ONLINE PRICE-RELATED BEHAVIOR AND ATTITUDE

TOWARD VARIOUS PRICING MODELS

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Online Price-Related Behavior and Attitude Toward Various PricingModels

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Thesis Abstract

Gözde Özdemir,

"Online Price-Related Behavior and Attitude Toward Various Pricing Models"

The importance of consumer attitudes and behavior toward price on purchase processes has long been known. Retailers have employed different marketing applications periodically in order to shape and direct these attitudes and behavior. With the spread of emerging technologies and the diffusion of Internet as a part of our daily lives, these applications have adapted into online markets, and become directive in consumers' purchase decisions in virtual environment. In addition, concentration of consumers' interest for online markets has increased the competition among online sellers, thus several online retailer forms have evolved into e-stores offering differentiated prices and buying processes, in order to gain competitive advantage. On the basis of these facts, the purpose of this thesis is to investigate the factors affecting price-related behaviors of consumers in the online environment, as well as the awareness of and attitudes toward different online pricing models.

The data collected as a survey study from 253 participants, and has been tested through descriptive, reliability, correlation, multiple regression, T-test, and ANOVA analyses, aiming to reach findings.

Results of this study reveal that consumers have high tendency to search for prices on the Internet, dependent to their price knowledge and value consciousness. Furthermore, the awareness for many online pricing models has been formed, and the models with high awareness rates are found to be preferred highly in consumers' purchase processes.

Tez Özeti

Gözde Özdemir,

"İnternet'te Fiyata Yönelik Davranışlar ve Çeşitli Fiyatlandırma Modellerine

Yönelik Tutumlar"

Tüketicilerin fiyata yönelik tutum ve davranışlarının, satın alma süreçlerindeki önemi uzun zamandır bilinmektedir. Bu tutum ve davranışları şekillendirmek ve yön vermek adına satıcılar, her dönem farklı pazarlama uygulamaları kullanagelmişlerdir. Gelişen teknolojilerin yaygınlaşması ve İnternet'in günlük hayatımızın bir parçası haline gelmesi ile birlikte, bu uygulamalar İnternet pazarlarına da uyarlanmış, ve sanal ortamda da müşterilerin satın alma kararlarında yön verici olmaya başlamıştır. Ayrıca İnternet pazarlarına yönelik ilginin yoğunlaşması, sanal satıcılar arasındaki rekabeti artırmış, pek çok perakende formunun rekabet avantajı sağlayabilmek için farklı fiyatlandırma ve satış süreçleri sunan mağazalara dönüşmesine neden olmuştur. Bu gerçekler ışığında bu tez çalışması, tüketicilerin İnternet ortamındaki fiyata yönelik davranışlarını etkileyen faktörler ve İnternet'teki farklı fiyatlandırma modellerine yönelik farkındalık ve tutumları araştırmayı amaçlamaktadır.

253 kişinin katılımıyla gerçekleştirilen anket çalışmasından derlenen veriler, tanımlayıcı, güvenilirlik, korelasyon, çoklu regresyon, T-testi, ve ANOVA analizleri kullanılarak test edilmiş ve sonuçlara ulaşmak amacıyla kullanılmıştır.

Analiz sonuçları tüketicilerin, fiyat bilgileri ve değer bilinçliliklerine bağlı olarak İnternet üzerinde fiyat araştırma eğilimlerinin yüksek olduğunu ortaya koymaktadır. Ayrıca tüketiciler arasında İnternet'teki farklı fiyatlandırma modellerinin pek çoğuna karşı farkındalık oluşmuş olup, farkındalığı yüksek olan modellerin tüketicilerin satın alma süreçlerinde tercih edilme olasılığının da yüksek olduğunu ortaya çıkarmıştır.

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CHAPTER I

INTRODUCTION

Web technologies are continuously growing and evolving to disperse in our lives by offering virtual alternatives to meet the needs emerging in our daily routine. Electronic commerce is also a one of the opportunities offered by the Internet, gaining increasing attention of consumers with its convenience. However, the changes resulted from the adaption of offline markets into online markets reflect upon consumers' behavior, changing their attitude towards and expectations from the market, and divide the concept of consumers into two as online and offline consumers. Offline consumer behavior has received much attention from researchers up to now. Further, a study of existing literature on consumer behavior shows an increased interest on investigation of online consumers.

According to the literature, one of the main factors of consumers' behaving differently in the online environment is found as the structural changes in pricing patterns of products or services on the Internet. General opinion about online consumers carried out so far is that they tend to be concentrated on lower prices in their purchasing decisions. Therefore, Internet offers a variety of tools in order to help consumers in meeting their price expectations. Through these tools, consumers are able to search for prices easily and determine their most appropriate choice by comparing different price alternatives. For the same reason, many websites have emerged which apply various price-based models offering consumers special discounts and even the opportunity to set their own prices. For example, E-bay and

its Turkish participant *Gittigidiyor* are the most popular examples of price-based models, applying an auction model. With more than 94 million active users, E-bay has reached $62 billion transaction volume in 2010. These numbers suggest that the the ability of its users to set prices rather than perceive as something imposed to pay has brought E-bay competitive advantage on e-commerce. In addition, the recent prevalence of special discount stores such as Groupon with its Turkish participant *Şehirfırsatı*, and price search engines such as *Akakçe* in Turkey also emphasizes the importance of price in consumers' purchase decisions.

