.

Gösterdiğiniz ilgi ve katkı için teşekkür ederiz.

Tez Danışmanı: Prof. Dr. Aslıhan Nasır (aslihan.nasir@boun.edu.tr)

Hazırlayan: Mehmet Nuri Can (mehmetn.can@gmail.com)

Lütfen cevaplarınızı vermeden önce soruları ve açıklamaları dikkatlice okuyunuz.

1) Günde ortalama kaç saat internet kullanıyorsunuz?	
Hiç kullanmıyorum	
1 - 2 saat	
3 - 5 saat	
6 - 9 saat	
10 saat ve üstü	

2) Lütfen aşağıdaki sosyal ağları kullanım sıklığınızı belirtiniz:

	1 Hiç kullanmıyorum	2 Nadiren kullanıyorum	3 Ortalama Sıklıkta Kullanıyorum	4 Sık kullanıyorum	5 Çok sık kullanıyorum
Facebook					
Twitter					
Google+					
Weibo					
RenRen					
LinkedIn					
Badoo					
Instagram					
Yelp					
Tumblr					
Flickr					
Orkut					
MySpace					
Foursquare					
Pinterest					
Soundcloud					
Xing					
Friendster					
Path					
GetGlue					
Last.fm					

Diğer Sosyal Ağ(lar)					

3) Herhangi bir sosyal ağda bir markanın sayfasını, uygulamasını ya da hesabını takip ediyor musunuz? (Markanın Facebook sayfası, uygulaması ya da twitter, foursquare hesabı vb.)	
Evet	
Hayır	

4) Sosyal ağlarda yaklaşık kaç markanın sayfa, uygulama ya da hesabını takip ediyorsunuz?	
1-5	
6-10	
10-20	
20-40	
40'dan fazla	

5) Takip ettiğiniz marka sayfalarından, uygulamalarından ya da hesaplarından hangi yöntemlerle haberdar oldunuz? (Birden fazla seçeneği işaretleyebilirsiniz.)	
Arkadaş tavsiyesi / bir arkadaşımın aynı sayfayı takip etmesi	
TV/Radyo/Gazete/Dergi reklamı	
İnternet reklamı	
İnternette firmayla ilişkili bir konuda arama yaparken karşılaştım	
İnternette konuyla alakasız bir arama yaparken karşılaştım	
Firmanın web sayfasında rastladım	
Diğer (Lütfen belirtiniz) :	

6) Bir markanın bir sosyal ağdaki sayfasını, uygulamasını ya da hesabını takip etmenizde aşağıdakilerden hangisi ne derecede etkili olur?					
	1 Hiç etkili olmaz	2 Etkili olmaz	3 Ne etkili olur ne de etkisiz	4 Etkili olur	5 Çok etkili olur
Markanın ürün ya da hizmetini satın alma sıklığınız					
Markaya olan tutkunuz					
Markanın hayatınızda bir alışkanlık haline gelmiş olması					
Markaya olan güveniniz					
Markanın şeffaflığı / dürüst yaklaşımı					
Markanın sektörü					

7) Bir markanın sosyal medya sayfasını, uygulamasını ya da hesabını takip etmenizde aşağıdakilerden hangisi ne derece etkili olur?

	1 Hiç etkili olmaz	2 Etkili olmaz	3 Ne etkili olur ne de etkisiz	4 Etkili olur	5 Çok etkili olur
İndirim kazanma					
Ürün ya da hizmet satın alma					
Ürün ya da hizmetle ilgili yorumlara ulaşma					
Markanın kendisi veya sağladığı ürün ya da hizmetlerle ilgili genel bilgi edinme					
Markanın kendisi veya sağladığı ürün ya da hizmetlerle ilgili bana özel bilgi edinme					
Markanın düzenlediği bir etkinliğe katılma					
Markanın kendisi veya sağladığı ürün ya da hizmetlerle ilgili görüş belirtme					
Markayla iletişim halinde kalmak isteme					
Markanın bir ürün ya da hizmetiyle ilgili probleminizi giderme / şikayette bulunma					
Markayla ilgili topluluğun bir parçası olma					
Marka ve / veya takipçileri tarafından saygı görme					
Markayla ilgilenen diğer insanları tanıma şansı elde etme					
Fiyat karşılaştırma					
Hediye kazanma					

8) Takip ettiğiniz bir marka sayfasından veya uygulamasından aboneliğinizi iptal ettiniz mi ya da markanın hesabını (twitter, foursquare vb) takip etmeyi bıraktınız mı ?	
Evet	
Hayır	

