

MARKETING-WISE BENEFITS OF
TECHNOLOGICAL IMPROVEMENTS ON CONSUMER WELL-BEING

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Nur Esra Kardeş

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Marketing-Wise Benefits of
Technological Improvements on Consumer Well-Being

The thesis of Nur Esra Kardeş

has been approved by:

Assist. Prof. Dr. Hande Kımılođlu
(Thesis advisor)



Assoc. Prof. Dr. Aslihan Nasır



Assist. Prof. Dr. Neva Yalman



Assist. Prof. Dr. Elif Alakavuk



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Abstract

Nur Esra Kardeş, “Marketing-Wise Benefits of Technological Improvements on Consumer Well-Being”

In recent years, emerging web-based innovations lead very fast penetration of technology in various domains of life. Immediate adoption of technology by companies also has an impact on this diffusion. This is because products and services provided by companies involve technological elements and people are getting obliged to use such technological implementations that companies offer. Moreover, attributes of these implementations undergo changes as time passes, which require the special attention of consumers for them keep up with. However, every person may not accept the changes brought by technology equally, and also people may not advance from advantages of technology at the same levels. Within this scope, the aim of this study is to investigate the relationship between technological improvements in marketing and consumers' well being; and also the relationship between people's general disposition toward technology and their perceived benefits from technological improvements in marketing. Data collected online from 231 people was analyzed by using descriptive, ANOVA, correlation and multiple regression analyses. Findings of the study reveal that technologically improved marketing activities have a positive affect on quality of life (QOL) and consumer well-being (CWB). In addition to this, technological improvements made by companies that increase their service capability, customer relationship management activities and product specifications have the greatest impact on enhancement of CWB. Finally, it can be concluded that, CWB and QOL of consumers do not have to be significantly improved by the technologically improved marketing activities which were attached high values by consumers.

Tez Özeti

Nur Esra Kardeş, “Pazarlama Alanında Görülen Teknolojik Gelişmelerin Tüketici Refahı Üzerine Etkileri”

Son yıllarda internet ve yerel ağ gibi iletişim kanallarının kullanım alanlarının artması ile birlikte, teknolojinin yaşamın farklı kesitlerinde daha sık karşılaşılır olması kaçınılmaz hale gelmiştir. Teknolojinin bu hızlı gelişiminde, firmaların pazarda rekabetçi bir yapıda kalabilmek adına teknolojinin sunmuş olduğu imkanları gerek organizasyon yapılarında, gerek üretim ve tedarik sistemlerinde, gerekse pazarlama aktivitelerinde kullanma arzuları da rol oynamaktadır. Tüketiciler sunulan ürün ve hizmetlerde katma değer yaratan ve süreklilik arz eden bu teknolojik yeniliklere adapte olma gereksinimini hissetmektedirler. Bununla birlikte, her tüketici teknolojiye ve teknolojinin sık aralıklarla getirmiş olduğu yeniliklere karşı benzer tutum içinde olmayabilir. Tüketiciler firmaların müşteri memnuniyetini arttırmak amacıyla yaptıkları teknolojik yeniliklerden aynı oranda fayda görmeyebilirler. Bu çerçevede, bu çalışma teknolojik olarak gelişen ve değişim gösteren pazarlama faaliyetlerinin tüketici refahı üzerine olan etkisini ve tüketicilerin teknolojiye karşı tutumları ile pazarda karşılaştıkları teknolojik yeniliklerden elde ettikleri fayda arasındaki ilişkiyi bulmayı amaçlamaktadır. Çalışmanın amacına uygun olarak, pazardaki değişimlere karşı daha hassas oldukları düşünülen, deneyim sahibi tüketicilerden oluşan 231 kişilik bir gruptan toplanan veriler, ANOVA, korelasyon ve çoklu regresyon analizleri kullanılarak analiz edilmiştir. Elde edilen sonuçlar, pazarlama alanındaki teknolojik gelişmelerin tüketici refahı ve tüketici yaşam kalitesi üzerinde olumlu etkileri olduğunu göstermiştir. Firmaların servis kabiliyetleri, müşteri ilişkileri fonksiyonları ve ürün geliştirme becerilerinin gelişmesi müşteri refahı üzerinde en fazla olumlu etkiye sahip alanlar olarak öne çıkmıştır. Son olarak, müşterilerin yüksek derecede önem gösterip, değer vermiş oldukları teknolojik açıdan geliştirilmiş pazarlama faaliyetlerinin tüketici refahı ve yaşam kalitesini iyileştirmeleri anlamında aynı derecede yüksek bir etkiye sahip olmayabileceği görülmüştür.

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CHAPTER 1

INTRODUCTION

As technology evolves, it brings both challenges and opportunities in our lives. On the business side, this evolution grants companies to show “how much innovative they can be” and proposes many ways to satisfy customers. On the customer’s life side, however, influence of technology can be various. Perception of new technology and the need to make use of it changes in accordance with people’s own characteristics and lifestyles. This fact also affects the way people perceive marketing activities which are enhanced by use of technology. That is to say, all technologically improved activities that companies offer to customers do not have to be perceived equally by consumers. Likewise, the level of well-being of consumers is expected to differ in accordance with the level of benefits they perceive from such improvements.

This study investigates relationships among consumers’ well-being with respect to their acceptance of technology-affected marketing activities and their disposition toward technology in general. Nine hypotheses were generated and tested in the scope of this research to verify these relationships.

The multipurpose objectives of the study can be briefly explained as follows:

- Measuring people’s general disposition towards technology: People may develop different levels of attitudes towards technology in accordance with their cognition of it, since technology can both have positive and negative affects on our daily lives.

- Measuring how much benefit consumers perceive from technologically affected marketing activities: Companies offer numerous alternatives supported by technology for use of consumers, but are consumers benefiting from them?
- Measuring the overall perception of consumers with respect to the contribution of technological improvements in marketing to their quality of life as consumers.
- Measuring affect of technologically improved marketing activities on consumer well-being.
- Determining the relationship between consumers' general disposition toward technology and their attitude toward technological improvements in marketing.
- Determining relationship between perceived benefits from technologically improved marketing activities and consumers' well-being.
- Determining which of technologically improved marketing activities play the greatest role in creation of stronger perceptions of consumer quality of life: Some marketing activities that companies offer may have more influence than others on improving consumer quality of life.
- Determining the relationship between quality of life and consumer well-being.

CHAPTER 2

LITERATURE SURVEY

In accordance with the aim of this study, literature survey was conducted in three branches. Initially, studies made on people's attitudes toward technology and their perceptions about technology were investigated. There are a variety of studies on this subject. In this study, the main idea behind this research theme is given and its relation with marketing is reflected. Secondly, literature was explored in order to reach studies that are related with the impact of technology on marketing. Literature provided a large scale of researches. In this study, the subject is handled and represented as the affect of technology on organizational structure and implementations in marketing which is evolved with technology. The last field of literature survey consists of consumer well-being, which is defined as a function of several definitions derived from different disciplines such as sociology, psychology, philosophy, marketing and economics. For better understanding the discovery and evolution of CWB, related subjects from these fields were researched.

Impact of Technology on Marketing

It has been long argued that technology affects marketing in various ways and influences the creation of marketing mixes that satisfy customers, therefore, the managers and marketers should follow the new developments in technology (Zineldin, 2000).

Technology Usage in Organizations and Marketing Performance

The transformation for performing better marketing activities starts within the organization. As Brady et al. (1999) suggest, there is a widespread acceptance that information technology (IT) is a central component of business operations and extensively used in marketing. However IT cannot make miracles without a brilliantly executed marketing strategy.

How an organization manages its marketing activities designates the level of IT used within the organization. A three stage framework of automation, information and transformation (Remenyl et al.,1991, c.f. Brady et al., 1999; Zuboff, 1998) has been suggested to track the impact of IT. Mooney et al.(1995) adapted this framework and incorporated the potential benefits of IT, as it progresses. This framework shows what the organization is capable of doing at each stage of IT.

Table 1. Potential IT Business Value Metrics (Mooney et al., 1991)

Business Processes	Dimensions of IT Business Value		
	Automational	Informational	Transformational
Operational	Labor Costs Reliability Throughput Inventory costs Efficiency	Utilization Wastage Operational flexibility Responsiveness Quality	Product service and innovation Cycle times Customer relationships
Management	Administrative expense Control Reporting Routinization	Effectiveness Decision quality Resource usage Empowerment Creativity	Competitive flexibility Competitive capability Organizational form

As seen from Table 1, IT automation helps organizations better control and routinize their activities and better report and reduce administrative expenses at the managerial level. This level of IT helps increasing efficiency. Informational IT provides a higher benefit by enhancing effectiveness, quality of decisions made, creativity, etc. A company using IT at the transformation level, on the other hand, performs new business operations and practices which require a change within the organization. This change supports a new mindset and larger thinking that lead carrying out more successful marketing activities. As customer satisfaction has become the main responsibility of companies, marketing must lead the company, and IT must meet the requirements of marketing functions. Brady et al. (1999) suggest that transformational level of IT should be considered by firms to be more innovative, flexible, and competitive so that they improve their ability to serve their customers and their overall marketing performance.

In addition to these, Brady et al. (1999) studied Irish firms to show what kinds of IT elements used in companies depending on the type of use of IT by marketers. The outcomes of the study designate that most of the firms having networked computers and benefiting from computer links to communicate with suppliers and customers have been using transformative IT. These firms also reach customers by e-mail, use e-mail for internal use, do video conferencing, and use laptops. Firms having their own web site, making research through internet, using computerized marketing information systems, using help-lines to reach customers mostly use IT at the informative level. This study also shows that word processing is most commonly used at the automation level of IT.

On the other hand, Ranchhod and Gurău (2004) propose that companies should change their philosophy, where IT shifts from “building solutions” to defining requirements of the customers in building the best solutions. Creating one-to-one

relationship provides companies to be flexible and continuously changing to meet needs of customers, where customers are known to the enterprise. Ranchhod and Gurãu (2004) also indicate the necessity of integrating organizational factors with technological factors in order to develop integrated marketing implementation strategies that can be successful in today’s marketplace. In their study, an implementation matrix is developed to plot firms on it in accordance with how well their IT system and how dynamic the organization structure is.

Score 12	Technology context	Well resourced	Integrated Marketing Implementation	Technology driven Marketing Implementation
Score 60		Poorly resourced	Fragmented Marketing Implementation	Poor Marketing Implementation
			Score 12 Organic/adaptable	Score 60 Mechanistic/Lacking flexibility
			Organization context	

Figure 1. IT implementation matrix

According to the matrix in Figure 1, companies in “integrated marketing implementation” quadrant are likely to have a global IT enabling them to offer increased

customer service. In such companies people, processes and the technology work in union.

Another instance can be using IT to create new and strong relationships and alliances, e.g. between logistics suppliers, manufacturers and retailers (Zineldin, 2000).

Another suggestion made by Barlow et al. (2004) for retail marketing is that the goal should be integrating offline and online operations, allowing consumers to purchase products in the way that suits them best, and the most common way to do this is utilizing the Internet. Ranchhod and Gurãu (2004) posit that the role of information becomes highly important when fast decisions need to be made and systems have to be able to offer this facility. As technology becomes more sophisticated and can deliver data and video links at increasing speeds, marketers need to understand its capability in effective marketing implementation. Shugan (2004) goes one step further and suggests that the ability to perform rapid computations online allows rapid adaptation to unexpected demand conditions, complex loyalty programs, the use of complex interactive dynamic pricing mechanisms, etc.

It should be noted that information technologies which provide a link with company's external constituencies (e.g. suppliers and customers), are used less than those intended for internal use (Brady et al., 1999). However, the relationship between the rate of effective IT use and relationship effectiveness would be positive and the success of launching of new products and market orientation are directly related to each other. For example, Ofek and Sarvary (2003) find that the market leaders who gain advantage from reputation should invest less in R&D than in the leaders who gain from R&D competence. Moreover, being a leader has a particular advantage for products and

services that are sold online, because large-share online products apparently enjoy more brand loyalty than products and services sold offline (Danaher et al., 2003).

Technological Advancements in Marketing

Marketing is, and will continue to be, heavily influenced by IT, and marketers who do not adapt to this new technological era will not survive (Bruce et al., 1996; Boshoff and Terbanche, 1996; Furness, 1996; Fletcher, 1995; Komenar, 1997; Rapp and Collins, 1995). A well integrated application of technology and staff, and through operations that respond to customer needs, encourage customers to use a whole range of firms' products/services rather than just a few. It also helps to create deeper and fuller customer relationships by building client loyalty (Zineldin, 2000).

Technologies used to enhance marketing activities exemplified by various studies and public surveys are numerous. Intranet, Internet, electronic data interchange (EDI) systems, ground positioning systems (GPS) into mobile phones, blue-tooth devices, ATMs, kiosks, interactive televisions, mobile phones, personal digital assistants (PDA) are some of the tools used to accomplish marketing activities. However, along with the tools, the activities and implementations designed to offer advantages to consumers in various areas such as product development, advertising, CRM activities, distribution channels, customer services, pricing mechanisms, information and data collection systems, etc. are the major domains in which these impacts are felt most strongly.

High technology products are those that employ turbulent technology in their use, manufacture and/or distribution, and are seen to require significant changes in usage

patterns. These are products in which “one or more basic technology substitutions take place within the life span of the demand life cycle” (Ansoff and McDonnell, 1990, p. 169). A number of questions can be asked about marketing strategies of high technology products: Is the marketing of high technology different? If so, is the difference really important? From Porter (1980) and his discussion on emerging industries, it logically follows that marketing strategy for high technology should be different. Specifically, Rosen et al. (1998) argue that “there are specific features of high-tech markets that are believed to distinguish them from other product categories” (Shanklin and Ryans, 1984).

The contingency theory suggests that there is no universal set of strategies which is optimal for all businesses or firms, and thus different strategies should be designed for different environmental contexts. The contingency framework has been widely accepted and used in many empirical studies in the field of strategic management and marketing strategy (Buzzell and Gale, 1987; Hambrick and Lei, 1985; Harrigan, 1980, 1983b). Applied in the present research context, this framework implies that if high and low technology-based products are truly different from each other, the differences stem from the industry and market characteristics. Furthermore, the framework suggests that in this situation a different set of marketing strategies should be designed and used for high technology products for the survival and growth in the market.

However, it should be kept in mind that the distinction between high versus low technology products is not a matter of type, but a matter of degree. It is assumed that there is “technology continuum”. Some products can be placed at “higher” while others can be located at “lower” positions on the continuum (Oakey et al., 1988, pp. 75-6 c.f. Gardner et al. 1999). The market environment for high technology products, compared to that for low technology, was identified with the earlier stage of the industry life cycle,

greater degree of turbulence, higher product differentiation, higher market growth rate, shorter expected life cycle, more visible future for technology, easier entry into the market, more diverse suppliers, and higher level of consumer involvement in purchase decisions. Such market characteristics had significant impact on marketing strategies of high technology products, resulting in increased number of sales people and channel intermediaries, more R&D investment, increased importance of product warranties, and a relatively higher price. The role of sales personnel and perhaps promotion and R&D were emphasized in high technology situations.

As listed below, eight key factors underlying the success of technology-based projects were identified by Cooper and Kleinschmidt (1990):

- . a superior product that delivers unique benefits to the user;
- . a well-defined product and project prior to the development phase;
- . technological synergy;
- . quality of execution of technological activities;
- . quality of execution of pre-development activities;
- . marketing synergy;
- . quality of execution of marketing activities;
- . market attractiveness.

A number of technological solutions for implementing marketing activities can be discussed here. These example cases show how the key factors are applied to real-life scenarios. Intranets are one of the hottest applications of the Internet technology in business. Intranets capitalize on the fact that most organizations distribute far more

information internally than they do to the outside world. The Intranet serves as an easily accessible repository for corporate information; anything from strategic targets to health plans (Frost and Strauss, 1997). Second, EDI is a system based on IT that links, for example, channel members for purposes of facilitating the flow of a product or service through the channel (Kahn and Mentzer, 1996). Quick-response (QR) logistics and inventory systems use EDI applications to automatically replenish stock as it is sold. For example, by using an international electronic data interchange (EDI) system, Benetton ensures that its products are available to consumers when and where they want them. Also, feedback from different actors, including end users, can be obtained by using a feedback loop system through customer hot line numbers, customer-satisfaction surveys or any other available feedback method. (Zineldin, 2000). Today, customers with computers and modems dial in to websites to place orders, track the status of their projects, make revisions to those projects, and submit questions via electronic mail.

On the other hand, there are limits to what IT can do without the benefit of good marketing (Burnstein and Kline, 1995 c.f. Brady et al., 1999). IT based systems “cannot work miracles”. They will not offset a poorly conceived or poorly executed marketing strategy. They will not compensate for an inferior sales force, and they will not sell inferior products (Moriarty and Swartz, 1989, p. 186 c.f. Brady et al. 1999).

The difficulties arise in accessing relevant information and making the information applicable to marketing (Davenport, 1994). Problems and difficulties in the area of IT use have been well documented (Bruce et al., 1996, c.f. Brady et al., 1999). A study by Kearney (1990) of 400 Irish and British companies found that only 11 percent of respondents considered their IT applications to be successful. Shaw (1994) discovered that marketers were dissatisfied with their IT systems and that dissatisfaction increased

as the complexity of applications moved from routine and tactical activities to more sophisticated marketing information systems (Brady et al., 1999).