Price concept which takes increasing attention of online markets as an aspect of online consumer behavior needs to be more structured and theorized into an integrated framework. In order to explain price-related decisions of consumers, firstly their online price search behaviors are needed to be explored. Online price search behavior includes the matter of consumers' tendency to price search, their frequency of price search, product categories that consumers majorly interested in their price range, and situations in which consumers are willing to or unwilling to search further for lower prices. The search behavior of consumers also leads them to be aware of the opportunities offered by the different online price-based models, and to take advantage of a model which fits their purchase decision. But before understanding these behaviors, it is necessary to figure out consumers' general price judgments. For example, price knowledge of consumers provides an acceptable price range for a product in their mind, thus their price search activities may be performed depending on this price range. Further, this acceptable price range may be result in noticing sellers with different price levels and comparing them in terms of their price levels. In addition, internal reflection of a price range in consumers' mind may vary as negative or positive.

Based on this approach, we decide to investigate "the factors influencing consumers' price-related behaviors in the online environment, and their awareness and acceptance of different online price-based model usage" in this thesis. We find out 6 different online price-based models to be measured in terms of their awareness and usage rates. These models are grouped as shopbots, outlets, discount stores, auctions, reverse auctions, and barters. The main objectives of this study are:

- Measuring consumers' overall price knowledge to find out what extent it affects their perception of different price levels in the online environment.
- Measuring consumers' overall price perceptions to find out what extent it affects their price search tendency in the online environment.
- Measuring consumers' perception of different price levels to find out what extent it affects their price search tendency as well as their attitudes toward different price-based models in the online environment.
- Measuring consumers' price search tendency in the online environment to find out what extent it affects their awareness and usage of different online price-based models.
- Measuring consumers' overall price-related behaviors including their price search tendency, their frequency of price-related search, product categories that consumers majorly interested in their price range, and situations in which consumers are unwilling to search further and willing to pay higher prices.

For this purpose, an extensive survey of the current literature was conducted. Consequently, a theoretical model revealing a set of independent variables which may influence consumers' price-related attitudes and behavior on the Internet was

proposed. Seven hypotheses were generated and tested with a questionnaire conducted in the scope of this model to verify the relationships. After the data collection process, we came up with 253 responses ready to analyze. Descriptive, reliability, correlation, multiple regression, T-test, and ANOVA analyses were used in order to evaluate the collected data. The outcome of these analyses have shown that consumers have remarkable knowledge in recognition of prices, and tend to evaluate these prices in relative terms of price paid and quality received. Within this profile of respondents, they are highly eager to search for different prices on the Internet, and taking a positive attitude towards different price-based models which they aware of.

This thesis is composed of following chapters:

- Chapter 1 includes the introduction as an overview of the study.
- Chapter 2 reviews the literature on consumers' price-related behavior and significance of the price concept in the online marketplaces.
- Chapter 3 introduces the model and the hypotheses of the study.
- Chapter 4 presents the methodology of the study including preparation of the questionnaire and the data analysis approach.
- Chapter 5 presents the findings and results of the analyses.
- Chapter 6 covers the discussion of findings, implications, and limitations of the study.

CHAPTER II

LITERATURE REVIEW

In order to determine the scope and the direction of the study, literature survey was conducted about the critical concepts of price-related consumer attitudes and behavior in the offline and online environment. The relevant literature was compiled under three main sections: price knowledge, price perceptions, and online price-related attitudes and behavior. Initially, the literature was explored to find out how consumers develop their price knowledge by identifying the concepts of reference price, self-assessed price knowledge, and price mavenism. In the second section, we investigated how consumers perceive and process their price knowledge. Literature provided numerous researches on price perception constructs, mainly grouped as price consciousness, price-quality schema, value consciousness, and prestige sensitivity, related with the focus of our study. Finally, we concluded with the studies made on online price-related perceptions, explaining how consumers adapt to and perceive the changing shopping environment.

Price Knowledge

Consumer price knowledge is a well established concept in the marketing literature that has considerably attracted the attention of researchers. There are plenty of studies that have approached the topic of price knowledge from very distinct perspectives. It has been found that consumer price knowledge is influenced by both

shopping environment and consumers' idiosyncrasies. In addition, they argue that consumers have a fuzzy working knowledge of prices and they may not recall the prices accurately, so that reference price effects in choice models (Vanhuele and Dreze, 2002 c.f. Yin and Paswan, 2007).

Reference Price

The concept of consumer reference price is one of the most extensive and explanatory research area among price knowledge studies, which tries to find out how consumers develop their price knowledge and how it affects their buying decisions. Reference price has been defined as "the standard against which consumers evaluate the actual price of products they are considering" (Rosch, 1975 c.f. Yin and Paswan, 2007). There are two components of reference price that have been identified based on the location of information about the price: internal and external reference price (Mazumdar and Papatla, 2000).

Internal reference price (IRP) is a memory based approach which is formed with the price of a product in consumers' past experiences; so that consumers have an idea of how much should be paid to that brand before they shop (Mazumdar and Papatla, 2000). On the other hand, external reference price (ERP) is set during a purchase occasion depending on the observed prices and can be reset when encountered with new information. Consequently, external stimuli determine the knowledge of how much a consumer should pay for a brand (Burman and Biswas, 2004; Hardesty and Suter, 2005; Hardie, Johnson and Fader, 1993; Mayhew and Winer, 1992; Mazumdar and Papatla, 2000; Yin and Paswan, 2007).