9) Aboneliğinizi iptal etmenizde aşağıdakilerden hangileri etkili oldu? (Birden fazla seçeneği işaretleyebilirsiniz.)	
İndirim/hediye kazanma döneminin sonlanması	
Markayı takip etmenin bana bir artısı olmadığını düşünmem	
Marka sayfasının çok fazla gönderimde (post, e-posta vb) bulunması	
Yeterince güncel içerik girilmemesi	
Kişisel bilgilerimin güvenliğinden endişe duymam	
Markanın kullandığım ürün ya da hizmetiyle ilgili memnuniyetsizliğim	
Uygulamayı takip eden kitleyi kendime yakın bulmamam	
Diğer (Lütfen belirtiniz) :	

10) Herhangi bir sosyal ağdan/internet sitesinden bir markayla ilgili şikayette bulundunuz mu?	
Evet	
Hayır	

11) Hangi kanalları kullanarak şikayette bulundunuz? (Birden fazla seçeneği işaretleyebilirsiniz.)	
Şikayet amaçlı siteler (sikayetvar.com vb)	
Markanın Facebook sayfası	
Twitter	
Markanın diğer sosyal ağlardaki sayfası/hesabı	
Markanın internet sitesi	
Canlı Yardım (live chat)	
Diğer (Lütfen belirtiniz) :	

12) Arkadaşlarınıza sosyal medyadaki herhangi bir marka sayfasını, uygulamasını ya da hesabını önerdiniz mi?	
Evet	
Hayır	

13) Aşağıdaki ifadeler için size en çok uyduğunu düşündüğünüz seçeneği işaretleyiniz.

	1 Kesinlikle Katılmıyorum	2 Katılmıyorum	3 Kararsızım	4 Katılıyorum	5 Kesinlikle Katılıyorum
Ürün ya da hizmetlerini satın aldığım markalarla internet üzerinden kişisel bilgilerimi paylaşırım					
Bir markanın sosyal medya uygulamasının kullanım kolaylığı o uygulamayı kullanmamda etkili olur					
Bir markanın sosyal medya uygulamasının eğlenceli olması o uygulamayı kullanmamda etkili olur					
İnternet üzerinden hiçbir marka ya da firmayla kişisel bilgilerimi (telefon, e-mail vb) paylaşmam					
Güvenilir bir arkadaşımın tavsiye etmiş olması bir markayı sosyal medya üzerinden takip etmemde etkili olur					
Yeni bir uygulamayı test etmek / gözlemlemek istemem bir markanın sosyal medya uygulamasını kullanmamda etkili olur					
Güvenli bulmadığım bir platformda (kişisel bilgilerinizin paylaşıldığını ya da çalınabileceğini düşünmeniz vb) bir markanın sosyal medya uygulamasını takip etmem					

14) Cinsiyetiniz:

Kadın	
Erkek	

15) Yaşınız:	
17 ve altı	
18 – 24	
25 – 34	
35 – 44	
45 – 54	
55 – 64	
65 ve üzeri	

16) Eğitim durumunuz:	
İlköğretim	
Lise	
Lisans	
Yüksek Lisans	
Doktora	

17) Mesleğiniz:	
Avukat/Hakim/Savcı	
Gazeteci/Yazar	
Serbest Ticaret	
Bankacı	
Öğretmen/Akademisyen	
Psikolog	
Doktor/Eczacı/Hemşire	
Yazılım Uzmanı/Sistem Analisti/Sistem Destek Uzmanı	
Danışman	
Mühendis	
Oyuncu/Müzisyen/Ressam	
Öğrenci	
Yönetici	
Diğer (Lütfen belirtiniz):	

18) Elektronik posta adresiniz (Kitap kazanma şansı elde etmek istiyorsanız lütfen belirtiniz)

SAMPLE QUESTIONNAIRE (ENGLISH)

Factors Affecting Turkish Consumers' Social CRM Applications Usage

Dear Respondent,

This survey aims to generate data for the thesis called “Factors Affecting Turkish Consumers' Social CRM Applications Usage” which is prepared in Boğaziçi University Management Information Systems department.

Your name will not be revealed under any condition and your answers will only be used in this survey.

Alain de Botton’s book named “The Pleasures and Sorrows of Work” will be gifted to 10 respondents. They will be contacted via e-mail addresses. E-mail sharing is optional. Your e-mail address will not be shared with third parties.

5 minutes will be enough to fill the survey.

Thanks for your participation.