Table 2. Problems with IT Use (Brady et al., 1999)

Problem	(%)
Lack of training	23
Lack of money	15
Speed of change	15
Lack of technological compatibility with customers	8
Lack of time	7
Computer problems	6
Difficulties in making practical use of all the information now available	5
Information overload	4

The problems that organizations face during adoption of IT to their marketing implementations are denoted in Table 2. In accordance with the study made by Brady et al. (1999), the three main problems which prevent marketing from making use of the available IT are lack of training of employees, insufficient finance to maintain the necessary equipment and incapability of companies in accessing and making use of information.

The marketing of technology oriented products and services on the other hand, involves the full range of marketing activities necessary to successfully market technology oriented products and services. In particular, the marketing of radically new technology can give rise to increased uncertainties in the market place including technological and market uncertainty. Technological uncertainty includes uncertainty about the performance of the product and its supporting functions. Market uncertainty

includes uncertainty related to understanding customer needs for the new technology, the market standards that may evolve, speed of market diffusion of the technology, and determining the market potential for the product (Malhotra, Citrin and Shainesh, 2004).

A point of caution highlighted in the research is that there are barriers to IT in marketing. There exists a duality of IT impact (Davies and Mitchell, 1994) where IT can be both an enabler and a constrainer of change. It is not easy for marketing managers to jump to a cyberspace transformational outlook but this is necessary in this technological era (Brady et al., 1999).

General Disposition toward Technology

In the second part of the literature survey, researches made on measuring people's dispositions or attitudes toward technology are investigated. Parasuraman (2000) states that as use of technology in marketing increases, customers become more involved in dealing with products and services that are sophisticated from a technological standpoint. Thus, besides technological advancements in marketing, consumers' perceptions of technology and their disposition toward either using or dealing with it become crucial. From this point of view, the way consumers handle technological improvements in life in general is also studied in this research.

Consumers' attitudes toward technology affect the way they purchase, what they buy, when they buy, when they purchase and even how they pay for purchases (Mohr, 2001 c.f. Edison and Geissler, 2003). Moreover, Edison and Geissler (2003) suggest that combining attitude of consumers toward technology with other segmentation variables such as demographics, lifestyles, etc., would provide an extended picture of consumer

profile to be used in several marketing implementations. It should also be noted that, identification of external customers' attitude toward technology is not the only important consideration for a company but attitudes of employees (internal customers) also should be realized (Parasuraman, 2000).

Studies conducted on this subject cover a wide range of interest areas such as social impacts of technology on people's lives, organizational change caused by the necessity of IT, technological improvements and their environmental side-effects, public adoption to technology and its problematic areas, etc. In the following section, the most common researches made on people's dispositions toward technology are examined.

As mentioned before, studies on assessing people's attitude toward technology exist in various types of disciplines, and research on attitude toward general technology is sparse (Edison and Geissler, 2003). An important portion of these researches are conducted on a specific group of people and for a specific purpose. These include determining the differences between attitudes of males and females toward technology, assessing technology attitudes of students studying at various educational levels, measuring employees' perception levels of technology, etc. Studies made on children's attitude toward technology also occupy a major place in the literature (Becker and Maunsaiyat, 2002; Frantom et al., 2002). Moreover, an instrument was designed by Dutch researchers and it was re-modeled for use in the USA in 1988. The scale is named as Pupils' Attitude Toward Technology (PATT) consisting of 100 statements and was conducted among pupils in the USA between ages 11 and 14. The aim of this research was to assess the children's awareness of the importance of technology and their acquaintance level about technology.

Studies in higher levels of education also exist and their major focus is determining the difference between attitudes of male and female students (Brunner and Bennett, 1997; Goldman et al., 1973). The distinction between attitudes toward technology caused by gender differences also argued to be helpful for organizations in terms of being aware of employees' training and development needs (Ray et al., 1999). Besides, merge of IT in organizational processes create the need for assumption of the degree that IT would be welcomed and for identification of at what level the new technology is seized by employees (DuMont et al., 1989, Speier and Venkatesh, 2002). The common purpose of these researches is to help educators and business managers to draw a roadmap in sustaining the use of technology to be more efficient among children, students or employees and help them giving the right decisions about the future developments of people that they are accounted for.

Being this subject concerned by different disciplines indicates the fact that it is crucial to determine people's dispositions towards technology in order to comprehend the situation and generate strategies for improving the technological services given by both private and public sector.

In relation with the aim of this study, measures developed for determining consumers' dispositions toward technology in general is the main area of interest of this part of literature survey. However, researches referring to measurement of people's attitudes (evaluations and perceptions) toward technology in general, which can shed a light on assessing consumers' attitude toward technology, are scarce in literature. Mick and Fournier (1998) also argue that studies focusing on consumer behavior on technological products are few. With these aspects, three of the most important studies

related with the subject are examined in detail, which were made by Mick and Fournier (1998), Edison and Geissler (2003), and Parasuraman (2000).

Realizing the lack of research on consumers' behavior toward technological products, Mick and Fournier (1998) developed a framework consisting of the paradoxes of technological products perceived by consumers. This paradoxical phenomenon is argued to bring both privileges and difficulties into people's lives. These paradoxes were assumed to affect the way consumers cognize technology, feelings they have against use of technology and the coping strategies they develop against technology, with respect to the technological products they use. Coping strategies refer to the specific efforts, both behavioral and psychological, that people employ to master, tolerate, reduce, or minimize stressful events.

The relationship between human and technology had been both fascinating and complex since the time of introduction of technology in human life (Ferkiss, 1969 c.f. Mick and Fournier, 1998). Thus, the authors found it reasonable to attach the characteristics of being paradoxical to technology stemming on the arguments existing in literature that technology brings both positive and negative aspects in life in general (Boorstin, 1978 c.f. Mick and Fournier, 1998; Goodman, 1988; Winner, 1994).

The term paradox is defined in their study as being something both "X" and "not-X" at the same time. From this point of view, and as a result of a qualitative survey consisting of interviews with 29 households residing in the USA and, eight types of paradoxes that technological products maintain were represented. These paradoxes are given in Table 3 below.

Table 3. Mick And Fournier (1998)'s Eight Central Paradoxes of Technological Products

Paradox	Description
Control/chaos	Technology can facilitate regulation or order, and technology can lead to upheaval or disorder.
Freedom/enslavement	Technology can facilitate independence or fewer restrictions, and technology can lead to dependence or more restrictions.
New/obsolete	New technologies provide the user with the most recently developed benefits of scientific knowledge, and new technologies are already or soon to be outmoded as they reach the marketplace.
Competence/incompetence	Technology can facilitate feelings of intelligence or efficacy, and technology can lead to feelings of ignorance or ineptitude.
Efficiency/inefficiency	Technology can facilitate less effort or time spent in certain activities, and technology can lead to more effort or time in certain activities.
Fulfills/creates needs	Technology can facilitate the fulfillment of needs or desires, and technology can lead to the development or awareness of needs or desires previously unrealized.
Assimilation/isolation	Technology can facilitate human togetherness, and technology can lead to human separation.
Engaging/disengaging	Technology can facilitate involvement, flow, or activity, and technology can lead to disconnection, disruption, or passivity.

As seen from Table 3, technological products are conceptualized to have eight types of paradoxes, thus 16 different characteristics that are perceived by consumers. They can be listed as “control vs. chaos” brought by technology, “freedom vs. enslavement” caused by technology, technology renewal frequency as “new vs. obsolete”, “competence vs. incompetence” people feel because of technology, “efficiency vs. inefficiency” technology brings to people’s lives, technology “fulfills vs. creates” needs, “assimilation vs. isolation” caused by technology and people’s “engaging vs. disengaging” because of technology and the erosion of certain human skills as a result of this.

The eight paradoxes and their influences on emotional reactions and behavioral coping strategies is investigated in the study. Consumers have both positive and negative feelings about technology, and this paradox of technology, which is encountered by consumers, in return mostly lead to a state of confusion. It is also concluded by the study that, facing these paradoxes is headed by product, situation and person factors.

In this study, Mick and Fournier's (1998) paradoxes have been turned into statements for the purpose of capturing people's general dispositions toward technology and its impacts on their daily lives without any intention to assess their usage of or competence in technological devices, systems, etc.

One of the most important studies in the marketing literature that offers a multi-item scale about this topic has been performed by Parasuraman (2000). In this study, the author proposes "The Technology Readiness Index" (TRI) which aims to measure people's propensity to embrace and use new technologies for accomplishing goals in home life and at work.

It is proposed that the amount of new technologies faced in everyday life is continuously increasing. Thus, people are becoming obliged to use technology either as in a product or a service day by day. In addition to this, as mentioned in the first chapter of the literature survey of this study, companies are quite willing to adopt these new technologies throughout their processes in order to reach the maximum efficiency and customer satisfaction. About this subject, Parasuraman (2000) also states that not only service companies but also the goods companies provide utilities of self-services to their customers that makes customers serve themselves through technology-based systems.

One important consideration which caused TRI to be constituted is that, even though people get used to the existence of new technology in their lives, they may not be

able to use it effectively or may not have the desire to use it. This situation was found to be critical to be dealt with in terms of determining managerial implications for marketing and serving customer segments that differ on technology readiness.

The TR index consists of 28 items in four major dimensions:

Drivers:

1. Optimism (10 items): A positive view of technology and a belief that it offers people increased control, flexibility, and efficiency in their lives.
2. Innovativeness (5 items): A tendency to be a technology pioneer and thought leader.

Inhibitors:

3. Discomfort (8 items): A perceived lack of control over technology and a feeling of being overwhelmed by it.
4. Insecurity (5 items): Distrust of technology and skepticism about its ability to work properly.

The first dimension of optimism deals with people's willingness to use new technologies, and includes questions regarding the characteristics of technology that is making people's lives much easier, bringing efficiency, control and freedom.

Innovativeness dimension investigates how much people are interested with and how desirous they are to adopt new technologies. The next dimension of discomfort which has a negative impact on people's readiness of technology includes questions that are about the possible perversities people face during usage of either high-tech products or simple technology based transactions, and the inadequate services given by high-tech

product manufacturers. The other inhibitor dimension of insecurity investigates the level of confidence people have on technology when doing online transactions, using electronic machines or automated systems.

The survey is done with randomly selected 1,500 residents of the USA. The mean score was calculated to be 2.88 over 5, which is a little greater than the midpoint. The outcomes of the analyses show similar pattern with the study of Mick and Fournier (1998) that, people tend to have both favorable and unfavorable perceptions about technology.

In addition, Parasuraman (2000) criticizes the study of Mick and Fournier (1998) on the framework of paradoxes offered by the authors that one pole of a paradox might have a relative dominance over the other one, thus people could be arrayed along a hypothetical technology-beliefs continuum. It is also argued that the positions of people in this continuum could be correlated with their technology readiness level.

Edison and Geissler (2003) also developed a scale to observe individuals' behavior concerning technology. It is argued that while technology increasingly affects everyone, not all individuals view this trend as positive. In order to determine the difference among attitudes of people toward technology, a technology affinity (positive attitude) scale consisting of 10 questions is developed.

The affinity for technology scale measures technology friendliness of the individual in general, desire to learn about and use technology, computers and machines. In addition, the antecedents and moderators of attitude toward technology are investigated. For this purpose, a total of seven variables derived from psychology were hypothesized to be the factors of attitudes toward technology. These antecedents and moderators are given as tolerance for ambiguity (tendency to perceive ambiguous

situations as desirable), dispositional optimism (positive expectations about future: the feel of less anxiety associated with new technology), locus of control (being someone in control of his/her actions), need for cognition (degree of desire to engaging in and enjoying thinking), self-efficacy (one's belief about his/her capability of producing effects) and personal demographic factors (age and sex).

The questionnaire was conducted among 114 people in the USA after a three stage pilot study. The outcomes of the analyses indicated that the affinity for technology scale is valid, with the antecedents of positive attitude (affinity) toward technology being optimism, need for cognition and self-efficacy. Moreover, older people were found to have lower affinity toward technology. Males have scored a higher technology affinity than females.

Well-Being

The term “well-being” is a broad construct in definition and has been used widely in studies in literature related to various disciplines. Well-being is most commonly used in philosophy to describe what is non-instrumentally or ultimately good for a person (Stanford Encyclopedia). Well-being can commonly be confused with the term “life satisfaction”. Diener (1984) suggests that well-being has three major indicators: life satisfaction, positive affect and negative affect. As an indicator of well-being, life satisfaction is defined as an overall assessment of feelings and attitudes about one's life at a particular point in time ranging from negative to positive.

Measuring Well-Being

A department of the Government of Canada, Human Resources and Social Development Canada (HRSDC) presents a comprehensive, up-to-date picture of well-being of Canadian society by gathering information from several resources. They define ten indicators of well-being for measuring individual and societal well-being as work, housing, family life, social participation, leisure, health, security, environment, financial security, and learning.

Sub-measures were also developed under each of these 10 indicators such as employment rate, weekly earnings, unemployment durations, etc. for “work” domain, or participation in political activities, volunteering, sense of belonging, etc. for “social participation” domain. Well-being of the society is said to be high when positive outcomes are gathered through these measures.

With a similar sense of HRSDC, several studies have been made which are measuring well-being of people in different life domains. One of them is Grzeskowiak et al.’s (2005) research on measuring housing well-being of home owners in the USA and Korea. Grzeskowiak et al. (2005) propose the indicators of housing well-being as purchase (buy the house with the least amount of effort), preparation (prepare the house to meet the needs of new occupants), ownership (signaling the status and enhancing financial portfolio of the owner of the house), use (home serving the housing needs of the residents), maintenance (maintaining the house with minimum cost and effort) and selling (transacting the house with minimum effort and most financial gain).

Another parallel study was made by Sirgy et al. (2006) on constructing a measure for internet well-being. The outcome of this research is intended to be helping developing policies to enhance the quality of life (QOL) impact of internet. The impact of internet on people's lives is determined by perception of benefits and costs of internet within several life domains which are listed to be consumer life, work life, leisure life, education life, social life, community life and sensual life.

Subjective Well-Being

Especially in researches made on well-being of societies, another term of "subjective well-being" is used more commonly. Subjective well-being (SWB) is defined as people's cognitive and affective evaluations of their lives in research made by Diener et al. (1995). In the scope of this research, it was hypothesized that the variables such as income, social life, etc. influence SWB if they affect people's ability to achieve their goals (Emmons, 1986 c.f. Diener et al., 1995). These variables stem from two approaches: societal and relativistic. Societal resources of SWB include income and human rights. On the other hand, relativistic model suggests that SWB depends on how one's resources is compared to the one's past level or the level of others. Oropesa (1995) defines SWB as the general feelings that people have about the quality and course of their lives. In this study of Oropesa (1995), linkages between accumulations of different types of products, passion for new products and subjective well-being are investigated.

Attaching SWB to consumer life, Sirgy and Lee (2008) define SWB as the feelings of satisfaction/dissatisfaction the consumer experiences in a manner that contribute to his or her QOL, in other words, the link between consumer satisfaction and

life satisfaction. Within the context of the study objective well-being is also defined to be the assessment by experts (e.g., engineers, scientists, consumer economists, safety experts) regarding consumers' costs and benefits as well as safety assessments (consumer safety, environment, etc.). For meeting the need for refining concept of consumer well-being (CWB), Sirgy and Lee (2008) re-define CWB and suggest it to be the state of objective and subjective well-being involved in the various stages of the consumer/product life cycle (shopping) in relation to a particular consumer good. Further discussion on this subject is made within CWB review of this thesis study.

Quality of Life (QOL)

In recent years researchers have been paying more attention in building models to measure both quality of life (QOL) and CWB. From a macro marketing perspective, these two measures are related with each other. QOL is a measure covering all of the domains in life, whereas CWB deals with consumer life domain of people.

The term QOL is defined in different sources in different ways. Many of these definitions link health and QOL and emphasize components of happiness and satisfaction with life. Although relevant aspects that are to be included by definition of QOL may vary from study to study, this definition can include general health, physical functioning, physical symptoms and toxicity, emotional functioning, cognitive functioning, role functioning, social well-being and functioning, sexual functioning, and existential issues.

Defining and measuring QOL has interested many scholars as well as public institutions, since this would guide them in describing "the good life" and in building a

desirable society. An important reason for such an interest in studying QOL lies in the question of effective allocation of scarce resources (Megone, 1990). Policy makers seek ways to distribute scarce resources in the most efficient way; in direct proportion with needs and priorities of society. QOL studies can help them reaching useful recommendations in doing so.

As a conclusion of a research made by Diener et al. (1997), it was stated that QOL is a complex, multifaceted construct that requires multiple approaches from different theoretical angles. In their study three major philosophical approaches for determining QOL are investigated, which are derived from study made by Brock (1993). These approaches initially stem from social indicators that are based on objective, quantitative statistics rather than on individuals' subjective perceptions of their social environment. Instances for this approach can be human rights, welfare, education, infant mortality, police per capita, etc. that may not accurately reflect people's experience of well-being. The second approach is associated with subjective well-being and defines QOL in terms of experiences of individuals. The main factors of this argument are life satisfaction, feelings of joy, pleasure and contentment. The last approach emphasizes economic indicators. This last approach made for the good life puts forward the assumption that living within scarce resources, people will possess those things that will enhance their QOL the most. In other words, QOL of a society is directly related with their ability to buy things that they desire. The authors defend the idea to unite these three approaches in order to understand human QOL, since each of the three approaches has its own strengths and weaknesses in defining QOL.