Mazumdar and Papatla (2000) segmented consumers on the basis of the differences in the importance they assign to each type of reference price, and found that use of IRP is greater for more expensive product categories and concentrated among fewer brands while ERP users are found to be more sensitive to losses. Further, Mayhew and Winer (1992) described IRP and ERP as not simply the different operationalizations of the same underlying variable because of the fact that IRP contains price comparisons between different stores in which the consumer shops, although ERP only includes the price information specific to a particular store. Even though memory-based and stimulus-based reference prices are reasonable to model consumer purchasing behavior, none of them can explain the behavior alone, but both together. Besides, consumers are found to use both based on product and consumer characteristics (Mazumdar and Papatla, 2000).

Previous price-knowledge studies revealed that memory for prices is lower than expected (Dickson and Sawyer, 1990; Le Boutillier and Neslin, 1994; Wakefield and Inman, 1993). However, according to Vanhuele and Dreze (2002), it is also possible that price knowledge will be underestimated if entirely focused on price recall and short-term memory. As clarified by Monroe and Lee (1999), price information may not be consciously remembered but may still influence consumers' price judgments. Therefore, price knowledge will be differentiated in the present study as self-assessed price knowledge, and price mavenism.

Self-Assessed Price Knowledge

The notion of self-assessed price knowledge was introduced by Yin and Paswan (2007), which refers to "consumers' knowledge or expertise about the price of a

product, obtained through prior purchase, search or use of price information of a product" (Frankerberger and Liu, 1994; Vanhuele and Dreze, 2002). Vanhuele and Dreze (2002) predict that when consumers frequently purchase a product, they are likely to develop a price knowledge, which makes them be able to notice price variations across time and different stores, thus assess the attractiveness of an advertised reference price. Therefore, a consumer's self-assessed price knowledge is stored in long-term memory, hence may not always be accessible to recall. Instead of relying on recall, as expressed by Vanhuele and Dreze (2002) recognition may alert consumers in a price change, and is also found to perform better than recall performance. Although price knowledge may not be accessible to recall and recognition, still be used in shopping, because it evokes a sense of how much the normal price would be (Monroe and Lee, 1999). In both ways, this knowledge exerts its effect on consumer choice.

Price Mavenism

Feick and Price (1987) came up with a notion that describes some consumers, who are desired to be informed about the marketplace in order to transmit information to others, as "market mavens". By modifying the definition of market mavenism, Lichtenstein et al. (1993) take a narrower perspective of the market maven and considered only one piece of marketplace information, price.

Price mavenism, as a price knowledge concept, mentions about people which are more sensitive to marketplace prices so as to deliver this information to other people. The price knowledge of a price maven is formed consciously with the effort of being a source of low price information for other people, different from self-

assessed price knowledge, which is consciously or subconsciously formed for personal utilitarian purposes. Price mavenism was mentioned formerly by Lichtenstein et al. (1993), as one of seven price-related constructs with a perception of price in its negative role, thus this is sensitivity to low price for some consumers. They define price mavenism as "the degree to which an individual is a source for price information for many kinds of products and places to shop for the lowest price, initiates discussions with consumers, and responds to requests from consumers for marketplace price information".

Price Perceptions

Price perception, the process by which consumers translate prices into meaningful cognitions (Lichtenstein et al., 1988), has been the focus of attention of many researchers so far. The price cue represents the amount of money that must be sacrificed in order to engage in a purchase transaction, so that higher prices are expected to affect purchase probabilities negatively. However, in some conditions, price may stimulate other meanings in consumers' mind and may be perceived different than its "negative role" as a monetary sacrifice (Lichtenstein et al., 1993).

It has been claimed that consumers process a price cue into a subjective internal representation –i.e. perceived price- (Monroe, 1990 c.f. Suri et al., 2003). This prediction clearly implies that consumers' price perceptions are specific to each of them and dependent to their characteristics. Although traditional economic theory operationalizes price solely as a monetary value a customer has to pay within a purchase transaction, current studies from a behavioral perspective (e.g., Burton et al., 1998; Lichtenstein et al., 1988; Lichtenstein et al., 1993; Mannuka, 2008; Suri et

al., 2003) contradicted the idea by suggesting that customers' price perception is closely related on their perception of quality, value and other beliefs.

Jacoby and Olson (1977) conceptualized the process of how consumers perceive price by employing a stimulus-organism-response (S-O-R) model. According to this model, actual prices that consumers encounter represent the stimuli, and activate perception process. The psychological processing of price cues represent the organism component of the model; including acquisition, encoding, storage of price information, as well as the development of an attitude toward price and the integration of price with other information. The encoding process plays an important role in determining how prices are perceived, because it is at this stage that the consumers interprets and evaluates the price cue (Berkowitz and Walton, 1980). In response stage, apparent results of this process are revealed as purchasing or not purchasing.

In the literature, there are four types of perception constructs identified related with the boundaries of this study, namely price consciousness, price-quality schema, value consciousness, and prestige sensitivity.

<u>Price Consciousness</u>

Price consciousness which is used equivalent to the concept of price sensitivity for a potential buyer of any product (Mannuka, 2008) identifies consumers' perception of a price cue as a monetary sacrifice. It has been stated that the acceptable price range for price conscious consumers tends to be narrow, and they generally do not want to pay higher prices for a product (Link, 1997 c.f. Mannuka, 2008). Moreover, the price conscious consumers will not be willing to pay for distinguishing features of a

product if the price difference for these features is too large. Still, they may not

necessarily pay the lowest price available, but tend to pay a lower price when the

distinguishing features of more expensive alternatives cannot be justified.