Thesis Advisor: Prof. Dr. Aslıhan Nasır (aslihan.nasir@boun.edu.tr)

Prepared by: Mehmet Nuri Can (mehmetn.can@gmail.com)

Please read carefully before answering the questions.

1) How many hours are you online in a day?	
Never	
1 - 2 hours	
3 - 5 hours	
6 - 9 hours	
More than 10 hours	

2) Please specify your usage frequency of the social networking sites listed below.

	1 I never use	2 I rarely use	3 I averagely use	4 I frequently use	5 I always use
Facebook					
Twitter					
Google+					
Weibo					
RenRen					
LinkedIn					
Badoo					
Instagram					
Yelp					
Tumblr					
Flickr					
Orkut					
MySpace					
Foursquare					
Pinterest					
Soundcloud					
Xing					
Friendster					
Path					
GetGlue					
Last.fm					

Other Social Network(s)					

3) Do you follow page, application or account of a brand in any social networking site? (Brands' Facebook page, application or Twitter, Foursquare account etc.)	
Yes	
No	

4) How many brands' pages, applications or accounts are you following in social networking sites?	
1-5	
6-10	
10-20	
20-40	
More than 40	

5) How did you know about those pages, applications or accounts? (Select all that apply.)	
Recommendation of a friend / One of my friends was following it	
TV/Radio/Newspaper/Magazine ads	
Internet ads	
I was making a web search about the brand	
I was making a general web search	
Company website	
Other (Please specify) :	

6) Please specify the effect of each item on your decision to follow social media page, application or account of a brand.

	1 It never affects	2 It does not affect	3 Neither affects nor does not affect	4 It affects	5 It strongly affects
Purchasing frequency					
Passion for the brand					
Loyalty to the brand					
Trust to the brand					
Transparency of the brand					
Sector of the brand					

7) Please specify the effect of each item on your decision to follow social media page, application or account of a brand.

	1 It never affects	2 It does not affect	3 Neither affects nor does not affect	4 It affects	5 It strongly affects
Discount opportunity					
Purchasing					
Reviews and product rankings					
Getting general information about the brand's products and services					
Getting personalized information about the brand's products and services					
Participation to an event of the brand					
Making comment about the brand					
Feeling connected with the brand					
Customer service / making complaint					
Being part of the brand's community					
Fulfilling emotional needs such as self-esteem					
Meeting with new people who are interested in the brand					
Price comparison					
Gift opportunity					

8) Have you ever unfollow a brand’s page, application or account on any social networking site?	
Yes	
No	

9) What was the reason of that action? (Select all that apply.)	
End of the discount or gift period	
I could see no added value to follow the brand	
Too many post (social media post, e-mail etc.) by the brand	
Lack of up-to-date content	
Privacy and security concerns	
Dissatisfaction from the product or service of the brand	
The people who follow the brand were not familiar to me	
Other (Please specify) :	

10) Have you ever complained a brand through a social networking site?	
Yes	
No	

11) Which channels did you use to complain? (Select all that apply.)	
Complaint sites (sikayetvar.com etc.)	
Facebook page of the brand	
Twitter	
Other social network page/account of the brand	
Company web site	
Live chat	
Other (Please specify) :	

12) Have you ever recommend social media page, application or account of a brand to your friends?	
Yes	
No	

13) Please answer the following questions by using the given scale.

	1 Strongly Disagree	2 Disagree	3 Moderate	4 Agree	5 Strongly Agree
I share my personal info through web with brands which I purchase their products or services.					
Ease of use of a brand's social media application affects my usage decision.					
Enjoyment of a brand's social media application affects my usage decision.					
I do not share my personal info through internet with any brand.					
Recommendation of a trusted friend affects my following decision of a brand on social media.					
I can use social media application of a brand in order to test it.					
I do not share my personal info with a brand if I think the platform is not safe.					

14) Your gender:

Female	
Male	

15) Your age:	
17-	
18 – 24	
25 – 34	
35 – 44	
45 – 54	
55 – 64	
65+	

16) Your education level:	
Primary school	
High school	
Undergraduate	
Graduate	
Doctorate	

17) Your profession:	
Lawyer / Adjudicator / Prosecuting Attorney	
Journalist / Writer	
Trade	
Bank Employee	
Teacher / Academician	
Psychology	
Doctor/Pharmacist/Nurse	
Developer / System Analyst / System Support Specialist	
Consultant	
Engineer	
Actor / Musician / Artist	
Student	
Executive Manager	
Other (Please specify):	

18) Your e-mail (If you want to have an opportunity for book gift)

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