There have been numerous attempts to construct a single statistic that measures QOL by combining a variety of different factors that are thought to influence QOL. The

Economist Intelligence Unit, a research and advisory company providing country, industry and management analysis worldwide, has developed a QOL index (QOLI). This index is based on a unique methodology linking subjective life satisfaction surveys to objective determinants of QOL across countries. The index consists of nine QOL factors, which are:

1. Material wellbeing: GDP per person, at Purchasing Power Parity in \$.
2. Health: Life expectancy at birth, years.
3. Political stability and security ratings.
4. Family life: Divorce rate (per 1,000 population)
5. Community life: Dummy variable taking value 1 if country has either high rate of church attendance or trade-union membership; zero otherwise.
6. Climate and geography: Latitude, to distinguish between warmer and colder climates.
7. Job security: Unemployment rate, %.
8. Political freedom: Average of indices of political and civil liberties. Scale of 1 (completely free) to 7 (unfree).
9. Gender equality: Ratio of average male and female earnings.

In developing this index several arguments were discussed such as relation between education and life satisfaction and role of income on life satisfaction. Education is found to have a small correlation with life satisfaction. Besides, a report by International Labor Organization found that an indicator of schooling and training was actually inversely related to wellbeing when jobs are poorly attuned to people's needs

and aspirations, which has been one of the major reasons why education is not included in the index. In addition, it was found that GDP per person explains more than 50% of an inter-country variation in life satisfaction and the relationship between two is linear (The Economist Intelligence Quality-of-Life Index, 2005).

On the other hand, scientific approaches to measuring QOL have taken two approaches (Peterson, 2006). First of these approaches stems from subjective experiences of individuals' from their lives' in terms of life satisfaction or happiness (SWB) (Cummins, 2000). The second approach is objective and takes social indicators such as economic output, crime rates, etc. into consideration. These two approaches were found to be positively correlated. In a study made by Peterson (2006) objective approach for measuring QOL is tested. The study covers three countries (USA, France and Italy) and tries to expose whether a differential weighting scheme is employed when assessing the relative importance of QOL dimensions for a society. QOL measure used in this study is taken from International Living (Lears, 1996), which is found to have a high degree of longitudinal reliability.

Another study about this subject is made by Ülengin et al. (1998) that is aiming to prioritize QOL perceptions of inhabitants of the city of Istanbul, Turkey. A QOL measurement model is developed consisting of 4 basic dimensions as listed below:

- Quality of Physical Environment
- Quality of Social Environment
- Quality of Economic Environment
- Quality of Transportation and Communication

The results of the study show that the ideal city of Istanbul for its inhabitants has a high opportunity of finding a satisfactory job, adequate infrastructure and municipal services, comfortable and rapid traffic flow, low cost of living, low home prices and rents and with developed means of public transportation.

The purpose of another QOL to measure the quality of life index (QOLI) (Ontario Social Development Council, 1997) is to provide a tool for community development which can be used to monitor key indicators that encompass the social, health, environmental and economic dimensions of the QOL in the community. The QOLI can be used to comment frequently on key issues that affect people and contribute to the public debate about how to improve the QOL in the community.

Consumer Well-Being (CWB)

People's lives consist of several different domains, and consumer life domain is only one of them. In line with the aim of this study, people's behavior in market place and the experiences they have as a result of the transactions they make during shopping are also investigated. This is done in order to come to a conclusion on how people's lives regarding their consumer lives are influenced by technology-affected marketing activities. Defining how content consumers are is subject to a new field of study and in its broadest term named as CWB.

Evolution of the concept of consumer well-being, the use of it in different areas of life and attempts for developing a measure for CWB are investigated in this chapter of our study.

Sirgy and Lee (2006) define CWB as a state in which consumers' experiences with goods and services are judged to be beneficial to both consumers and society at large. It is also proposed that consumer population can be segmented by demographic and geographic characteristics. In addition, Sirgy, Lee and Rahtz (2007) suggest that the concept of CWB is inherently guided by a different meta-level concept, namely the link between consumer satisfaction and QOL. It was hypothesized by the authors that high levels of CWB lead to higher levels of consumers' QOL, thus higher levels of life satisfaction. The distinction between CWB and consumer satisfaction is also explained by the authors. In their study, American Consumer Satisfaction Index (ASCI) is subjected to be highly representing consumer satisfaction conceptualization and measure, and viewed as a source of measuring consumer satisfaction. It is suggested that ASCI is based on the notion that consumer satisfaction is determined mostly by perceived value, perceived quality, and customer expectations from products and services in the marketplace. On the other side, CWB is discussed to be the link between consumer satisfaction and QOL, where high levels of CWB reflect high levels of consumer's QOL -higher levels of life satisfaction, overall happiness with life.

Enhancement of CWB can be essential for people, since it is directly related with life satisfaction. Lee, Sirgy, Larsen and Wright (2002) investigated this relationship in their study. Lee et al. (2002) stem from the findings suggesting that life satisfaction can be explained within different life domains, which are health, job, family, friends, community, material possessions, and so on. Based on this, the aim of their study is to explore whether satisfaction in the consumer life domain is an important source of life satisfaction. They try to come to a conclusion by using bottom-up spillover theory and explain the relationship between CWB and life satisfaction. In accordance with this

study, the relationship is conceptualized using a satisfaction hierarchy model as shown in Figure 2 (Andrews and Withey, 1976).

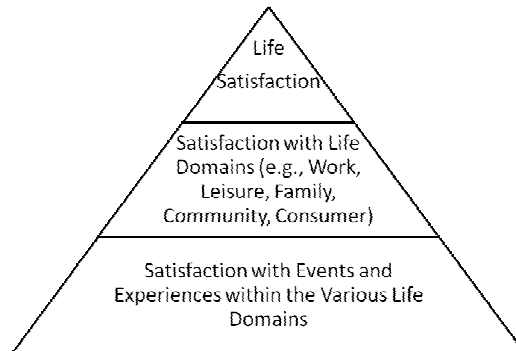


Figure 2. Satisfaction hierarchy (Andrews and Withey, 1976)

This model suggests that life satisfaction is influenced by evaluations of various life domains. Thus, the greater the satisfaction with such life domains as personal health, work, family and leisure, the greater the satisfaction with life in general (Lee, et al., 2002). Satisfaction with a life domain (e.g. consumer life domain) is directly influenced by the experiences faced within that domain. This theory proposes that the level of life satisfaction is conditioned in relation with the affects within life domains.

Measuring CWB

As mentioned before improving well-being of consumers affects their satisfaction with life in a positive way. That is why marketers seek ways to better consumers' well-being in the marketplace. For being able to do this, a measure for CWB is needed in order to use the right instruments. There are a variety of conceptualization styles and measures of

CWB and as a result, industry analysts and policy makers often do not know how to choose a CWB conceptualization and corresponding measure most suitable for their tasks (Sirgy, et al., 2007). Those different measures developed for CWB is investigated in this section.

CWB is handled in multiple ways in accordance with different situations and purposes. Cost of living model for measuring CWB posits that increase in prices of goods and services –in other words, inflation measured by Consumer Price Index- decrease consumers' purchasing power, which in return makes purchase of goods and services unaffordable. Samli (2003) suggests that this situation averts maintaining a certain level of QOL. Another index used to measure CWB is Total Consumption Expenditure Index (TCEI), which gives a score referring to the summary of all expenses across various expenditure categories. Findings suggest that the richest countries consume around 85 percent of total consumption expenditure made around the world. High levels of total consumption expenditure represents high CWB at the macro level (Sirgy, et al., 2007).

In the United States, consumers from any region can deliver any kind of complaints they experience during shopping to the Better Business Bureau (BBB). In return, BBB informs consumers about companies whenever they consider purchasing goods and services from a certain company. High number of complaints made against a company means the lower the level of CWB specific to that company and brand. In addition to these measures, Consumer Reports, which is a monthly publication of the Consumer Union in United States, declares experts' assessment of quality of goods and services by taking reliability, durability and safety into consideration. The worse the assessment of experts are, the lower the well-being of consumers related to that product

and service. The information provided by Consumer Reports is found to be useful for consumers in order to make evaluations in the marketplace.

In the literature, CWB is also tried to be measured by taking the level of consumer life domain satisfaction into consideration. The models differ from each other because each one of them consider consumer life domain separately. As an example, Meadow (1983) generated the shopping satisfaction model positing that CWB is determined by satisfaction with acquisition of consumer goods, and constructed a CWB measure based on consumers' experience with retail institutions in purchasing food, housing, medical care, etc.

On the other hand, possession satisfaction model suggests that life satisfaction is affected by material possession. In other words, there is hypothesized to be a relation between experiences related with possession of economic goods and overall life satisfaction (Sirgy, Lee, Larsen, et al., 1998). Nakano et al., (1995) add socialization concept for measuring CWB and examined consumers' overall life satisfaction with their material possessions and standard of living. Nakano et al. (1995) used a two-question measure to capture CWB to investigate consumer socialization in relation to material possessions and standard of living: "How do you feel about your standard of living-the things you have like housing, car, furniture, recreation, and the like?" and "How do you feel about the extent to which your physical needs are met?". CWB is conceptualized as the composite of a set of these items.

With the acquisition/possession satisfaction model (also known as two-factor model), Day (1978, 1987) and Leelakulthanit et al. (1991) propose that CWB is the satisfaction with acquisition and possession of consumer goods and services, where

acquisition referring to the experiences related to purchase of goods and services, and possession referring to experiences related to ownership of material possessions.

Another model by Lee et al. (2002) conceptualizes CWB in terms of consumer satisfaction with varied marketplace experiences that are acquisition, possession, consumption, maintenance and disposal. In brief, these experiences stand for;

- Acquisition: shopping and other activities involved in the purchase of goods and services (e.g. quality, price, availability).
- Possession: ownership of goods and services, whether used or not.
- Consumption: actual usage or consumption of products and services.
- Maintenance: the availability for repairing or making maintenance of goods either by service vendors or by consumers themselves.
- Disposal: convenience and ease of disposal of products.

This measure of CWB, which can be named as consumer/product life cycle model, assumes that consumers experience satisfaction and dissatisfaction with each of the stages of shopping transaction mentioned above, and these marketplace experiences influence their overall life satisfaction. Lee et al. (2002) found this model to have predictive validity in relation to life satisfaction for three out of its five dimensions that are acquisition, possession, and consumption. Thus, the CWB measure consisting of these three dimensions is found to be nomologically valid. In the same study, it was also demonstrated that satisfaction in consumer life domain is an important component of life satisfaction.

For the purpose of refining the construct of CWB, Sirgy and Lee (2008) re-define CWB as a state of objective and subjective well-being involved in the various stages of consumer/product life cycle in relation to a particular consumer good (i.e. acquisition, preparation, consumption, possession, maintenance, disposal). The conceptualization is parallel with the previously generated consumer/product life cycle model, but contributes to the model by simply distinguishing state of subjective and objective well-being of consumers. They suggest that well-being of consumers in all of these six stages are shaped by both subjective evaluations of consumers (consumer satisfaction) and the qualifications of the process experienced (experts' assessment of consumers' and societal costs and benefits) which is the objective part. Such a conceptualization of CWB is found to be necessary since, defining responsibilities of companies is highly crucial in terms of consumer welfare. Sirgy and Lee (2008) propose that well-being marketing is a business philosophy grounded in business ethics and is an extension of relationship marketing. It is demonstrated how well-being concept can guide marketing decisions of companies, in order to enhance well-being of consumers.

Grzeskowiak et al. (2006) benefited from consumer/product life cycle model for measuring housing well-being of home owners in the USA and Korea. The model developed in the study was guided by consumer/product life cycle model. The reason for this is to make sure that the model they are testing covers the full range of consumer experience with the home that are, acquisition, preparation, possession, consumption, maintenance, disposal. In the study it is suggested that, housing well-being of home owners' is a result of cumulative positive and negative affects associated with the purchase (acquisition), preparation, ownership (possession), use (consumption), and maintenance of the current home, and the selling (disposal) of the previous home. It was

also conceptualized that the greater the housing well-being the higher the life satisfaction. The tested CWB measure is found to be nomologically valid.

Sirgy, Lee and Kressman (2006) suggest that although macro-measures of CWB are useful for public policy purposes, specific industries such as personal transportation need to use micro measures of CWB. For this purpose, a customized CWB measure is developed. It is suggested that CWB regarding personal transportation is enhanced by meeting needs in personal transportation life domain, which are safety, economic, family, social, esteem, actualization, knowledge and aesthetics needs. In addition, consumption of personal vehicles is conceptualized referring from consumer/product life cycle, consisting of four stages. Thus, fulfillment of needs in the following stages of consumption is tested:

- The purchase of a vehicle that has certain design characteristics,
- Having the right car insurance policy and service from an insurance agency,
- Having the right car warranty and getting good maintenance service from an auto repair shop, and
- Having the right financing package from the dealer or bank.

The findings of the study supported the validity of the CWB measure.

Critics on CWB Measures

Although the previously demonstrated CWB measures are found to be statistically appropriate and most of them are accepted, there are still critics on the success of

encapsulation and validity of the measures. First, an assessment is made by Malhotra (2006) on the state of literature in CWB and QOL. Malhotra (2006) states that there is an ongoing confusion on distinguishing and comparing of the constructs of CWB and QOL and argues that there is a need for developing a framework grounding CWB and QOL in theory. Considering consumer/product life cycle model (Lee et al., 2002), Malhotra (2006) suggests that the model leaves some important aspects such as consumer socialization, involvement with the society, social causes, etc. out, and for having a heavy emphasis on materialism, where materialism is opposed to CWB (Malhotra, 2006). Furthermore, it is argued that CWB and QOL should not be examined nor at very micro levels neither totally macro levels, but focusing on countries or cities as the research field would be the most favorable.

In addition to reviews of Malhotra, Sirgy and Lee (2006) published their analysis about existing measures of CWB and examined these measures by three questions, which are:

1. Is the CWB measure comprehensive enough to capture the richness of consumer experiences in the marketplace?
2. Is it macro enough to capture not only consumers' assessment of marketplace experiences but also experts' assessment of society's costs and benefits of these marketplace experiences?
3. Is it diagnostic and practical enough to guide the formulation of policies and action programs?

First of these questions queries the existing CWB measures for covering full range of consumer experiences in the marketplace. It is suggested that there are at least six types

of experiences consumers have with goods and services, which are acquisition, preparation, consumption, possession, maintenance and disposal experiences. It was found out that all of these experiences except “preparation” are somehow measured by the existing measures; either focusing on only one of the experiences or including more than one experience. The most comprehensive measure among them is found to be the consumer/product life cycle model dealing with acquisition, consumption, possession, maintenance and disposal (Lee et al., 2002).

The second question queries whether the existing measures take marketplace’s societal affects on consumers’ lives into consideration or not. Among the before mentioned measures of CWB, Consumer Price Index (CPI), Total Consumption Expenditure Index (TCEI) and Consumer Reports are found to be reflecting expert opinion, thus providing an objective evaluation for the sake of well-being of consumers in societal point of view. The importance of such an objective assessment is said to be coming from providing significant clues for government regulatory agencies in setting marketing-related policies.

The third question examines the existing CWB measures in accordance with their applicability for different situations, under different circumstances, such as demographic and geographic varieties. A CWB measure is argued to be very useful measure if it can be aggregated and disaggregated by geographic, demographic, marketing function and industry type. Measures such as Meadow’s (1983) CWB measure and CPI are found to be meeting the above mentioned requirements, however the 5-item CWB measure developed by Lee et al. (2002) is suggested to be more comprehensive than the other ones.

Marketing on Consumer Well-Being

Well-being of people is affected by numerous factors. As mentioned before, these factors are both extrinsic (work, environment, etc.) and intrinsic (health, financial security, etc.). The level of wellness of these factors determines how high well-being of people are. In their daily lives, people are affected by these factors, by being involved in several activities either for making money for living or consuming for living or improving themselves for better living. “Consuming” side of these activities means “making money” for some other people. So, in order to make consumers consume more and more, product and service providers use various types of marketing methods, which show development day by day. These methods work very well most of the time, but the question is whether too much marketing is really good for consumers or not.

Marketing influences CWB in large part because it directly affects satisfaction in the consumer life domain (experiences related to the marketplace) and indirectly in other life domains such as health and safety, work, family, leisure, and finance, among others (Sirgy, Lee and Rahtz, 2007). Marketing strategies encompass creating and maintaining an appropriate marketing mix involving product, place, promotion and distribution that will satisfy those customers in the target market (Dibb et al., 2001). From this point of view, it can be said that ultimate goal for marketers is to satisfy consumers by meeting their needs at each level of shopping transaction.