Generally accepted definition of price consciousness by several researchers is

as "the degree to which consumers focus exclusively on paying low prices for a

product and willing to refrain from buying a product whose price is unacceptably

high" (Erickson and Johansson, 1985; Kukar-Kinney et al., 2007; Lictenstein et al.,

1988; Lichtenstein et al., 1993; Monroe, 1990; Tellis and Gaeth, 1990). On the other

hand, less price conscious consumers are not very involved with the price aspect of

the purchase (Lictenstein et al., 1988), and are not likely to conduct an extensive

search of competing prices (Lichtenstein et al., 1993). Because the purpose of

further price search derives from the expectation of obtaining a lower price for the

product or confirming that the price is acceptable, consumers with higher levels of

price consciousness perceive a high level of benefits from additional search than

others (Alford and Biswas, 2002).

Price-Quality Schema

Even though consumers receive the same price information, some may judge the

price as high while others may judge the same price as low. Here, consumers

evaluate the price cue by comparing with their person-specific range of acceptable

price stored in their memory (Jacoby and Olson, 1977; Lichtenstein et al., 1988).

According to the research which tries to find out the correlations of price

acceptability, conducted by Lichtenstein et al. (1988), interpersonal variations in

price acceptability levels are found to be explained, in part, with differences in

consumers' propensity to make price-quality inferences. For some consumers, the level of the price cue may be related positively to the level of product quality (Erickson and Johansson, 1985), and consumers who perceive price in this way actually prefer paying higher prices.

Perceived quality has been defined as "the consumer's judgments about a product's overall excellence or superiority" (Zeithaml, 1987 c.f. Lichtenstein et al., 1988), and price-quality schema represents the generalized belief across product categories that the level of the price cue is related positively to the quality level of the product (Lichtenstein et al., 1993). Consequently, to the degree buyers make price-quality inferences; they believe that higher prices reflect higher quality such as better materials, finer workmanship, and so on. This meaning, in return, prices at higher levels are perceived as more acceptable (Lichtenstein et al., 1988; Suri et al., 2003). On the contrary, to the degree consumers do not make price-quality inferences, they view price as an expenditure affecting their budget without compensating returns in product quality, making these consumers more likely to accept lower prices only.

When consumers are motivated to evaluate other cues indicating a product's quality, they are less likely to process the price cue to infer quality (Rao and Monroe, 1988). However, consumers often do not have sufficient expertise of a product or its alternatives. Though, prior knowledge or familiarity with the product compensate the effects of expertise on a product, and influence consumers' use of price cue in judgments of product quality and in product choice.

Value Consciousness

Linking the two price perceptions above, price and quality concepts may be represented by relative terms in consumers' mind. As Lichtenstein et al. (1993) expressed, perception of the price cue for some consumers can be characterized by a concern with the ratio of quality received to price paid in a purchase transaction. Therefore, price may be perceived at a broader level by some consumers, and they are thus "value conscious".

Perceived value is defined as a cognitive trade-off between perceived quality and perceived monetary sacrifice (Suri et al., 2003; Zeithaml, 1987). Thus, value consciousness, briefly, reflects a concern for price paid relative to quality received (Lichtenstein et al., 1993). Value conscious consumers expect some potential benefits from their monetary sacrifice, and because perceived monetary sacrifice corresponds to the price paid, a decrease in perceived quality and/or an increase in perceived sacrifice is expected to result in a decrease in perceived value, and vice versa (Suri et al., 2003).

Results of a research of Suri et al. (2003) reveals that there are some factors affecting consumers' value perceptions, such as consumers' motivation level to shop, or obtained information amount for a product, in a way that when consumers are highly motivated to shop, an increase in information load led to higher prices being perceived as more valuable and of superior quality. In other words, with a high a motivation to shop and/or an increase in information load, price was perceived less as a monetary sacrifice and more as a quality cue, which makes the transaction more valuable. This implication also supports the previous assumption related to quality perceptions which suggests consumers' previous expertise of a product will compensate the effect of its price (Rao and Monroe, 1988).

Prestige Sensitivity

Another perception of the price cue, similar to perceived quality, which is based on what price signals to the purchaser about product quality, is prestige sensitivity that can be defined as "the perceptions of the price cue due to inferences about what it signals to other people about the purchaser" (Lichtenstein et al.., 1993). It has been suggested that prestige sensitivity is related to socially visible behaviors, whereas a price/quality schema is influenced by cues that reinforce the validity of using price to imply quality (McGowan and Sternquist, 1998).

The concept was formerly introduced by Veblen (1915) as conspicuous consumption. Conspicuous consumption is an attempt of consumers by demanding higher priced products because owning a high priced product will reveal wealth and social prestige of its owner. In other words, the consumption will be utilized as an evidence of wealth in order to impress others. In this sense, price cue has favorable perceptions and positively effects prestige sensitivity, thus higher price will result in higher demand.

In summary, as Zeithaml (1984) stated in his work, the need for identifying price perception concepts relies on the sensitivity of consumers to price differences, a concern for price as a criterion in decision-making and also internal limits on what the consumer is willing to pay.

Online Price-Related Attitudes and Behavior

There have been some irreversible structural changes over marketing and consumer perceptions as a result of the merge of Internet and shopping environment. Now consumers have an alternative and convenient way of acquiring knowledge while

sellers are introducing their new interface. This removes the boundary of stores or geographic location. As expected, this virtual environment has been on the spotlight of researchers with its many aspects.