Materialism and Consumerism

Marketing communication is argued to have generated and propagated an ideology of materialism in society, and associated an identification of consumption with happiness (Westra and Werhane, 1998). Westra and Werhane (1998) propose that marketing has tended to encourage the identification of people with what they possess. Marketers tend to foster consumerism by developing strategies that are identifying happiness with what one owns. On the other hand, in the literature, it is a common discussion of how the degree of consumerism affects well-being of people. Although it was suggested by Westra and Werhane (1998) that consumerism helps raising self-esteem of individuals, some researches have found that high levels of material values are negatively associated with well-being. It has been discovered that individuals who focus on the acquisition of material objects show reduced life satisfaction (Richins and Dawson, 1992), diminished levels of happiness (Belk, 1985), and higher levels of depression (Kasser and Ryan, 1993). Studies made on this subject broadly suggest that the relationship between materialism and well-being is largely negative but that it is also important to view materialism as just one component of an individual's broader value profile (Burroughs et al., 2002).

Quality of Life Marketing

Marketing practices that contribute significantly to CWB are referred to as quality-of-life (QOL) marketing (Lee and Sirgy 1995; Sirgy and Lee 1996; Sirgy, Meadow, and Samli 1995). QOL marketing is a business process that plans, prices, promotes, and

distributes economic goods to consumers in ways that maximize acquisition, possession, consumption, maintenance and disposal satisfaction (Lee et al., 2002) while preserving the well-being of other stakeholders (e.g., stockholders, distributors, suppliers, employees, the local community, and the environment) (Sirgy, 2001 c.f. Lee and Sirgy, 2004).

Lee and Sirgy (2004) propose that the consequences of marketing beneficence and nonmaleficence affect customer well-being at high levels. Thus, in societal point of view setting socially responsible marketing objectives and using appropriate marketing tools are important for sustaining well-being of society. The authors investigated dimensions of QOL marketing by stemming from marketing mix elements of product, price, distribution and promotion, and also proposed that “selection of the market” should be another dimension of QOL marketing. The better QOL marketing is suggested to be enhancing well-being of consumers and other stakeholders with respect to these five dimensions.

Peterson and Ekici (2007) investigate the relationship between consumer attitudes consumers toward marketing (CATM) and their quality of lives in a developing country. The importance of this relationship is emphasized based on the fact that sentiments of consumers toward marketing are the core indicators of the marketing system’s performance in delivering well-being to consumers during acquisition stage of shopping transaction. The study was conducted in Turkey and responses from a sample of 222 people were collected. The results of the analysis show a healthy and positive relationship between CATM and QOL. This study is suggested to be encouraging for QOL researchers for integrating CATM into future theories of QOL marketing.

CHAPTER 3

THEORETICAL MODEL AND HYPOTHESIS

In this part of the study, a theoretical model is proposed. Following sections contain a set of variables which shape the characteristics of the study. The model developed by using these variables is expected to explain the relationships among people's general attitude towards technology, technologically improved marketing activities, quality of lives of consumers and consumer well-being.

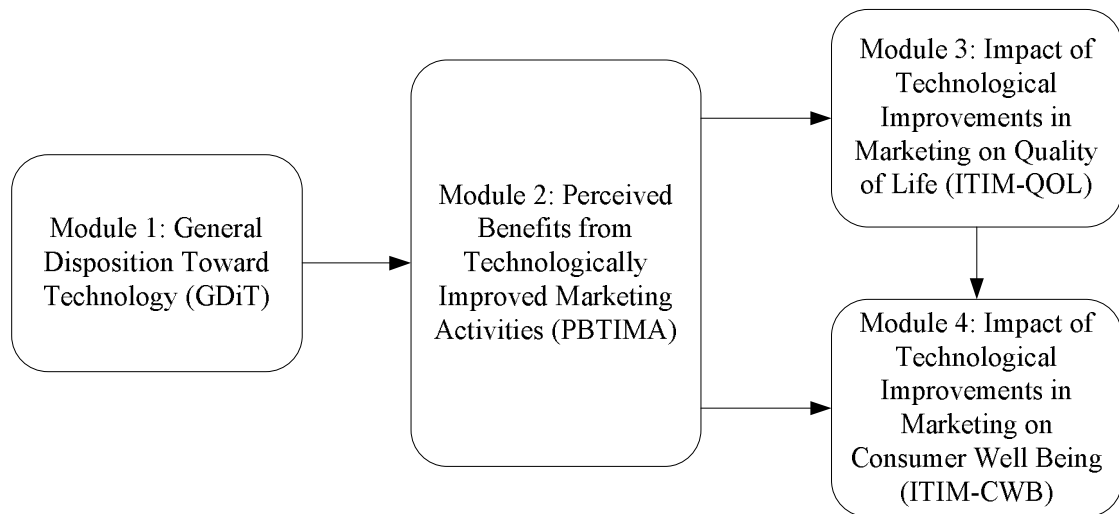


Figure 3. Theoretical model

For simplicity, abbreviations generated for each of the modules are going to be used in the rest of the study.

Demographic Characteristics of Consumers

Demographic characteristics of consumers can play a direct or indirect role on consumers' attitudes and perceptions related to technology, marketing and their well-being. As well as demographic consumer characteristics, the level of income that can be disposable for consumers is also included in this module.

1. Age: Being one of the most common demographic characteristics used in researches, age is an important factor in this study in order to reach consumers who experience consumer life domain at most.
2. Gender: This characteristic enables confirming that distribution of females and males among respondents of the questionnaire is normal.
3. Marital Status: This characteristic of consumers is thought to be playing a role in their preferences in the marketplace.
4. Education: The aim of asking education levels of people is that it may affect their attitudes toward technology and the way they perceive marketing activities.
5. Income: This is asked in order to satisfy the potential of being an experienced consumer.

Disposable (discretionary) income: This is the amount of an individual's income available for spending after the essentials (such as food, clothing, and shelter) have been taken care of. In addition to this, not each and every consumer is in search for satisfying similar needs even if their income levels are close to each other. Thus, simply taking income levels of consumers into consideration can be misleading when trying to

differentiate them in the scope of shopping experiences and quality of life perceptions. From this point of view, the level of consumers' disposable income is also questioned in this study.

Module 1: General Disposition toward Technology (GDiT)

Consumers' general dispositions toward technology (GDiT) is a significant factor in today's highly technology driven world. Their attitudes toward technology affect their shopping behavior as well as other simple transactions in their daily lives. In the scope of this study, it is inevitable to handle this subject, since it is supposed to be an important factor for consumers in developing perceptions about technologically improved marketing activities. Within this context, Mick and Fournier (1998)'s conceptual framework on the paradoxes of technological products is taken into consideration and revised in accordance with the aim of this study.

1. New vs. Obsolete: This paradox stems from the idea that technology brings innovation in life in general, however it evolves so rapidly that they may become outdated quickly.
 - New: New technology makes people able to be up to date about the most recent developments which they can immediately benefit from.
 - Obsolete: High speed of technological changes can lead purchased products or services become outdated very quickly.

2. Efficiency vs. Inefficiency: The improvements seen in several aspects of life which are caused by technology, helps consuming less time and effort, however managing the technology behind may cause more trouble.
 - Efficiency: Technology brings efficiency in fulfillment of needs or desires, in terms of effort and time spent.
 - Inefficiency: Existence of technology (high or low) within a product or service makes it much harder to use, manage and benefit from.
3. Fulfills needs vs. Creates needs: Use of technology can make it possible for people for overcoming barriers and fulfill their requirements, such as online shopping or simply using a dishwasher. On the other hand, people also have to be aware of any kind of disadvantages these may bring and become conscious about use of technology, which needs an effort for learning.
 - Fulfills Need: Use of technology facilitates in fulfilling needs; it makes life more comfortable.
 - Creates Need: The advantages of technology in bringing easiness in consumers' lives lead them realize more of their needs which were not noticed before. That is, solving problems in the daily life by using technology is a brand new dimension compared to regular old methods, which needs special attention and care.
4. Competence vs. Incompetence: Technology that facilitates handling difficult situations more easily, may also cause people to develop dissatisfaction when can not be used properly.

- Competence: The facilities that technology provide people make people feel smarter and make them confident enough to feel like being able to cope with most of the problems faced.
 - Incompetence: When people can not keep up with the developments in technology, this may lead them to feel incompetent and ineptitude.
5. Control vs. Chaos: Technology can be considered as the main factor for today's highly volatile world. As being the main cause, it is also the only way to keep things in order. Nevertheless, misuse of technology or undesirable failures may lead to irreversible adverse situations.
- Control: Presently, from both business and social point of view, things develop and change too rapidly, all over the world. To be able to keep up with all of these actions that are surrounding people, use of technology in order to bring order into their lives has become a must.
 - Chaos: There is always a chance of chaos caused by misuse of technology or by any kind of human-free interruptions. The main reason for chaos is that people are either at high levels or low levels dependent to technology, since technology is highly reliable at most of the times.
6. Freedom vs. Enslavement: While people gain their independencies among the society by numerous technological tools, they become more reliant on technology.
- Freedom: Technology offers people freedom. By the help of technology it is much easier to be mobile without interrupting any important issues in life in general. In addition to this, since technology makes it possible for a single

person to be able to overcome difficult situations more easily, it helps individuals gain their independencies.

- Enslavement: Being technology involved in almost every little detail of people's lives, it becomes a must day by day and dependency towards technology is remaining.

Module 2: Perceived Benefits from Technologically Improved Marketing Activities (PBTIMA)

In this module, several types of marketing activities are displayed. 4P's of marketing, which are product, price, place and promotion, are taken as a basis for this part of our study. Later, literature survey proposed a large variety of marketing activities used in the real life, of which in today's marketplace a high percent are conducted using technological tools. The following 30 characteristics existing in marketing are the ones that are affected highly by technology.

1. Product variety: As production technologies evolve, making it available to have more flexible production systems with same costs, variety in a product range increases as well. In addition to this, companies which have need-oriented production systems use technology for being aware of consumer needs and also for being able to see possible future developments before consumers do. Such activities also play role in increasing variety.
2. Renewal and improvement on product: Technology makes it possible to watch trends in consumer needs very closely, through smart cards used in shopping or by being able to receive customer feedbacks any time, anywhere and

immediately, etc. After being aware of such improvement needs, research and development departments of companies, which are now more capable of adapting to changes easily by use of technology, can respond in a shorter period of time to such demands of the market. This rapidness leads fast and high frequency of renewals and improvements on products.

3. Product durability: Developments in quality of raw materials, R&D processes and production systems lead products to be more durable than before they are.
4. Product safety: Safer products are the outcomes of feedbacks from consumers and high technology pre-production tests. Both of these two factors affect R&D and production processes.
5. Nature friendly products: With use of technology in R&D it is much easier to find out and use the least harmful raw materials for production.
6. Customized products: Developments in production systems by use of technology can make customization feasible in terms of time and cost.
7. Price variety: As well as variety in characteristics, price of similar products also show high levels of differentiation, caused by alternative raw materials, distribution channels, production systems, etc.
8. Price changes in high-tech products: Technology evolves so rapidly that, high-tech products continuously change in characteristics. This change is applied to products even before a need is created. As a result of this, in the marketplace consumers frequently come across a newer version of the high-tech product they own, which's is much cheaper than the price at the time the product is bought, even though it is bought a while ago.

9. Availability of products: Nowadays, it is usual to meet a specific kind of product at almost any shopping center or online. High capability of distribution of products is assisted by technological tools used in supply chain management system.
10. Accessibility of companies: It is crucial for companies to get feedbacks from customers in order to enhance the deficiencies of products and services provided. From customers' point of view, on the other hand, it is important to be conscious that they can communicate with companies whenever a problem is faced, help is needed or a need arises related with products and services. Accessibility of companies is much easier by use of technology, through call centers, online assistance services, e-mailing, etc.
11. Variety in shopping channels: Efficiency of the supply chain plays a major role in availability of products and services, at the right time and place. Today, software that provide online communication among supply chain partners are indispensable elements of successful supply chain management systems. In addition to this, technology helps companies for diversifying their distribution channels, e.g. internet, TV shopping, ATM's, etc.
12. Geographical diversity of markets: The world is a global market. Boundaries between countries are disappearing year by year in terms of business. If financially capable, it is much easier for companies to operate in different countries and one of the most important factors of this formation is the simplicity of being online, thus the chance of reaching millions of people around the world. Availability of remote communication as well as internet is another advantage of technology brought to business partners.

13. Shopping environments: In the competitive environment of marketplace, more attention is paid for better looking shopping places in order to attract more customers. Architectural details and lighting as well as technological facilities provided to customers are some of the improvement areas for this purpose.
14. Safety of customer data collection: Collection of customer data is the start point for implementation of CRM activities, however due to security concerns of people it may not be as much easy to do. By removing human factor in collection of data and improving data warehousing systems in terms of security, such concerns of customers are strived to be minimized.
15. Variety in channels for collecting customer data: For several purposes included by CRM activities, personal information is demanded from customers. Customers who are willing to take part in such activities should not suffer when sharing his/her personal information otherwise it would turn to a disadvantage for the companies. For this reason, it is made possible for customers to send information easily via cell phones, telephone, kiosks, internet, etc.
16. Amount of customer data stored by companies: Amount of information held is crucial in order to perform more successful CRM activities both in present and in future. However, being able to store huge amount of data requires highly developed warehouse systems.
17. Personalized offerings to customers: Following buying behaviors of customers is one of the most common activities of marketing. Technology offers various ways for doing this, such as credit cards, smart cards, internet, etc. By collecting and analyzing buying behaviors of consumers, personalized promotion activities can be generated.

18. Customer data owned by companies: The more companies know about consumers, the better service they can provide. For this purpose, customer data is tried to be obtained as much as in detail through credit cards, smart cards, internet, etc.
19. Frequency of exposure to promotional activities: Promotional activities such as advertising, sales promotion, public relations and direct marketing are improved to a higher level of digital marketing. One of the most evident consequences of such activities is the exposure of consumers to them against their wills, since digital promotion tools may pop up from anywhere the consumers are, e.g. coiffeur saloons, sport centers, on television, via internet, in shopping malls.
20. Variety of channels that the exposed promotional activities exist: Technology help marketing experts create new ways of introducing their products. It has become possible to make digital advertisement through different promotion tools such as mobile devices, Bluetooth, GPS, banner ads, smart cards, etc.
21. Attractiveness of advertisements: Technology brings visual excellence to advertisements and makes them more interesting in terms of audiovisual effects used.
22. Mobile advertising: Since mobile devices are very common among society, it is one of the most powerful tools for advertising and companies frequently use this tool.
23. Acquaintance level of customers about products and services: Companies promote themselves in a high variety of environments such as internet, television, mobile devices, etc. Being everywhere brings easiness for reaching the information, which makes it possible for consumers to be more informed.

24. Facilities that consumers use in gathering information about companies: Via internet or via 24 hours available call centers, consumers can reach any kind of information about both products/services and companies, anywhere and anytime they want in a short period of time.
25. Security of payment systems: Credit card payments either online or offline had been open to frauds since the beginning. However, advanced security systems provided by software companies help minimizing this risk.
26. Payment transaction: By integration of bank accounts, credit cards, and software programs in payment systems it is made possible to make payment using different tools, e.g. through watches, mobile phones, self checkouts, etc.
27. Querying a product in a sales point: A good supply chain management system can also provide consumers the possibility to query an item in a store or chain of stores either in the store or online.
28. Duration of service during shopping: Giving an order in a restaurant, checking out in a mall or repair in a car maintenance service takes much less time than before through usage of technological devices.
29. Human factor in shopping: Human-free transactions in shopping are becoming more common as technology usage increases in placing order, querying a product, inquiring characteristics of a product, checking out, etc.
30. Speed and efficiency of after sales services: As companies become more easily reachable by use of technology, any kind of problem or comment about a product or service can be transmitted to companies with little effort. Diminishing response times of companies can also be possible by successfully integrated customer management systems within the organization.

Module 3: Impact of Technological Improvements in Marketing on Quality of Life (ITIM-QOL)

In literature, many different measures can be found for quality of life (QOL), of which most important ones are explained in the previous section. Within the context of this study, the level of consumer QOL is investigated in order to see the possible differentiations within perceptions of technologically improved marketing activities (TIMA) in the scope of contributions they make to QOL of consumers. For this purpose, this module simply measures the effect of perceived benefits from TIMA on enhancement of QOL of consumers.

Module 4: Impact of Technological Improvements in Marketing on CWB (ITIM-CWB)

Consumer well-being (CWB) states the satisfaction with consumer life domain, which consists of several stages of the shopping experience. CWB should be measured in order to determine whether technological advancements in marketing contribute to well-being of consumers and also to be able to investigate the relationship between these advancements in marketing and stages of consumer life domain. This fifth module consists of three stages of consumer life domain in relation with CWB measure.

1. Acquisition: This stage of consumption process is related with the shopping experiences of consumers. While addressing shopping, not simply purchasing activity meant here. Being an important facet of CWB, acquisition stage involves activities consumers experience starting from entrance to the store till the exit,

including factors affecting the decision making process. With this respect, satisfaction with acquisition is enhanced when;

- the product or service bought deserves the money spent for it,
- shopping becoming more entertaining,
- the quality of service provided by companies is increased,

and,

- the consumers becoming more conscious and informed.