In line with the concentration of this study, Yin and Paswan (2007) have gathered the most important features of the Internet under three categories, influencing consumers' perception and formation of reference price. These are:

1- Price comparison opportunity

2- Price & product search opportunity

3- Price dispersion & volatility

<u>Price Comparison</u>

Since the emergence of Internet, consumers have the opportunity to compare prices online more often because of its ease (Rohm and Swaminathan, 2004; Wind and Mahajan, 2002). Stigler (1961) predicts that consumers are uncertain about what the lowest price is because of price variations in the marketplace, therefore they must seek price information from sellers in order to reduce this uncertainty. According to Bettman et al. (1991), higher accessibility to the information will lead to lower cost of search and process the information. Thus, the relative ease of price comparison is likely to increase the tendency to search for better prices for online consumers. In addition, reduced cost of information access and price comparison should increase price sensitivity (Lynch and Ariely, 2000), which also affects the width of the reference price range of consumers.

Yin and Paswan (2007) expressed that because the nature of reference price is price comparison, increased price comparison opportunity online will help consumers to set and reset their reference price with respect to their price perceptions. As indicated before, consumers who perceive price as a negative outcome of their purchases are more willing to pay lower prices; whereas for those who perceive price in its positive role, lower prices are more likely to be unacceptable (Lichtenstein et al., 1988). In this way, negative perceptions of price should be related positively with active price comparison behavior rather than positive perceptions of price (Lichtenstein et al., 1993).

Online comparison-shopping agents, also called shopbots, provide one-click access to product and price information from various sellers within a single search. Thus, shopbot usage for searching the lowest price can be convenient, quick and comparatively costless. Earlier shopbots were simply comparing quoted price from sellers. Now they can rank sellers in terms of their final price including packaging and delivery costs, the speed of delivery, customer satisfaction ratings, together with the quoted price (Daripa and Kapur, 2001).

Consumers who engage in price comparison should compare prices much more easier with acquiring enlarged consideration sets. According to a study of Lynch and Ariely (2000) ease of store comparability will increase price sensitivity for homogeneous goods sold by both competing sellers, because of involving less risk in terms of quality variation, but not for goods unique to a seller. In addition, as the Web grows bigger, the number of online sellers has increased and larger set of alternatives has emerged, which may result in confusion in consumers' information judgment processes. Past researches suggested that human memory is limited in terms of information processing capacity, thus Miller (1956) presented evidences on

short-term memory processing capacity, which was approximately 7 units of information. Moreover, if the information load increases over 7 units, processing level begins to decrease. This leads to frustration on consumers and increase psychological cost of shopping.

Consumers who use the Internet to search for price information are broadly categorized into four, according to their search strategies. Sen, King, and Shaw (2006) identify these strategies as:

1- Use of search engines,

2- Directly going to the preferred seller's website,

3- Use of shopping agents to find online sellers,

4- Using a search engine with gathering information from preferred seller (mixed strategy), and the first two of them found to be dominant among consumers.

Johnson et al. (2004) found that price search and comparison is not very effective or comprehensive enough as yet, resulting that the amount of online search is quite limited. In fact, even among those who search, frequency of search begins to decline with the user experience. For example, an unexperienced online buyer of technological goods may use search and compare to find the seller with the lowest price, but having found one, tend to stick with that seller rather than repeatedly comparing prices. In addition, familiarity and comfortability in using a website are found to be effective in not shifting to other websites for a lower price, thus the tendency for customers to shop, based on price comparison, is decreased (Jiang, 2002). Supporting this finding, another study on browsing patterns of online consumers show that time-saving strategy is dominated in online purchases, and

consumers often return to sellers they are experienced with instead of shopping around (Murray and Häubl, 2002 c.f. Su, 2008).

<p style="text-align:center">Price & Product Search</p>

In the online marketplaces, search for an appropriate seller (i.e. price comparison between different sellers) is called cross-site search, while search for price and product information are bundled together as in-site search (Su, 2008).

In a traditional view, search intention is defined as "a buyer's willingness to search for additional product and price information" (Grewal et al., 1998). Consumers' price search behavior is explained, in part, by the cost-benefit paradigm of economics (Stigler, 1961; Urban et al., 1993), which assumes that consumers search for information until the marginal costs and benefits of obtaining a unit of information is equalized. In other words, price search will increase as the cost of search decrease, or vice versa. However, with the increase in alternatives examined, expected benefits from the next alternative is reduced, therefore consumer terminates the search when the search cost becomes greater than the expected benefits of search (Alba et al., 1997).

Nevertheless, there are main structural differences between online and offline markets which invalidate the findings of offline search behavior for price and product information over online consumers. These differences are stated by Sen, King and Shaw (2006) as:

– Locational differences: Offline buyers develop their search strategies according to their knowledge about sellers within their location; whereas online buyers are

able to reach all sellers without considering the location and distance (Balasubramanian, 1998).

- Differences in search pattern: Offline buyers search for a price or a product sequentially; whereas online technologies offer more than one way to search online markets (i.e. sequential or parallel search).

- Differences in search strategy: Offline buyers are homogeneous in their search strategy; whereas online buyers could be differentiated on the basis of their awareness of various online search tools.

In online markets, sellers need to utilize the interactive nature of the Internet by improving the availability of product information and enabling direct multiattribute comparisons in order to increase convenience, thus efficiency of online shopping (Alba et al., 1997). Studies show that consumers define online shopping convenience in terms of easy site navigation, easy browsing, accessibility of product information, and reduced shopping time (Tedeschi, 1999 c.f. Su, 2008), all of which relate to search convenience.