2. Consumption: At this stage, experiences gained by consumers consist of consuming process; that is the actual usage of products (Lee et al., 2002).

Consumption satisfaction is increased when;

- consumers believe that use of products they bought make their lives easier,
- the money was spent for the goods which are really within the scope of their needs,

and,

- satisfaction with after sale service is improved.

3. Possession: Satisfaction regarding this stage of consumer experience is felt simply by owning the product, not necessarily using it. Possession satisfaction is improved when the products bought make contribution in increasing the quality of consumers' lives and when consumers feel they are being valued more by companies.

Hypotheses

The multipurpose objectives of the study can be briefly explained as below.

- Measuring people's general disposition towards technology (GDiT).
- Finding the relationship between consumers' GDiT and their perception of technological improvements made in marketing activities and implications.
- Measuring the level of consumers' perceived benefits from technologically improved marketing activities (PBTIMA).
- Measuring the overall perception of consumers with respect to the contribution of technological improvements in marketing to their quality of life (QOL) as consumers.
- Finding the relationship between technologically improved marketing activities and QOL of consumers.
- Finding the relationship between PBTIMA and consumer well-being (CWB),
- Measuring CWB in relation with technological improvements in marketing.

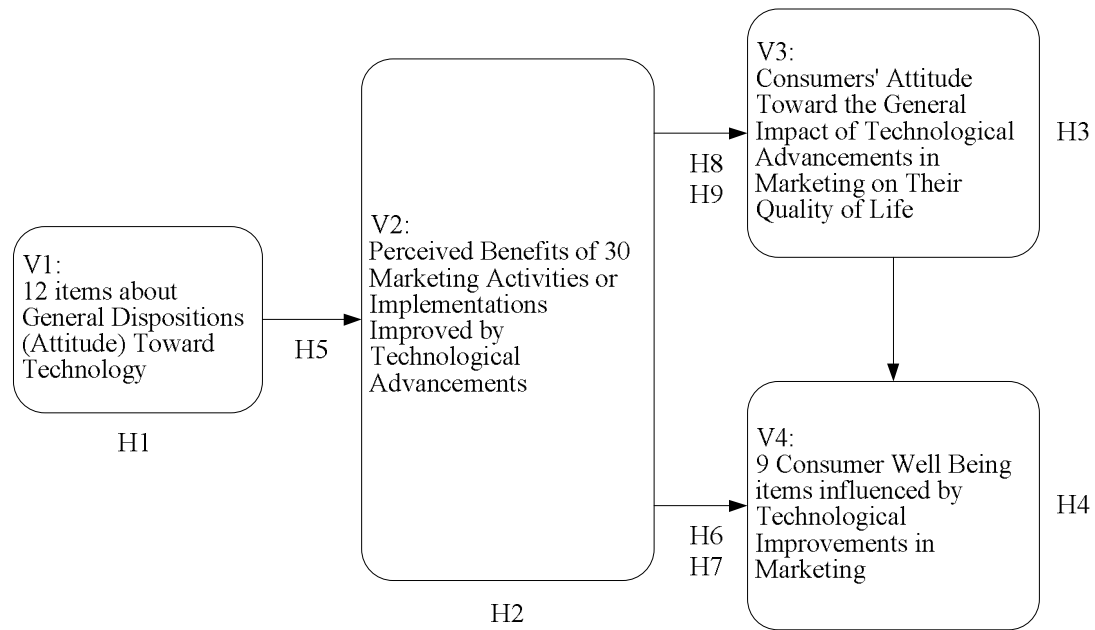


Figure 4. Variables and hypotheses of the study, and the proposed relationships

Hypotheses of this study and the variables related with each of the hypotheses are given below.

Hypothesis 1: People’s general disposition toward technology (GDiT) is positive (V1).

Hypothesis 2: Technologically improved marketing activities (TIMA) and implementations are highly valued by consumers (V2).

Hypothesis 3: TIMA affect quality of lives (QOL) of consumers in a positive way.

Hypothesis 4: Consumer well-being (CWB) is enhanced by TIMA.

Hypothesis 5: People’s GDiT (V1) and the level of benefits they perceive from TIMA (V2) are correlated.

Hypothesis 6: The level of benefits people perceive from technological improvements in marketing (V2) and enhancement of their CWB as a result of these improvements (V4) are correlated.

Hypothesis 7: Consumers who perceive benefits from technological improvements in marketing (V2) differently also consider enhancement in their CWB (V4) differently.

Hypothesis 8: The benefits of technological improvements in marketing (V2) will be perceived differently by consumers who experience different levels of improvements in their overall consumer quality of life (V3).

Hypothesis 9: In the scope of technologically improved marketing activities, the enhancement of CWB (V4) is felt differently by consumers who experience different levels of improvements in their overall consumer quality of life (V3).

CHAPTER 4

RESEARCH METHODOLOGY

In the literature survey part, attitudes of people toward technology, causes of technology on organizational processes and their marketing applications, and dependents of consumers' well-being were examined in detail. In the light of these information, determining the relations between,

- (1) attitudes of people towards 12 consequences of technology and their perceived benefits from 30 technologically improved marketing activities,
 - (2) perceived benefits from technology affected marketing implementations (PBTIMA) and consumer well-being (CWB),
 - (3) PBTIMA and quality of life (QOL),
 - (4) QOL and CWB enhancements caused by technological improvements in marketing,
- is aimed in this study.

During the literature survey, developments were also observed via contemporary publications. Technology being one of the main constituent of this study, is continuously evolving and penetrating into human life covering many different life domains. While studies exist in literature provide a major basis to the study, this kind of a survey is also needed in order to keep up with the latest changes regarding technology and marketing and to embody these changes into this study.

Another main reason for making this survey is to be able to understand the latest trends in marketing implementations in Turkey and discover at what stage new developments in marketing are received by markets in Turkey. The survey is conducted via domestically published magazines and books and through web sites.

Preparation of the Questionnaire

After concluding literature survey, the questionnaire consisting of a total of 59 questions was developed. A pilot survey was conducted using this first developed questionnaire and a total of 39 people attended the pilot survey. The outcome of the questionnaire was statistically tested by using SPSS and the necessary modifications on questions were made. The main part of the modifications made on the questionnaire consisted of re-wording of the questions since it was realized by the low reliability scores that some of the questions were prone to misunderstanding.

Re-wording was made for 4 of the questions in general dispositions toward technology scale. This scale was adopted from Mick and Fournier's (1998) study on paradoxes of technology. Thus, re-wording was done in terms of improving the translation of questions.

The scale on the perceived benefits from technologically improved marketing activities had a high reliability score of 0.924 and SPSS analyses were satisfactory. So, no changes were applied on this scale.

Consumer well-being scale was problematic, in terms of low reliability score of 0.315 and unsatisfactory statistical analyses results. It was also needed for a change in wording. In developing this scale, the study of Lee et al. (2002) was taken as the basis, in which a measure for simply measuring consumer well-being was developed by dividing consumer life domain into five stages of acquisition, possession, consumption, maintenance and disposal. Based on the literature and survey made, and the poor results of statistical analyses, it was found most appropriate to exclude maintenance and disposal dimensions from the consumer well-being scale used in this study. With this

regard, 4 of the questions were removed from the consumer well-being scale of 10 items. Instead, 3 statements were included that were believed to increase reliability and validity of the scale. Moreover, some of the questions were re-worded to present a comparison between the states before and after technological improvements in marketing take place. This was done because the enhancement in consumer well-being is tried to be measured by this scale.

In addition to the scales, a modification on the single question of measuring the quality of life of consumers was also made. The question was on 5-item interval scale and respondents were asked to state their agreement level by choosing one of the answers consisting of two positive, two negative and one neutral statements. The pilot survey results for this question showed that nobody agreed with the two negative answers. Thus, a comparison was seen impossible. Based on this fact, the question was revised to be on a 4-item interval scale of two negative and two positive statements, and moreover negative words were excluded from answers. However the meanings of two of them were still left negative.

Choice of People for the Questionnaire

Convenience sampling was used in this study. The data for this study has been collected from individuals in Turkey. The sample was targeted to be composed mostly of individuals who have some accumulated experience as individual consumers. These individuals are no younger than 18 and may also include the ones with age of over 54. The questionnaire was prepared on internet through a survey preparation tool provider web site. Collection of the data was done through the Internet through two channels.

One of them was sending the survey link directly to individuals who were members of the working population and who were conveniently available. The other channel was sending the survey to groups and communities in the online environment which used keywords such as technology, marketing, IT, management, business, etc. in their descriptions. From the group descriptions, it can generally be inferred that most of the members are working and are aware of the recent developments taking place in the world of business and technology. The survey link was sent to total of 12 of the moderators/owners of these electronic groups (e-groups) and if they gave approval, an e-mail with the survey link was delivered to the members of selected e-groups. An approval rate of more than %66 was obtained from the groups.

Components of the Questionnaire

The questionnaire consists of five sections: (1) Demographic characteristics of the consumers, (2) General Disposition Toward Technology (GDiT), (3) Perceived Benefits from Technologically Improved Marketing Activities (PBTIMA), (4) Impact of Technological Improvements in Marketing on Perception of Quality of Life (ITIM-QOL) and (5) Impact of Technological Improvements in Marketing on Consumer Well-being (ITIM-CWB).

Demographic characteristics part includes 6 questions of age, gender, marital status, education, monthly income and disposable income level. The aim of asking age, monthly income and disposable income was to satisfy the need for reaching the potential experienced consumers. Gender, marital status and education levels were asked since these characteristics can significantly affect consumers' buying behaviors.

The second part of the questionnaire tries to determine the attitudes of people towards technology in general. The questions were derived from the study of Mick and Fournier (1998) in which paradoxes of technology are introduced. It is suggested that technology does not provide only advantages or only disadvantages, but people feel both positive and negative effects of technology at the same time. The authors proposed 8 paradoxes of technology which equals to a total of 16 different characteristics. In this study 6 of these paradoxes corresponding to a total of 12 characteristics of technology is presented. Thus, one positive and one negative statement related to a paradox exist in the scale and a total of 12 statements are presented. It should be noted that reverse coding was used for the negative statements in order to avoid bias. Respondents were asked to answer these statements on a 4-point interval scale (1: Strongly Disagree, 2: Disagree, 3: Agree, 4: Strongly Agree). The reason for constructing a 4-point scale is because respondents were expected to have grown an attitude toward technology, either positive or negative.

The paradoxes stated in the scale are new vs. obsolete, efficiency vs. inefficiency, fulfills needs vs. creates needs, competence vs. incompetence, control vs. chaos and freedom vs. enslavement. In brief explanation these paradoxes connote as below:

1. New vs. Obsolete: The idea behind this paradox is that technology brings innovation in life in general, but these innovations may become outdated in a short period of time.
2. Efficiency vs. Inefficiency: This paradox puts forward the characteristics of technology that it helps consuming less time and effort, but it also may cause trouble when could not be managed.

3. **Fulfills needs vs. Creates needs:** This paradox stems from the idea that technology helps people much easily meet their needs, however use of technology also may require extra knowledge and care, which in other terms create a need for learning and tools for using it.
4. **Competence vs. Incompetence:** The fourth paradox proposes that while technology helps people overcome difficult situations, it may also make people incompetent when not properly used.
5. **Control vs. Chaos:** This paradox proposes the idea that while people make use of technology in order to keep things in control, any kind of frauds or faults in functioning may cause severe situations.
6. **Freedom vs. Enslavement:** The last of the paradoxes is stemmed from the idea that use of technology provide people more freedom but being too much dependent on technology lead people also to feel restricted by it.

The third part of the questionnaire is a self constructed scale, consisting of 30 statements that represent enhancements in the marketplace caused by technological improvements in marketing. Respondents were asked to indicate the degree of their perceived benefits from such enhancements on a 5-point interval scale (1: Not Beneficial at All, 5: Highly Beneficial).

In the light of literature survey, technological improvements and implications in marketing activities were grouped into five main groups, which are product, place, marketing communication, informed customer and service. In the scale, what these categories include are presented as follows.

- Product (1st to 8th items): In this category, the consequences of improvements in production technologies are stated, such as increase in variety in both price and characteristics of products, frequent renewals in both price and characteristics of products, products being safer to use, more durable and more nature friendly, and customization in production.

- Distribution (9th to 13th items): With use of technology in distribution, consumers face the improvement in several areas such as products being available at various sales points, the companies being constantly available, even globally, either for reporting complaints or making orders and the shopping environments being more attractive places than before.

- Marketing Communication (14th to 22nd items): Improvement in marketing communication were classified into two: customer relationship activities and advertising. Statements belonging to customer relationship part of this category are about the customized solutions provided to consumers, companies' ability to collect data more secure and faster, and companies being able to store huge amount of customer data which can be beneficial for customers in terms of products and services provided. On the advertising side, the improvements were given to be the availability of mobile marketing, more attractive advertisements and frequent exposure to advertisements through a variety of channels.

- Informed Customer (23rd and 24th items): This category was found to be necessary, since technology has great impact on customer consciousness by making it possible for any kind of information spread very fast and can be reached easily. Because of this characteristics of technology, customers are more informed about both products and services, and about companies.
- Service (25th to 30th items): This category represents the advancements in service quality that companies offer. The statements belonging to service category are being payments more secure, easier and available via various ways, after sales services being faster and more efficient, finding and locating a specific product in a store or within several stores easily and being duration of service less than before.

The fourth part of the questionnaire consists of one single question, which investigates the effect of technological advancements in marketing on the perception of quality of life of consumers. The respondents were asked to share their opinions on a 4- point interval scale (1: Very Positively Affected, 2: Partially Positively Affected, 3: Not Very Positively Affected, 4: Not Positively Affected at All). It is a 4-item scale in order to be able to differentiate the negative and positive perceptions.

The fifth and the last part of the questionnaire was developed in order to measure how much consumers' well-being enhanced as a result of technological advancements in marketing. A consumer well-being (CWB) scale was developed stemming from the CWB measure of Lee et al. (2002). The study of Lee et al. (2002) divides consumer life domain into five stages of acquisition, consumption, possession, maintenance and

disposal, and well-being of consumers is measured by questions specific to each of these stages. In this study however, three of these stages were taken into consideration, which was decided after the pilot survey as mentioned before. The three stages used in consumer well-being scale of this questionnaire are acquisition, consumption and possession, and the respondents were asked to answer the questions on a 4-item interval scale (1: Strongly Agree, 2: Disagree, 3: Agree, 4: Strongly Agree). Within this scope, the questions included below given factors:

- Acquisition: In this stage of shopping experience, technological advancements in marketing lead consumers feel like a more conscious consumer, consider quality of the service provided as improved, entertain shopping more than before and believe that the product he/she buy deserve the money spent for it.
- Possession: This stage is one of the parts of shopping experience which means simply owning a product but not necessarily using it. By technologically improved marketing activities, consumers feel that they are being valued more by companies and they consider that the products owned by them help increasing their quality of lives.
- Consumption: This stage involves the experiences related with consumption of goods. In this scale the advancement in consumption stage by what technology bring in marketing are presented as being the products bought help making consumers' lives easier and consumers being more satisfied with after sales services. One other statement is also asked which cause

consumers to be less satisfied with consumption stage which is about spending too much money for the goods that are actually not needed.

Statistical Analyses

- Descriptive Analyses were done for demographic characteristics, general dispositions towards technology (GDiT), perceived benefits from technologically improved marketing activities (PBTIMA), impact of technological advancements in marketing on perception of QOL (ITIM-QOL), and impact of technological advancements in marketing on CWB (ITIM-CWB).
- T-test's were done for PBTIMA, and ITIM-CWB to find out if the high score of these scales are significant or not.
- Correlation Analyses were done between GDiT and PBTIMA, between PBTIMA and ITIM-CWB.
- ANOVA Analyses were done between PBTIMA and ITIM-QOL, between ITIM-CWB and ITIM-QOL in order to find significant differences between the responses.
- Regression Analysis was done between consumers' PBTIMA and their CWB levels as a result of technologically improved marketing activities (TIMA) in order to further investigate the relationship between them and find out how much of CWB is explained by TIMA.

CHAPTER 5
ANALYSES AND FINDINGS

Descriptive Findings

Demographic Profile of the Respondents

Table 4. Demographic Profile of Respondents

	18-23	24-29	30-35	36-41	>42
Age	13	135	40	23	20
	6%	58%	17%	10%	9%
	Female	Male			
Gender	111	120			
	48%	52%			
	Married	Unmarried	Divorced/Widow		
Marital Status	142	81	8		
	61%	35%	3%		
	High school (graduate)	University (graduate)	Postgraduate Degree		
Education	6	137	88		
	3%	59%	38%		
	<1000 TL. (<≈\$650)	1000-2500 TL. (≈\$650-\$1600)	2500-4000 TL. (≈\$1600-\$2600)	>4000 TL. (>≈\$2600)	
Income	25	115	59	32	
	11%	50%	26%	14%	

This distribution suits the targeted profile for this study with respect to five major demographic variables. The sample consists of equally distributed groups of early adult and middle-aged consumers with 58% in the 24- 29 range and 17% in the 36-41 range which corresponds to a young urban working population. Thus, 75 percent of

respondents are between ages 24 and 35, who are relatively more technology-oriented and who are experienced enough as customers, which meets the needs of the study. The number of males is a bit higher than females, but each gender group is represented adequately.