Among the time-saving aspect of search convenience, product presentations through the website, perceived depth of information, relative ease of search process, and the range of available product and price options are found to increase consumers' motivation to search with an increase in price sensitivity (Shankar et al., 1999). Many online sellers use menu bars so that consumers can search group of products easily. Unfortunately, it has been found that about two-thirds of online stores have poor menu categories and ineffective in-site search engines, resulting with frustration of shopping process or even loss of desire for purchasing something (Gaudin, 2003 c.f. Su, 2008). On the other hand, less dependence on human

perceptual abilities (Jiang, 2002) and more automated shopping processes will increase search motivation, thus efficiency of decision making.

Recent literature shows that many consumers search for product and price information online before they purchase from either environment (Rohm and Swaminathan, 2004; Wind and Mahajan, 2002; Yin and Paswan, 2007). For instance, a consumer may search for prices online in order to verify the profitability of an encountered deal in an offline market (Jiang, 2002), taking advantage of decreased search costs in the Internet. Further, some consumers may even search for product and prices offline, then purchase online because of the same reason (to justify their decision) with utilizing the offline environment by observing the product in real. In all cases, consumers are able to benefit from either environment consciously for the best deal.

Benefits of search are defined as "outcomes that increase one's utility or provide value by facilitating achievement of higher level goals or value" (Gutman, 1982; Olshavsky and Wymer, 1995 c.f. Jiang, 2002). The "outcomes" would involve purchasing a product with the lowest price, the best appearance, the highest quality, or the highest satisfaction with the decision. Consumers with a high degree of perceived benefits from search may want to utilize their search process in higher degrees to avoid postpurchase dissonance, such as searching for information which justifies their decision to buy a specific product and not to buy the others (Jiang, 2002).

Price Dispersion & Volatility

Consumers engage in product and price-related search because of market heterogeneity in terms of product and prices. Thus, if there is no price dispersion, search is useless (Daripa and Kapur, 2001). However, the prices are changed more frequently on the Internet, than in offline stores (Brynjolfsson and Smith, 2000). In addition, the range of prices (dispersion) between online and offline stores are also found to be higher (Burman and Biswas, 2004; Hardesty and Suter, 2005; Vanhuele and Dreze, 2002).

Convenience of the Internet for online shoppers is expected to result in decreased search costs among the online markets. Bakos (1997) analyzed the role of online markets in terms of reducing search costs, and finds that lower search costs should lead to lower and more homogeneous prices. Based on this finding, Brynjolfsson and Smith (2000) compared the prices of selected homogeneous goods (specifically, books and CDs) between the Internet and conventional stores and found that the price of the items sold on the Internet average 9-16% less than the identical items sold by conventional stores. However, price dispersion in the online markets has been found to be no lower than that in the conventional stores.

Stigler (1961) defines price dispersion as "a biased measure of ignorance", because products sold cannot be homogeneous, since the product itself is bundled with the purchase process. In addition, Urbany et al. (1996) state that while customers can easily compare the prices, companies can track their customer behavior likewise, and adjust their prices accordingly. Extant literature also tries to explain possible reasons of online price dispersion.

Latcovich and Smith (2001) have found out two reasons for the online price dispersion between firms (inter-firm price dispersion) and two for within the same

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firm across time (inter-temporal price dispersion). Based on their categorization, possible reasons for online price dispersion is investigated deeper.

Online Inter-firm Price Dispersion

According to Latcovich and Smith (2001), the first reason for online inter-firm price dispersion is search cost. Price dispersion happens because consumers differ in their search costs, which makes it possible for some firms to set higher prices while some can set lower prices (Salop and Stiglitz, 1977). Consumers with lower search costs and higher search propensity are likely to purchase from the sellers with lower selling prices; whereas consumers who search less is likely to face higher prices and decide among them. Thus, low-price firms are intended to sell to the consumers who search, and high-price firms sell only to consumers with high search costs.

The second cause of price dispersion is explained by quality differences. Even if the delivered products are identical, some firms may offer higher prices in return for their additional service. Firms that provide additional services may charge a price premium for the products they sell, thus heterogeneity in the services offered may explain some of the price dispersion observed (Brynjolfsson and Smith, 2000). In addition, there can be some unobserved seller characteristics; the one which is highly commanding for firms in pricing is trust among consumers and the associated value of branding. Similar to these factors, it has been proposed that convenience and shopping experience on the websites are likely to be some of the most important factors in explaining online price dispersion (Smith et al., 1999 c.f. Zo and Ramamurhy, 2009).

In addition to Latchovich and Smith (2001), some other explanations for inter-firm price dispersion are provided in the literature. Clay et al. (2001) claim that advertising and competitive structure may affect price. They found for the big three bookstores (Amazon, Barnes&Noble, Borders) and fringe bookstores, higher competition lowers the standard deviation of prices. The big three had very similar prices overall, with widely advertised books. In contrast, fringe bookstores offered very different prices. As a result, widely advertised books had the highest dispersion of price.

Waldeck (2002) also explained price dispersion with the existence of an information asymmetry between consumers and sellers, coupled with information cost. As similar, Salop and Stiglitz (1977) and Varian (1980) have analyzed price dispersion arising from consumers who are differentially informed of prices. They found that the informed consumers purchase from the retailer with the lowest price; whereas the uninformed consumers purchase if the price they aware of is lower than their acceptable value.

Zo and Ramamurty (2009) extends information asymmetry and claims that awareness of the websites may be responsible for the existence of price dispersion, hence many Internet retailers spend on advertising to gain competitive advantage in terms of generating awareness of their site and public relations.

Online Inter-temporal Price Dispersion

Latcovich and Smith (2001) claim that, the firms may be colluding and the collusive price is changing over time as demand changes. Indeed, it is reasonable to lower prices when demand is high and falling than if demand is low and constant.