Distribution in marital status shows that majority of the participants are married with a 61 percentage of dominance.

The majority of respondents are university graduate with a 59 percent, where a significant part has a postgraduate degree corresponding to 38 percent of all. This statistics draw a conclusion that all of the respondents are most likely to be used to technology.

Another demographic factor that is measured is the income levels of respondents. Half of the sample size have a monthly income between 1000 and 2500 Turkish Liras (TL), which corresponds to an approximate income level between 650 and 1600 U.S. Dollars. This level of income is adequate for having the required experience in the marketplace. The low-income group which is below 1000 TL is also represented by 11 percent, thus the distribution can be said to be appropriate.

Table 5. Disposable Income Characteristics of Respondents

	Low	Medium	High
DISPOSABLE INCOME	37	84	110
	16%	36%	48%

Disposable income levels of the respondents are varied. Besides, 48 percent of the sample responded to have incomes that meet majority of their needs and desires, where

36 percent claimed to have an adequate income that just can meet their needs. Such a distribution in disposable income levels among the respondents confirms one of the requirements of this study for the respondents to be experienced consumers.

Dispositions of Respondents toward Technology

Hypothesis 1: People's general disposition toward technology (GDiT) is positive.

Table 6. Mean Agreement Levels with Statements about GDiT

	Mean (over 4)	St. Dev.
As a result of technological developments, people can benefit from changes and novelties in science rapidly. *(new)	3.19	0.66
Technological developments offered to consumers can become outdated quickly. *(obsolete)	3.29**	0.64
Technology increases people's productivity and efficiency. *(efficiency)	2.89	0.77
Technology can sometimes unnecessarily complicate people's lives. *(inefficiency)	2.74**	0.73
Technology makes it easier for people to meet their needs. *(fulfills needs)	3.13	0.54
Technology can trigger or intensify needs that have not been felt or realized by individuals before. *(creates needs)	3.19**	0.66
Technology makes people feel more intelligent and successful. *(competence)	2.38	0.69
People may feel incompetent when they cannot use technology well. *(incompetence)	2.90**	0.65
Technology brings system and order to many aspects of human life. *(control)	2.79	0.65
Technology may cause chaos when it is not used well. *(chaos)	3.26**	0.68

Table 6. Mean Agreement Levels with Statements about GDIT (Continued)

	Mean (over 4)	St. Dev.
Technology makes people more independent with the conveniences it offers. *(freedom)	2.58	0.82
Technology imprisons people to itself. *(enslavement)	2.78**	0.82
Average Score for Dispositions Toward Technology	2.40	0.27

In this scale 1 denotes Strongly Disagree and 4 denotes Strongly Agree. This second part of the questionnaire attempts to measure respondents' attitudes toward technology. The scale, which is consisting of 12 questions, includes 6 paradoxes generated by Mick and Fournier (1998), thus both positive and negative conclusions of technology within a characteristics were directed to respondents to answer.

As the results in Table 6 show, except one of the items about competence, subjects have agreed with all of the items at an above average level. Therefore, even though one positive and one negative statement was put for each paradox, when the negative items are reverse coded to compute the average technology attitude score, the sample produces a mean level of 2.40 over 4. This shows that people are equally aware of the benefits and challenges introduced to their lives by technology. This is confirmed by the reliability scores achieved for the scale.

The reliability of the scale is measured for both situations; using outcomes directly, and using outcomes of negative statements by reverse coding. Without reverse

*The asterisks denote which paradox from Mick and Fournier's (1998) study the item has stemmed from.

** The mean values of negative statements are represented. However, average score of 2.40 gives the mean value of the scale where the outcomes of negative statements are reverse coded.

coding the negative items, in its original form, the scale produces a Cronbach's alpha of .59 which is acceptable for exploratory studies (Hair, 1998). However, if the reverse coded items are used, alpha level decreases to .49 which shows that the scale is much more consistent in its original form with both positive and negative items. Thus, it can be said that people are aware of both the advantages and disadvantages of technology for their lives and they agree on the effects of both sides of technology. The reliability scores calculated separately for positive and negative items of .59 and .60 respectively also supports this judgment. Based on these findings, it can be said that H1 is not supported.

Perceived Benefits from Technologically Improved Marketing Activities (PBTIMA)

Hypothesis 2: Technologically improved marketing activities and implementations are highly valued by consumers (V2).

Table 7. Mean Values of the PBTIMA

Variables with a Very High Level of Benefit Perceived By Customers	Mean (Over 5)	St. Dev.
Production of products in a way that improves customer safety	4.74	0.58
Production of products from nature-friendly inputs, protecting the environment and human health	4.63	0.79
Being able to make payments easily and in various ways	4.54	0.71
Constant accessibility of companies	4.50	0.75
Being able to find a product easily in a specific sales point (computerized systems to locate products, opportunity to order a desired product immediately, etc.)	4.49	0.70
The availability of a product in various sales points	4.45	0.74
Production of products with improved durability	4.45	0.90
Faster and more effective provision of after sale services	4.45	0.77
Improved security of payment systems	4.43	0.83
Decrease in service time during shopping (food ordering, retail shopping, etc.)	4.43	0.84
Emergence of alternative shopping channels (TV, telephone, Internet, etc.)	4.36	0.79
The geographical diversity of markets in which firms can sell their products	4.31	0.81
Increased level of information customers have about products and service in the market	4.26	0.80
Customers' opportunity to find information about companies, people, etc. in a much shorter period of time	4.24	0.89
Increase in price variety in most products	4.17	0.95
Production of products by companies that are customized according to individual or customer groups	4.03	0.93
Improvements in shopping environments with respect to design, architectural and technological elements	4.00	0.99

Table 7. Mean Values of the PBTIMA (Continued)

Variables with a High Level of Benefit Perceived By Customers	Mean (Over 5)	St. Dev.
Increase in variety in both durable consumer goods (automobile, mobile phone, white goods, etc.) and nondurable consumer goods (fast moving consumer goods)	3.99	0.89
Capability of companies to offer personalized alternatives to customers (promotions, information about products and prices, etc.)	3.98	0.89
Increased security in companies' collection of customer data	3.95	1.13
Decrease in human factors in shopping (payment systems, learning product prices through barcodes, etc.)	3.92	1.08
Collection of customer data from various channels (telephone, Internet, sales points, etc.) in a much shorter period time	3.76	1.18
Rapid and frequent decreases in the prices of high-technology products	3.74	1.13
Personalized advertisements and marketing communications reaching the right target market at the right time and place through mobile advertising	3.72	1.08
Improved attractiveness of advertisements and other marketing communications activities in terms of visual or other attributes	3.71	1.05
Increased level of information companies own about customers	3.40	1.19
Being exposed to advertisements and marketing communications activities in a higher variety of media (TV, Internet, telephone, outdoor) and any visible environment	3.39	1.16
Frequent renewals and improvements of the attributes of products offered to consumers	3.38	1.15
Frequent exposure to advertisements and marketing communications activities	3.27	1.20
High amount of customer information recorded and retained by companies	3.16	1.25
Average Perceived Benefit in Technological Improvements in Marketing	4.06	0.50

The questions asked in the third part of the questionnaire aimed to measure the level of benefits perceived by individuals as a result of technologically improved marketing activities. Respondents were asked to answer the questions on a 5-point interval scale (1: Not Beneficial At All, 2: Not So Beneficial, 3: Undecided, 4: Partially Beneficial, 5: Highly Beneficial). Statements of this part of the research are composed of marketing activities faced during shopping experience, which are enhanced by use of technology.

The scale is self-constructed and was developed in conclusion with the insights gathered from literature survey. Besides, the reliability score for this scale is very high with a Cronbach's alpha of 0.908. The high score of reliability represents the high level of consistency of the scale, which is developed by the authors. It can be said that the scale for measuring consumers' PBTIMA is successfully constructed in terms of reaching an accurate result.

The expectation with this part of the study is that, in all of these various areas of improvements about products, sales channels, customer relationship management, customer information, advertising, and services, consumers will perceive and give high value to the benefits these developments introduce into their lives. This is the second hypothesis of this research and the findings about the mean perceived benefit levels attached to the above factors confirm this hypothesis. From a set of 30 technologically improved marketing activities (TIMA), 17 of them have a mean perceived benefit level that exceeds 4, and 13 of them have a mean perceived benefit level that exceeds 3.16. The mean value of the "Level of Benefit Perceived from TIMA" which is computed as the average score of all 30 items is 4.06 over 5.

In order to statistically prove that the scale produces a score that is above average, -which is 3 since it is a 5-item interval scale- T-test is conducted using the average score of each respondent for this scale. The results are stated below:

Table 8. T-test Results for PBTIMA Scale

	Test Value = 3					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Perceived Benefit Average Score	32.290	230	.000	1.061	.996	1.126

The analysis is conducted under 95% confidence level and it can be seen from the Table 8. that significance value is smaller than 0.05. This means that the average score of the PBTIMA scale is significantly higher than 3, which is the mid point of a 5-item interval scale. Thus, consumers perceive benefits and give high values to the technological improvements in marketing. Based on these, it can be said that Hypothesis 2 is supported.

A closer look at the TIMA and implementations that are very highly valued by consumers yields interesting results. First of all, consumers are very significantly impressed by transactional improvements related to the shopping process. Especially, easy, convenient and secure payment mechanisms are found to be highly beneficial. Service quality is also very important; faster and more effective after sales services and reduced service provision time are significantly beneficial implementations. Service provision time is composed of set of activities faced during searching, examining, locating the product or service and afterwards making the order and the payment.

Being very close to benefits attached to service related activities, it is seen that consumers value improvements in production technologies greatly. They attach very

high level of benefits to the production of products that improve customer safety, protect the environment and human health, have higher durability and are customized according to individuals or customer groups. It is also highly valued for products being sold within a wide price range. This implies that product-based improvements are adopted by consumers rapidly and extensively. On the other hand, consumers give relatively less importance on high frequency renewals and improvements of products that may lead to frequent price changes and increased product variety for a specific branch.

In addition to these, consumers have very positive attitudes toward enhanced distribution systems. They highly value the opportunity to find any product they want either through computerized systems or because of the availability of various sales points and alternative shopping channels. Moreover, consumers see great value in being able to access companies and find any piece of information they want very easily and constantly as well-being able to give their information to companies in a secure way. They are aware that improvements in many marketing-related functions of companies such as offering a greater geographical diversity of markets that makes companies accessible easily have very positive reflections on consumers' lives. Finally, consumers are also highly aware of the increase in the quality of the shopping process such as being exposed to superior-designed and technologically equipped shopping environments.

One of the advantages that technology brings to consumer life is being more informed about companies and about products and services provided by them. This is also found to be an important aspect in enhancing shopping experience. Consumers value being more conscious in the marketplace where an intensive competition among companies exists.

Besides the improvements in production systems, service mechanisms, distribution systems and consumer awareness, consumers also consider developments in CRM activities and advertisements as beneficial, but grant less importance to them. For instance, they value personalization not only at the production level but also in promotions or the information they receive about products, prices, etc. It is also important for customers when the collection of customer information is made much easier and safer, which in return provide companies be more well-informed about consumers by storing a higher amount of data. Advertisements being more consumer-oriented, which are targeting the right audience, and being more attractive are perceived to be beneficial. Consumers are also aware of the fact that advertisements and marketing communication activities are being more frequently exposed at different environments, and these improvements are valued slightly less than others by consumers.

Impact of Technological Improvements in Marketing on Perception of QOL

(ITIM-QOL)

Hypothesis 3: Technologically improved marketing activities affect quality of lives of consumers in a positive way.

This part of the study investigates the overall impact of technologically advanced marketing activities on quality of lives (QOL) of consumers. In order to test the third hypothesis of this research that ITIM-QOL is positive, a single question was directed to respondents and it was asked from them to state the level of the impact on their QOL. The frequencies and percentages of the answers are given below.

Table 9. Distributions of Respondents With Respect to the Overall ITIM-QOL

	Frequency	Percentage	Cumulative Percentage
Very positively affected	67	29.0%	29.0%
Partially positively affected	144	62.3%	91.3%
Not very positively affected	18	7.8%	99.1%
Not positively affected at all	2	0.9%	100%
Total	231	100%	

According to the results in Table 9, 29% of the respondents claim that their QOL's are very positively affected by technologically improved marketing activities, where 62.3% of them consider these improvements to have a partially positive affect on their QOL. In sum, it can be said that 91%3 of the sample, which means the huge majority, share the common belief that technological advancements applied in marketing activities have positive impact on their QOL's. Thus, Hypothesis 3 is supported.

Impact of Technological Improvements in Marketing on CWB (ITIM-CWB)

Hypothesis 4: Consumer well-being is enhanced by technologically improved marketing activities.

Table 10. Mean Values of Consumer Well-Being Dimensions Affected by
Technological Improvements in Marketing

	Mean (Over 4)	St. Dev.
I believe the products that I buy make my life smoother.	3.06	0.54
I believe the products that I buy increase the quality of my life.	2.94	0.63
I believe I am a more conscious and informed customer.	2.91	0.66
I believe the quality of service offered to consumers has increased.	2.87	0.66
I believe I am more satisfied with after sale services.	2.78	0.61
I believe shopping has been more entertaining.	2.73	0.65
I believe I spend too much money and buy goods that I really do not need.*	2.67	0.89
I believe most of the products I buy deserve the money I spend for them.	2.66	0.66
I believe I have been valued more by companies.	2.42	0.75
Average Score for Consumer Well-being	2.74	0.41

The fifth part of the questionnaire includes the set of questions which were directed to respondents in order to find out their Consumer Well-being levels, taking the advancements in marketing caused by technology into consideration. Analyses in this part of the study were conducted in order to test the fourth hypothesis, stating that technological improvements in marketing help enhancing well-being of consumers.

By CWB scale, it was aimed to discover the degree of enhancement of CWB as a result of technological advancements in marketing activities. The scale consists of

* In calculation of average score, the answers to this statement were reverse coded.

questions that were derived from study of Lee et al. (2002) and adapted in accordance with the aim of this research. Thus, stemming from the concept developed by Lee et al. (2002) a new scale was developed, which produces a Cronbach's alpha of 0.78. It should be indicated that the reliability of the scale was calculated with taking the reverse coded score of the negative statement into consideration. Reliability score of 0.78 verifies that CWB scale used in this research is reliable enough for use in an exploratory study.

On a 4-point interval scale, the average score of the CWB scale is calculated to be 2.74, showing that people agree on the belief that technological advancements in marketing activities help improving their consumer well-being. The scale was voted on a 4-point interval scale where 2 corresponding to "Disagree" and 3 corresponding to "Agree". Thus, for making it possible to conclude the agreement of people about the subject, it is expected for the average score to be exceeding 2.5, which it does. In order to test the fourth hypothesis, a T-test is applied with the average scores of each respondent for this scale. The result of T-test is given below:

Table 11. T-test Results for ITIM-CWB Scale

	Test Value = 2.5					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
CWB Average Score	9.081	230	.000	.243	.190	.296

The analysis was conducted under 95% confidence level and it can be seen from the Table 11 that significance value is smaller than 0.05. This means that the average score

of the CWB scale is significantly higher than 2.5, which is the acceptable mid point for a 4-item scale. Thus, technological improvements in marketing enhance the level of CWB. Based on these, it can be said that Hypothesis 4 is supported.

When the results are examined in detail, it is seen that people feel the advantages brought by technological improvements mostly in acquisition stage of the shopping experience. They find it most advantageous for being a more informed customer which helps them do shopping consciously and in the most suitable way regarding their budgets and needs, where it is considered to be worthwhile for the money spent. It is also believed that consumers' acquisition experience is enhanced as quality of service is increased and shopping has become more entertaining.

In addition to acquisition stage, consumers feel the advancement during consumption of the products and services, too. The products that are bought considered to be making their lives much easier as a result of technological enhancements. Similarly, people being more satisfied with the after sales services helps them improve their CWB. On the other hand, spending excessive money for the goods that may not meet consumer needs during consumption stage can be said to be a common problem based on the answers given to the related question, which leads decreasing CWB levels of people.

In the possession stage, enhancement of CWB is expected to be caused by simply owning the product. Within the scope of technological advancements consumers face in the marketplace, they agree with the increase of their quality of life levels by owning the products they purchased. However, they do not believe that the seller companies give more value to its customers than before. This fact is one another factor that causes lower levels of CWB.

Relational Findings

In this section of the study, the findings of statistical models, which were conducted in order to test the rest of the hypotheses of the research are represented. The models that were applied to test the hypotheses were Correlation Analysis, ANOVA and Regression.

Correlation Analyses

The aim of conducting correlation analysis was to discover whether a significant relationship exists between the selected variables of the research.

General Disposition Toward Technology (GDiT) and Perceived Benefits from Technologically Improved Marketing Activities (PBTIMA)

Hypothesis 5: People's general dispositions' toward technology (V1) and the level of benefits they perceive from technologically improved marketing activities (V2) are correlated.

Table 12. Correlation between GDiT and PBTIMA

		Disposition Toward Technology
Perceived Benefits from Technologically Improved Marketing Activities	Pearson Correlation	.167*
	Sig. (2-tailed)	.011

It is hypothesized by the fifth hypothesis of the study that people's attitude toward technology is correlated with the level of their PBTIMA. This was tested by correlating

the average technology attitude score of the sample with their average score of the value they attach to 30 different technologically improved marketing activities and implementations. The outcome of the correlation analysis shows that the correlation coefficient is 0.167 with a significance level of 95%. It can be concluded that the correlation between two variables is positive but not strong. Thus, Hypothesis 5 is partially supported. One main reason for the relationship being not strong is because, while one of the variables measures the general state of people's attitudes towards technology, the other variable is related with consumers behaviors against technological advancements specifically in marketing.

Perceived Benefits from Technologically Improved Marketing Activities (PBTIMA) and Consumer Well-Being (CWB)

Hypothesis 6: The level of benefits people perceive from technological improvements in marketing (V2) and enhancement of their consumer well-being as a result of these improvements (V4) are correlated.

Table 13. Correlation between PBTIMA And ITIM-CWB

		Perceived Benefits from Technologically Improved Marketing Activities
Consumer Well-Being	Pearson Correlation	.323**
	Sig. (2-tailed)	.000

In order to test Hypothesis 6, which argues that, given the technological advancements in marketing, level of benefits that consumer perceive and the enhancement of their CWB are correlated, Correlation Analysis between these two variables is performed. The analysis is conducted by correlating respondents' average score of the value they attach to 30 different technologically improved marketing activities and implementations, and the average consumer well-being score. Correlation coefficient is calculated to be .323, which denotes a weak positive correlation, though the relationship is significant at 99% confidence level. It can be concluded that Hypothesis 6 is supported. In order to better understand the relationship between the two variables multiple linear regression is conducted.

Multiple Regression Analysis

Hypothesis 7: Consumers who perceive benefits from technological improvements in marketing (V2) differently also consider enhancement in their consumer well-being (CWB) (V4) differently.

Table 14. ANOVA Table of Perceived Benefits from Technologically Improved Marketing Activities and CWB Regression Analysis

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	10.487	30	0.350	2.520	.000(a)
	Residual	27.745	200	0.139		
	Total	38.232	230			

(a) Predictors: (Constant), Perceived Benefits from Technologically Improved Marketing Activities, (b) Dependent Variable: Consumer well-being.

ANOVA table shows that predictive level by the dependent variable is high. It can be said that enhancement of consumer well-being can be predicted by regression equation by the input variables because significance level is under 0.01

Table 15. Model Summary of PBTIMA and CWB Regression Analysis

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.524	.274	.165	0.372457

(a) Predictors: (Constant), PBTIMA.

As given in Table 5.12, R value is calculated to be 0.524 and R square value is .274.

These results denote that the result of regression equation is satisfying.

Table 16. Regression Coefficients of Dependent Variable CWB

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.833	.264		6.935	.000
TM1	.060	.034	.131	1.742	.083
TM2	.005	.026	.014	.186	.852
TM3	.064	.037	.141	1.736	.084
TM4	-.082	.070	-.117	-1.183	.238
TM5	-.071	.050	-.137	-1.418	.158
TM6	-.025	.031	-.058	-.828	.409
TM7	.027	.033	.063	.819	.414
TM8	.002	.025	.006	.088	.930
TM9	.044	.050	.080	.882	.379
TM10	.005	.052	.010	.103	.918

Table 16. Regression Coefficients of Dependent Variable CWB (Continued)

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
TM11	-.021	.040	-.042	-.536	.592
TM12	.008	.043	.016	.189	.850
TM13	.012	.034	.029	.349	.727
TM14	-.070	.039	-.194	-1.794	.074
TM15	.079	.037	.227	2.114	.036
TM16	-.048	.032	-.148	-1.502	.135
TM17	.077	.040	.169	1.958	.052
TM18	.010	.035	.029	.288	.774
TM19	.019	.043	.058	.451	.652
TM20	-.046	.045	-.132	-1.034	.302
TM21	.113	.039	.292	2.919	.004
TM22	.004	.034	.011	.119	.906
TM23	-.002	.043	-.005	-.056	.955
TM24	.026	.038	.058	.697	.486
TM25	.030	.045	.060	.665	.507
TM26	.037	.060	.065	.624	.534
TM27	-.026	.060	-.045	-.434	.665
TM28	-.114	.051	-.234	-2.244	.026
TM29	.060	.029	.160	2.088	.038
TM30	.066	.057	.123	1.140	.256

It should be noted for Table 16 that 30 items of PBTIMA scale are given the abbreviation of “TM” in front of their ranking numbers in the questionnaire.

As a result of the analysis, regression equation of CWB is:

$$\begin{aligned}
 \text{CWB} \approx & 1.833 + 0.060*\text{TM1} + 0.005*\text{TM2} + 0.064*\text{TM3} - 0.082*\text{TM4} - 0.071*\text{TM5} - \\
 & 0.025*\text{TM6} + 0.027*\text{TM7} + 0.0028*\text{TM8} + 0.044*\text{TM9} + 0.005*\text{TM10} - 0.021*\text{TM11} \\
 & + 0.008*\text{TM12} + 0.012*\text{TM13} - 0.07*\text{TM14} + 0.079*\text{TM15} - 0.048*\text{TM16} + \\
 & 0.077*\text{TM17} + 0.01*\text{TM18} + 0.019*\text{TM19} - 0.046*\text{TM20} + 0.113*\text{TM21} + \\
 & 0.004*\text{TM22} - 0.002*\text{TM23} + 0.026*\text{TM24} + 0.03*\text{TM25} + 0.037*\text{TM26} - \\
 & 0.026*\text{TM27} - 0.114*\text{TM28} + 0.06*\text{TM29} + 0.066*\text{TM30}
 \end{aligned}$$

The variables which are significant at 90% confidence level are listed below:

Table 17. Technologically Improved Marketing Activities for CWB Significant at 90%

Confidence Level by Regression

	t	Significance
TM1	1.742	.083
TM3	1.736	.084
TM14	-1.794	.074
TM15	2.114	.036
TM17	1.958	.052
TM21	2.919	.004
TM28	-2.244	.026
TM29	2.088	.038

And the simplified regression equation of CWB is:

$$\text{CWB} \approx 1.833 + 0.060*\text{TM1} + 0.064*\text{TM3} - 0.07*\text{TM14} + 0.079*\text{TM15} + 0.077*\text{TM17} + 0.113*\text{TM21} - 0.114*\text{TM28} + 0.06*\text{TM29}$$

The variables which are significant at 95% confidence level are listed below:

Table 18. Technologically Improved Marketing Activities for CWB Significant at 95%

Confidence Level by Regression

	t	Significance
TM15	2.114	.036
TM21	2.919	.004
TM28	-2.244	.026
TM29	2.088	.038

When the variables which are significant at 95% significance level are considered, regression equation is as follows:

$$CWB \approx 1.833 + 0.079*TM15 + 0.113*TM21 - 0.114*TM28 + 0.06*TM29$$

The results of regression analysis done between PBTIMA and CWB designate that consumer well-being is mostly determined by easiness of collection of customer data, attractiveness of advertisements and, service time and human factor in shopping. In addition to these implementations, variety and durability of goods, security of collection of customer data, personalized offerings made by companies are also important determinants for development of CWB.

By regression analysis, predictors of CWB are determined among input variables of technologically improved marketing activities. In accordance with this, eight of these marketing activities in Table 5.17 play important role compared to others in enhancing CWB, which are also found to be explaining 16.5 percent of CWB.

ANOVA Analyses

The aim of conducting ANOVA analysis in this study is to discover the significant differences between the responses given to scales. As it is hypothesized, it is expected for the consumers to develop different insights and behave differently during shopping process in accordance with their adoption and use of technological improvements in the marketplace. In order to test the related hypothesis, ANOVA analysis is applied based on the outcomes of the scales.

A total of two different ANOVA analyses were conducted within the scope of this study. And these analyses investigate how consumers' behavior toward technological improvements in marketing and their level of consumer well-being show difference from one to another because of their different quality of life (QOL) perceptions. At this point, one important consideration should be stated before representing the findings. That is, the responses given to two different perception levels of QOL are merged, since, as can be seen from Table 9 that, only 2 people claimed for their QOL not being positively affected by technological improvements in marketing at all. Because of this, these 2 responses are added to the next nearest response of "not very positively affected". Thus, it should be taken into consideration through the ANOVA analyses that, three QOL levels were used, which are affected by technological improvements in marketing very positively (67 responses), partially positively (144 responses) and not very positively (20 responses).

Hypothesis 8: The benefits of technological improvements in marketing (V2) will be perceived differently by consumers who experience different levels of improvements in their overall consumer quality of life (V3).

Table 19. ANOVA Analysis Results - Perceived Benefits from Technologically Improved Marketing Activities (PBTIMA) and Overall Consumer QOL

	F	Sig.	μ_1	μ_2	μ_3
Collection of customer data from various channels (telephone, Internet, sales points, etc.) in a much shorter period time	12.180	0.000	3.15	3.60	4.30
Personalized advertisements and marketing communications reaching the right target market at the right time and place through mobile advertising	11.888	0.000	2.85	3.66	4.10
Capability of companies to offer personalized alternatives to customers (promotions, information about products and prices, etc.)	11.291	0.000	3.30	3,93	4.30
Increased security in companies' collection of customer data	11.282	0.000	3.20	3,85	4.40
Improved attractiveness of advertisements and other marketing communications activities in terms of visual or other attributes	10.067	0.000	3.00	3,63	4.09
Frequent exposure to advertisements and marketing communications activities	7.628	0.001	2.60	3,18	3.67
Increased level of information companies own about customers	7.551	0.001	2,70	3,32	3.77
Being exposed to advertisements and marketing communications activities in a higher variety of media (TV, Internet, telephone, outdoor) and any visible environment	7.507	0.001	2.60	3.36	3.70

The eighth hypothesis was tested by conducting One-way ANOVA analysis. In accordance with the results, consumers who consider that their quality of lives enhance at diverse levels also perceive different degrees of benefits from 8 of technological improvements in marketing among 30. As can be seen from the Table 19, eight improvements in marketing are the ones which greatly effect consumers' perception of quality of lives at 99% confidence level, since they have a significance value less than 0.01. Thus, the degree of consumers' quality of lives highly differentiates from each

other when they perceive different levels of benefits form these improvements in marketing. Thus, Hypothesis 8 is supported.

It should also be noted that, the results verify the fact that the lower the PBTIMA, the less the enhancement of QOL by such activities, and vice versa.

To have a closer look, it can be said that consumers' QOL is much greatly improved when companies provide better services in terms of data collection –at high speed, from different channels and secure- and when they can provide customized solutions to consumers using the huge amount of data stored in their databases. Thus, consumers are willing to take part in data transmission in exchange for taking better services in terms of promotions or customization. Another significant improvement in marketing that lead enhancing quality of life of consumers is seen as the evolution of advertising. Consumers find it highly beneficial for advertisements being conveyed via cellular phones which catch the consumer at the right place. In addition it is also found to be important for advertisements being more attractive and being exposed to them much frequently.

In conclusion, it can be said that in today's highly competitive environment of marketplace, consumers do not want to spend an excessive effort by being to much involved with searching and finding the right kind of product in accordance with their needs. Instead, they are inclined for companies to take a part of the responsibility in shopping process by introducing their products or services, informing customers about the products or services they provide, offering the best solution to customers in terms of product and price, and reaching customers anywhere they are. Such opportunities provided by companies are seen by consumers to be enhancing consumer quality of life greatly.

For further description of the relationship, multivariate analysis of Discriminant Analysis can be conducted to test Hypothesis 8.

Hypothesis 9: In the scope of technologically improved activities, the enhancement of CWB (V4) is felt differently by consumers who experience different levels of improvements in their overall consumer quality of life (V3).

Table 20. ANOVA Analysis Results – Consumer Well-Being (CWB) and Overall Consumer Quality of Life (QOL)

	F	Sig.	μ_1	μ_2	μ_3
CWB Average Score	19.431	0.000	2.33	2.72	2.92

The second One way ANOVA analysis was conducted to test the ninth hypothesis that, as a result of technologically improved marketing activities (TIMA), the state of consumer QOL diverse as levels of their CWB differ. Taking QOL perceptions as the independents, a significant difference among the CWB average scores was sought. The analysis produced a Sig. value of 0.000 that is below 0.01, which can be interpreted that the difference between CWB levels is significant regarding the state of consumers' QOL. Moreover, in Table 20 average CWB score for each QOL level can also be found. It can be seen that CWB level increases as consumers' state of QOL improves. In the light of these results, it can be said that Hypothesis 9 is supported.

CHAPTER 6

CONCLUSION AND IMPLICATIONS

This research provides an intense survey of literature on people's perception of technology and attitudes they have toward it; diffusion of technology in organizations and in their marketing implementations; sociological importance of quality of life (QOL); the concept of well-being, and appearance of consumer well-being (CWB) in different fields. In the survey part of the research a comprehensive questionnaire is directed to 231 participants with demographic characteristics parallel to the target profile of being an experienced customer.

In this thesis; people's general disposition toward technology (GDiT), perceived benefit levels of consumers from technologically improved marketing activities (PBTIMA), effect of technological improvements in marketing on QOL of consumers (ITIM-QOL), effect of technological improvements in marketing on CWB (ITIM-CWB), the correlation between people's GDiT and their PBTIMA, the correlation and the relationship between consumers' PBTIMA and enhancement of their CWB, the relationship between consumers' PBTIMA and improvement in their QOL, the relationship between improvement in consumers' QOL as a result of technological improvements in marketing (TIMA) and their CWB are studied. According to the proposed relations, a model in parallel with the hypotheses was developed and supported by the analyses results.

Descriptive findings suggest that the majority of the respondents are between ages 24 and 35, 84 percent of which claimed to have a disposable income level enough

to meet or exceed his/her needs. These results confirm that the respondents are experienced enough to contribute to this study.

In terms of measuring people's GDIT, it was found that participants were aware of both advantages and disadvantages that technology brought into their lives. Besides this fact, they can be said to have a positive attitude toward technology.

When the level of benefits they perceive from TIMA were asked by a self-constructed 30-item scale, the participants responded to be attaching very high values to improvements in service capabilities of companies in terms of quality and payment transactions, also to improvements in production systems in terms of products being safer, more durable and environment friendly. Developments in distribution systems that lead consumers reach products easily, and being more informed about both companies and products as a result of technological advancements were also found to be highly beneficial for consumers. In addition to these, less but not low degree of value was attached to those marketing activities related with customer relationship management (CRM) and advertisement.

The impact of TIMA on consumers' QOL in general was investigated by a single question, which was attained to be "positive" by responses of 91.3 percent of respondents having this perception. Thus, people believe that TIMA increase their QOL.

Enhancement in CWB of respondents as a result of TIMA was also investigated and found to be supporting the hypothesis that such marketing activities do enhance CWB. The stage of shopping experience that consumers feel the enhancement at most is the acquisition stage, in which they can shop being more conscious about products and prices in more entertaining environments. Making the products they bought their lives much smoother is one another factor that improves their level of CWB at most.

The results of correlation analysis conducted between people's GDIT and their PBTIMA show that the correlation between these two variables is not strong but significant. As further analysis can be encouraged for these variables, it can be suggested that the reason for the low correlation is because these two variables are stemming from separate fields of interest where, one of them include all kinds of technological elements in life in general, the other one is restricted with marketing.

The second correlation analysis of this study was made between consumers' PBTIMA and enhancement of their CWB as a result of these improvements. The correlation between two variables was significant but not high. In order to further analyze the relationship between them, multiple regression analysis was performed. The results of regression analysis give that, eight of TIMA are the predictors of CWB. Thus, eight out of thirty marketing implementations proposed to respondents were found to be significantly related with CWB. These marketing implementations include variety and durability of products, easiness and security of collection of customer data, personalized offerings of companies to consumers, attractiveness of advertisements and other marketing communication tools, service time and human factor during shopping. Among these implementations, CWB is most significantly related with the level of quality of data collection, attractiveness of advertisements and the level of the quality of service, in terms of time spent and technology used.

ANOVA analysis performed between consumers' PBTIMA and their QOL revealed results that, eight of thirty marketing activities proposed to respondents were found to be significantly affecting level of QOL. These activities are included by marketing communication branch of marketing that are CRM activities of companies and advertisements. These results conclude that, QOL of consumers is increased when

they are informed more by companies, so that they do not have to spend much effort in search and investigation of products.

The last of the analyses is conducted in order to define the relationship between QOL and CWB of respondents. The results of ANOVA analysis denoted that the relationship between the two variables is significant and they are positively correlated. Thus, as QOL of consumers increase, their CWB also increases, and vice versa.

In brief, results of the analyses conducted are consistent with each other and reveal interesting results. First of all, technological improvements that take place in the marketplace through several marketing implementations have positive affect on both QOL and CWB. Secondly, the relationship between QOL and CWB is significant and they are positively correlated.

The next important finding of the study is that, the most crucial stage of consumer life domain is the acquisition stage, where the physical purchase of the products is made and CWB can be improved at most. In addition to this, marketing implementations that enhance CWB significantly are related with product specifications, service capability and CRM activities of companies. Thus, companies should improve their abilities in these areas in technological terms and try to touch the consumers using them during the acquisition of products.