Similarly, Internet gives an opportunity to online firms to determine the sales impact of a price increase by quoting higher price, say, every 50th visitor to its site, and compare the purchase rates (Baker et al., 2001).

In addition, Brynjolfsson and Smith (2000) has found that retailers change prices in smaller increments than do conventional retailers, since menu costs -the costs a retailer incurs when changing a posted price- are much lower on the Internet. Optimally, retailers respond to a shift in supply and demand conditions by making small price adjustments, unless the price change cost exceeds the related benefits. In this sense, retailers on the Internet are able to make regular price changes in smaller units than the smallest price change observed in conventional stores.

Latcovich and Smith (2001) also suggest that price reductions are used to attract consumers to the website, so that the website raises awareness on them. If consumers who prefer to purchase from the reduced price, directed to that website and intend to purchase other products, sold at higher prices.

Lastly, the need for segmenting customers may result in price dispersion, and then the firm can offer a segment-specific price or promotion immediately to the point of target (Baker et al., 2001).

To sum up, online pricing is highly adaptable, enabling online firms to make price adjustments more frequently, and to take advantage of even smaller fluctuations in market conditions, customer demand, and competitor behavior (Baker et al., 2001). On the other hand, these volatile prices have some effects on consumers' behavior observed in the literature.

Frequent price change may confuse consumers in remembering the actual price of the product (Vanhuele and Dreze, 2002). Several studies have suggested that price comparison and product search enhances consumer knowledge about the

product and price range (Rohm and Swaminathan, 2004). However, consumer knowledge is found to be affected negatively from price volatility. Vanhuele and Dreze (2002) noticed that consumers having difficulty in remembering and recalling prices if a product category has many brands and volatile prices, because the increased complexity of the information that customers need to remember, compared to a relatively stable environment.

Nwokoye (1975) suggests that consumers often use the end prices (i.e. the highest and the lowest prices) as a cue to evaluate market prices. Complementary with this suggestion, Janiszevski and Liechtenstein (1999) also observed the market price attractiveness as depending on the comparison between the end prices and the evoked price range. The implication is that, the increase in price dispersion for a product will result in an increase in the expected price range. Therefore, wider range of expected prices may lead to greater acceptance of an implausible reference price (Burman and Biswas, 2004). Burman and Biswas (2004) have improved the approach, adding that the value perception and shopping intention for an implausible reference price were also significantly higher with wider price dispersion in the market.

Frequent price change also has impact on consumer price search behavior. The economics of information search theory argues that the higher the perceived price dispersion in the market, the larger the expected gains from search (e.g., Stigler, 1961; Telser, 1973; Urbany et al., 1996). Supporting this argument, Sen, King and Shaw (2006) found that potential buyers are likely to learn where low prices are and search for when they perceive high price dispersion in the market. Nevertheless, when consumers perceive higher potential cost rather than the

expected gain from search, they would stop searching for new prices, even if they know that there could be lower prices in the market (Zo and Ramamurthy, 2009).

On the contrary, Grewal and Marmorstein (1994) found that consumers' willingness to engage in price search does not always increase depending on the price variation for a product, and they suggest two possible explanations for consumers' price search behavior.

The first reason is that consumers may underestimate the market price variation. Maynes and Assum (1982) found that consumers tend to underestimate the market price variation which results in even greater price variation as retailers find success in price discriminating on the basis of consumers' price knowledge.

Another result depends on the psychological utility which is derived from saving a fixed amount of money, and is inversely related to the price of the item. Thus, the consumer intuitively translates the expected saving from price search into relative terms rather than absolute liras.

As can be seen, consumers do not always seek for the lowest price under some circumstances, besides the retailers with the lowest prices do not always receive the most sale. Furthermore, as the extant literature suggests, consumers can be ready to pay more in order to optimize their perceived benefit from shopping depending on their price perceptions.

According to the approach of Smith and Brynjolfsson (2001) the products are not quite homogeneous, but differ in overall package of bundled services, including the speed of delivery, store policy on returning defective or unwanted items, and the overall quality of the online shopping experience (Daripa and Kapur, 2001). Additionally, consumers who care about either one or both of these attributes are less sensitive to the item price. Furthermore, Daripa and Kapur (2001) explained the

willingness to pay higher prices with the lack of trust; which arises from the physical separation of buyers and sellers, and the temporal separation between paying for a good and receiving it in the online markets. Therefore buyers may be prepared to pay a premium for the security of buying from a reputable store. In this context, branding can serve as a signal that consumers can use to identify retailers with higher service quality (Brynjolfsson and Smith, 2000; Sen, King and Shaw, 2006; Smith and Brynjolfsson, 2001).

Sen, King and Shaw (2006) extend this approach and claim that if a customer is loyal to a store or brand, than there is a willingness to pay more for this brand. Even if buyers know that they are purchasing at higher prices from their preferred online seller, they are still likely not to search for lower prices outside, because they are paying higher prices in return for the value they get from this seller. Besides, the value buyers perceive from an online seller may include a better Web site, high trust associated with the seller's brand, high switching cost for the buyer, and higher convenience.