Another considerable finding of the study is the reveal of TIMA that contribute to QOL most. According to the results of the analyses, it was found that, consumers' QOL is improved significantly in relation with promotional implementations of companies. The more consumers get involved with CRM activities and expose more to advertisements, they feel the quality of their lives are increased more, since one of the

main parts of the shopping process of investigation to get to know the product or company is getting completed by companies.

On the other hand, TIMA that consumers perceive benefits from include some more branches of marketing. Consumers attach very high values to the technological improvements in product and distribution as well as service capability and promotional implementations of companies. This situation shows that, consumers do not see the improvements in product, in terms of being in high variety, safe, environment-friendly, durable, etc. as a contribution, but as a must. With the same manner, improvements in distribution capabilities of companies are highly valued by consumers however; these advancements alone such as increased accessibility of companies, availability of products are not enough to improve neither QOL of consumers nor CWB.

The findings of this study provide constructive suggestions to managers for implementation of TIMA. Firstly, it should be noticed that consumers will not necessarily be content and satisfied when marketing implementations that they give the greatest value is provided to them by companies. As the second outcome, it can be said that, in today's technology intense marketplace, being close to consumers by CRM systems, increasing service capability and producing products that help consumers feel comfortable to own is highly crucial in order to enhance CWB. In addition to these implementations, being noticeable by attractive marketing tools and advertisements will improve the QOL of consumers. The study also provide general perspective of the behavior of consumers within the technologically surrounded marketplaces.

Further studies should focus on the sources of why some technology impacted marketing implementations which are perceived to be highly beneficial by consumers do

not contribute on improvement of QOL and CWB heavily. Identification of the source would help developing new methods of marketing that would lead customer satisfaction.

Besides, CWB can be investigated by grouping its dimensions in accordance with the corresponding stage of shopping. By this way, further analyses can be performed using each stage of shopping experience (acquisition, consumption, possession, etc.).

In addition to these, improvement on the technological implementations in marketing scale and CWB scale can be made, in order to increase the correlation coefficient between them. Results of regression analysis on these variables are encouraging but it can still be advanced.

APPENDIX A

QUESTIONNAIRE

This questionnaire study is prepared in the content of the thesis “Marketing-Wise Benefits of Technological Improvements on Consumer Well-Being” by Nur Esra Kardeş who is a master student in Management Information Systems Department under the advisory of Assist. Prof. Dr. Hande Kımılođlu. All the questions must be answered completely for your questionnaire to be counted in the evaluation. You are not obliged to claim your name in order to participate in the study. Thank you for your contribution to our study.

PART 1

Please put an [x] next to the answer that best suits you.

1. Your Age Group

18-23	
24-29	
30-35	
36-41	
42-47	
48-53	
Over 54	

2. Your Gender

Female	
Male	

3. Your Marital Status

Married	
Single	
Divorced/Widow	

4. Education

High School Graduate	
University Graduate	
Postgraduate Degree	
Other (please specify)	

5. Personal monthly income

< 1,000 TL	
1,000-2,500 TL	
2,500-4,000 TL	
> 4,000 TL	

6. Please specify the level your income can compensate your consumption, needs and desires.

My income can compensate most of my needs and desires	
I can hardly compensate my needs and desires	
My income can not compensate most of my needs and desires	

PART 2

Below are given statements about technology that is used frequently in our daily lives. Please tick the answer you agree with.

		Strongly Disagree	Disagree	Agree	Strongly Agree
1	As a result of technological developments, people can benefit from changes and novelties in science rapidly.				
2	Technological developments offered to consumers can become outdated quickly.				
3	Technology increases people's productivity and efficiency.				
4	Technology can sometimes unnecessarily complicate people's lives.				
5	Technology makes it easier for people to meet their needs.				
6	Technology can trigger or intensify needs that have not been felt or realized by individuals before.				
7	Technology makes people feel more intelligent and successful.				
8	People may feel incompetent when they cannot use technology well.				
9	Technology brings system and order to many aspects of human life.				
10	Technology may cause chaos when it is not used well.				
11	Technology makes people more independent with the conveniences it offers.				
12	Technology imprisons people to itself.				

PART 3

Below are given statements about improvements in marketing caused by technology. Considering how much each of these improvements provide benefit to “your life”, please tick the answer you agree with.

		Not Beneficial At All	Not So Beneficial	Undecided	Partially Beneficial	Highly Beneficial
1	Increase in variety in both durable consumer goods (automobile, mobile phone, white goods, etc.) and nondurable consumer goods (fast moving consumer goods)					
2	Frequent renewals and improvements of the attributes of products offered to consumers					
3	Production of products with improved durability					
4	Production of products in a way that improves customer safety					
5	Production of products from nature-friendly inputs, protecting the environment and human health					
6	Production of products by companies that are customized according to individual or customer groups					
7	Increase in price variety in most products					
8	Rapid and frequent decreases in the prices of high-technology products					
9	The availability of a product in various sales points					
10	Constant accessibility of companies					
11	Emergence of alternative shopping channels (TV, telephone, Internet, etc.)					
12	The geographical diversity of markets in which firms can sell their products					
13	Improvements in shopping environments with respect to design, architectural and technological elements					
14	Increased security in companies' collection of customer data					
15	Collection of customer data from various channels (telephone, Internet, sales points, etc.) in a much shorter period time					
16	High amount of customer information recorded and retained by companies					

PART 3 (Continued)

		Not Beneficial At All	Not So Beneficial	Undecided	Partially Beneficial	Highly Beneficial
17	Capability of companies to offer personalized alternatives to customers (promotions, information about products and prices, etc.)					
18	Increased level of information companies own about customers					
19	Frequent exposure to advertisements and marketing communications activities					
20	Being exposed to advertisements and marketing communications activities in a higher variety of media (TV, Internet, telephone, outdoor) and any visible environment					
21	Improved attractiveness of advertisements and other marketing communications activities in terms of visual or other attributes					
22	Personalized advertisements and marketing communications reaching the right target market at the right time and place through mobile advertising					
23	Increased level of information customers have about products and service in the market					
24	Customers' opportunity to find information about companies, people, etc. in a much shorter period of time					
25	Improved security of payment systems					
26	Being able to make payments easily and in various ways					
27	Being able to find a product easily in a specific sales point (computerized systems to locate products, opportunity to order a desired product immediately, etc.)					
28	Decrease in service time during shopping (food ordering, retail shopping, etc.)					
29	Decrease in human factors in shopping (payment systems, learning product prices through barcodes, etc.)					
30	Faster and more effective provision of after sale services					

PART 4

Please state overall impact of technological advancements in marketing on your quality of life as a consumer.

Very positively affected	
Partially positively affected	
Not very positively affected	
Not positively affected at all	

PART 5

Below are given statements about consumers' shopping experiences and behavior. Considering technologically improved marketing activities you face in the marketplace, please tick the answer you agree with.

		Strongly Disagree	Disagree	Agree	Strongly Agree
1	I believe most of the products I buy deserve the money I spend for them.				
2	I believe shopping has been more entertaining.				
3	I believe the quality of service offered to consumers has increased.				
4	I believe the products that I buy increase the quality of my life.				
5	I believe the products that I buy make my life smoother.				
6	I believe I spend too much money and buy goods that I really do not need.				
7	I believe I am more satisfied with after sale services.				
8	I believe I am a more conscious and informed customer.				
9	I believe I have been valued more by companies.				

APPENDIX B

QUESTIONNAIRE (TURKISH)

Bu çalışma Boğaziçi Üniversitesi Yönetim Bilişim Sistemleri Bölümü Yüksek Lisans öğrencisi Nur Esra Kardeş tarafından yapılmakta olan ve Yrd.Doç.Dr.Hande Kımiloğlu'nun danışmanlığında yürütülen "Teknolojik Gelişmelerin Firmaların Pazarlama Faaliyetleri ve Tüketicilerin Yaşam Kalitesi Üzerindeki Etkileri" konulu tez çalışması kapsamında gerçekleştirilmektedir. Anketi yanıtlamak için isim belirtmeniz gerekmemektedir. Çalışmamıza katkıda bulunduğunuz için teşekkür ederiz.

1. BÖLÜM

Lütfen size uygun olan seçeneğin yanına [x] işareti koyunuz.

1. Yaş Grubunuz

18-23	
24-29	
30-35	
36-41	
42-47	
48-53	
Over 54	

2. Cinsiyetiniz

Kadın	
Erkek	

3. Medeni Durumunuz

Evli	
Bekar	
Boşanmış/Dul	

4. Eğitim Durumunuz

Lise Mezunu	
Önlisans/Lisans Mezunu	
Y.lisans/Doktora Mezunu	
Diğer (Lütfen Belirtiniz)	

5. Aylık Ortalama Kişisel Geliriniz

< 1,000 TL	
1,000-2,500 TL	
2,500-4,000 TL	
> 4,000 TL	

6. Gelirinizin tüketim, istek ve ihtiyaçlarınızı karşılama düzeyini aşağıdaki ifadelerden birini seçerek belirtiniz.

İstek ve ihtiyaçlarımın büyük bir kısmını karşılayabilecek kadar gelirim var.	
İstek ve ihtiyaçlarımı ancak karşılayabiliyorum.	
Gelirim istek ve ihtiyaçlarımın çoğunu karşılayamayacak düzeyde.	

2. BÖLÜM

Aşağıda, günümüzde insan yaşamının bir parçası haline gelmiş olan teknolojinin etkileri ile ilgili ifadelere yer verilmiştir. Bu ifadelere katılma derecenizi uygun seçeneği işaretleyerek belirtiniz.

		Kesinlikle Katılmıyorum	Katılmıyorum	Katılıyorum	Kesinlikle Katılıyorum
1	Teknolojik gelişmeler sayesinde insanlar bilim alanındaki değişim ve yeniliklerden kısa süre içerisinde faydalanabilirler.				
2	Tüketiciye sunulan teknolojik gelişmeler çabuk eskiebiliyor/modası geçebiliyor.				
3	Teknoloji insanın üretkenliğini ve verimliliğini artırır.				
4	Teknoloji bazen insan hayatını gereksiz yere zorlaştırabilir/karmaşılaştırabilir.				
5	Teknoloji insanların ihtiyaç ve gereksinimlerini karşılamasını kolaylaştırır.				
6	Teknoloji insanların daha önce farkına varmadıkları gereksinimlerinin ortaya çıkmasına veya bu ihtiyaçlarının artmasına neden olur.				
7	Teknoloji insanların kendilerini daha zeki ve başarılı hissetmelerini sağlar.				
8	İnsanlar teknolojiyi iyi kullanamadıkları zaman kendilerini yetersiz hissedebilirler.				
9	Teknoloji insan hayatının birçok boyutuna sistem ve doze getirir.				
10	Teknoloji iyi kullanılmadığı zaman karmaşaya neden olabilir.				
11	Teknoloji, sağladığı kolaylıklarla kişileri daha bağımsız hale getirir.				
12	Teknoloji insanları kendine mahkum hale getirir.				

3. BÖLÜM

Aşağıda firmaların çeşitli pazarlama faaliyetlerinin teknolojik gelişmeler sayesinde göstermiş ya da göstermekte olduğu değişiklikler belirtilmiştir. Bunların her birinin bir tüketici olarak "sizin yaşamınıza" ne derece fayda sağladığını uygun aralığı işaretleyerek belirtiniz.

		Hiç Faydalı Değil	Pek Faydalı Değil	Kararsızım	Kısmen Faydalı	Çok Faydalı
1	Gerek dayanıklı tüketim ürünlerinde (otomobil, cep telefonu, beyaz eşya, vs.), gerekse dayanıksız tüketim ürünlerinde (gündelik tüketim ürünleri) çeşitliliğin artması.					
2	Tüketiciye sunulan ürünlerin özelliklerinin sık aralıklarla yenilenmesi ve geliştirilmesi.					
3	Ürünlerin çok daha uzun süre kullanılabilir dayanıklılıkta üretilmesi.					
4	Ürünlerin tüketicinin güvenliğini arttıracak biçimde üretilmesi.					
5	Doğal malzemelerden üretilmiş ya da çevre ve insan sağlığına daha saygılı ürünler üretilmesi.					
6	Firmaların kişiye ve/veya, bir müşteri grubuna özel ürünler üretebilmeleri.					
7	Birçok üründe fiyat yelpazesinin genişlemesi.					
8	Yüksek teknoloji ürünlerinin fiyatlarının kısa zamanda ve sık aralıklarla düşmesi.					
9	Bir ürünün çok çeşitli satış noktalarında bulunabilmesi.					
10	Firmaların her zaman ulaşılabilir olması.					
11	Alternatif alışveriş kanallarının ortaya çıkması (TV, telefon, İnternet, vs.).					
12	Firmaların ürünlerini coğrafi olarak çeşitli pazarlarda satabilmeleri.					
13	Alışveriş mekanlarının tasarım, mimari özellikler, teknolojik donanım, vs. açısından gelişmesi.					
14	Firmaların müşteri bilgilerini daha güvenli şekilde toplayabilmeleri.					
15	Müşteri bilgilerinin çeşitli noktalardan (telefon, İnternet, satış noktası, vs.) çok daha kısa süre içinde toplanabilmesi.					
16	Müşterilerle ilgili birçok bilginin firmalarda kayıtlı kalması.					

3. BÖLÜM (Devam)

		Hiç Faydalı Değil	Pek Faydalı Değil	Kararsızım	Kısmen Faydalı	Çok Faydalı
17	Firmaların müşteriye özel seçenekler sunabilmesi (promosyon, fiyat ve ürünler hakkında bilgilendirmeler, vs.).					
18	Firmaların müşteriler hakkında daha fazla bilgiye sahip olması.					
19	Reklam ve tanıtımlarla daha sık karşılaşılıyor olmak.					
20	Reklam ve tanıtımlarla daha çeşitli mecralarda (TV, İnternet, telefon, dış mekan) ve görülebilir her yerde karşılaşmak.					
21	Reklam ve tanıtımların görsel ya da diğer özellikler açısından daha etkileyici şekilde yapılabilmesi.					
22	Mobil reklamcılık sayesinde doğru yer ve zamanda, doğru hedef kitlelere ulaşan kişiselleştirilmiş reklam ve tanıtımların yapılması.					
23	Müşterilerin piyasadaki ürün ve hizmetler hakkında daha fazla bilgi sahibi olmaları.					
24	Müşterilerin firmalar, kişiler, vs. ile ilgili bilgilere kolaylıkla çok daha kısa sürede ulaşabilmeleri.					
25	Ödeme sistemlerinin daha güvenli hale gelmiş olması.					
26	Ödemenin çeşitli biçimlerde ve kolaylıkla yapılabilmesi.					
27	Belirli bir satış noktasında istenen ürünün kolaylıkla bulunabilmesi (bilgisayarda ürün bulma, istenen ürünün anında sipariş edilebilmesi, vs.).					
28	Alışverişte servis süresinin kısılması (yemek siparişi, mağaza alışverişi, vs.).					
29	Alışverişte insane faktörünün azalması (ödeme sistemleri, ürün fiyatını barkod ile öğrenme, vs.).					
30	Satış sonrası hizmetlerin daha hızlı ve etkin biçimde sağlanması.					

4. BÖLÜM

Teknolojik gelişmelerin ve bu gelişmelerin firmaların pazarlama faaliyetleri üzerindeki etkilerinin sizin “tüketici olarak” genel yaşam kalitenize ne derece katkı sağladığını düşünüyorsunuz? Uygun olan seçeneği işaretleyerek belirtiniz.

Çok olumlu etkiliyor	
Kısmen olumlu etkiliyor	
Pek olumlu etkilemiyor	
Hiç olumlu etkilemiyor	

5. BÖLÜM

Aşağıda bireylerin tüketim davranış ve süreçleri ile ilgili çeşitli ifadeler bulunmaktadır. Bu ifadelere katılma derecenizi lütfen belirtiniz. Teknolojik gelişmelerin firmaların tüketicilere yönelik pazarlama faaliyetleri üzerindeki etkileri sayesinde:

		Kesinlikle Katılmıyorum	Katılmıyorum	Katılıyorum	Kesinlikle Katılıyorum
1	Satın aldığım çoğu ürün için ödediğim paranın karşılığını aldığımı düşünüyorum.				
2	Alışveriş/satınalma sürecinin genel olarak çok daha keyifli hale geldiğini düşünüyorum.				
3	Tüketicilere sunulan hizmet kalitesinin yükseldiğini düşünüyorum.				
4	Satın aldığım ürünlerin yaşam standartımı yükselttiğini düşünüyorum.				
5	Satın aldığım ürünlerin hayatımı kolaylaştırdığını düşünüyorum.				
6	Çok fazla harcama yaptığımı, gereksiz ürünler de satın aldığımı düşünüyorum.				
7	Satınalma sonrası memnuniyetimin yükseldiğini düşünüyorum.				
8	Daha bilinçli, bilgili bir tüketici haline geldiğimi düşünüyorum.				
9	Bir müşteri olarak bana firmalarca daha fazla değer verildiğini, istek ve ihtiyaçlarımın daha iyi şekilde karşılandığını düşünüyorum.				

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