CHAPTER III

THEORETICAL MODEL AND HYPOTHESES

In this chapter, theoretical model of the study is shown and explained, with a comprehensive collection of variables that are expected to influence the online price-related behavior and consumers' attitude toward various pricing models.
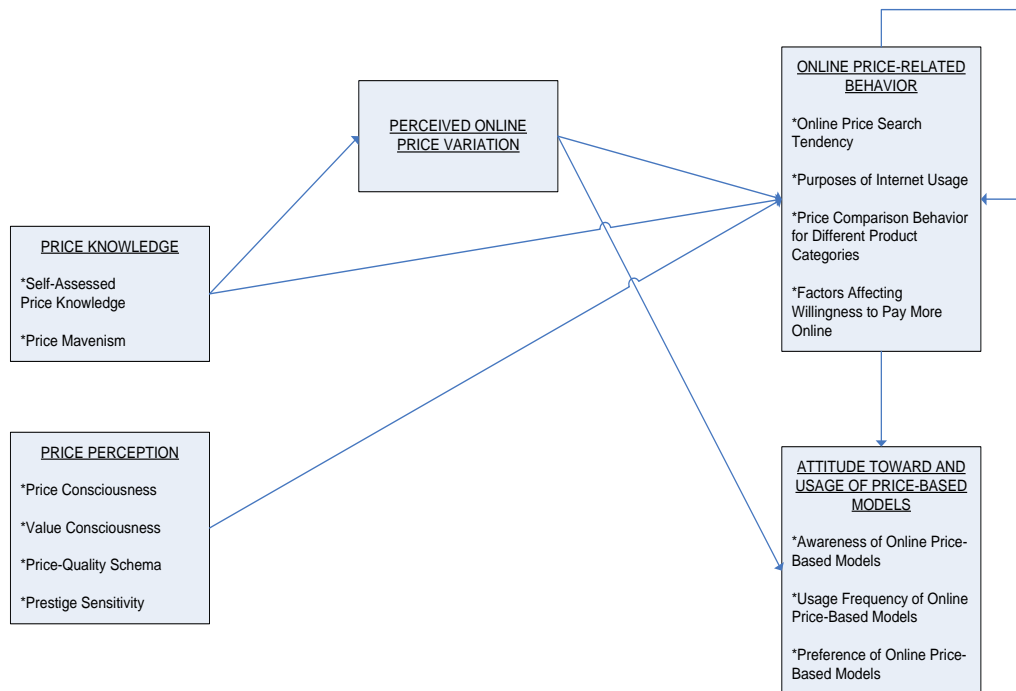
Figure 1: Theoretical model

Independent Variables

As a result of an extensive research on literature, three main concepts are found to be important in understanding consumers' online price-related behavior, and attitude

towards different price-based models in the online environment. We need to determine these concepts in order to investigate how consumers transform their price knowledge and perceptions into online price-related behavior and attitudes. Thus, three independent variables are determined as:

- Price Knowledge
- Price Perception
- Perceived Online Price Variation

Price Knowledge

Price knowledge has a significant role in motivating consumers to form their price-related behavior, and also constituting the mental base for developing price perceptions. There are two divisions of price knowledge in terms of revealing price-related behavior. These divisions are found as self-assessed price knowledge and price mavenism, as inspired from the studies of Lichtenstein *et al.* (1993) and Yin and Paswan (2007).

1. Self-Assessed Price Knowledge: Consumer price knowledge obtained through prior purchase or search, revealed by recall or recognition.

2. Price Mavenism: Consumer price knowledge at an advanced level with a desire to be a source of that kind of information and to inform others.

Price Perception

Price perceptions, uniquely formed by consumers on their own, constitute an important factor in explaining consumers' online price-related behavior. In order to identify differences the ways consumers perceive the price cue, 4 dimensions of price perception have been delineated. Two of them (value consciousness, and price consciousness) represent the price cue in its negative role, and two of them (price-quality schema, and prestige sensitivity) represent the price cue in its positive role. These variables have been identified based on the study of Lichtenstein *et al.* (1993):

1.   Value Consciousness: Consumers' awareness of expected benefits from a product, in return for the price paid.

2.   Price-Quality Schema: Consumers' perception of price level as relating positively with the quality level of a product.

3.   Prestige Sensitivity: Consumers' perception of price cue as reflecting their social status within a positive relationship.

4.   Price Consciousness: Consumers' willingness to minimize the price paid for a product against the other aspects of a product, and time or effort spent.

Perceived Online Price Variation

The fact of online price variations is a key driver in consumers' online price-related behaviors, and is also expected to affect their attitudes toward and usage of different types of online price-based models. In order to measure how consumers perceive these price alteration, inspired by two dimensions of price variations – price

volatility and price dispersion – from the studies of Yin and Paswan (2007) and Sen, King, and Shaw (2006) respectively, perceived online price variation construct has been developed.

Perceived Online Price Variations: Consumers' perception on price variations between online and offline markets, or within the online environment across time or different stores.

<div align="center">Dependent Variables</div>

In order to measure the role of independent variables identified above in explaining online consumer price-related behavior and consumers' attitudes toward different price-based models, dependent variables for this study are grouped as:

– Online Price-Related Behavior
– Attitude Toward and Usage of Price-Based Models

<div align="center">Online Price-Related Behavior</div>

Consumers' engaging with price-related activities in the online medium is a significant determinant in their online decision-making process. In order to measure to what extent consumers utilize the opportunities given by online markets, online price-related behavior has been examined under four subtitles as: online price search tendency, price comparison behavior for different product categories, purposes of Internet usage, and factors affecting willingness to pay more online.

1. Online Price Search Tendency: Consumers' favorable behavior on price search and comparison online with respect to the price levels on the Internet.

2. Purposes of Internet Usage: Consumers' frequency of performing price and product related activities on the Internet.

3. Price Comparison Behavior for Different Product Categories: Consumers' frequency of performing price comparison on the Internet among six different product categories.

4. Factors Affecting Willingness to Pay More Online: Seven distinctive features of a purchase, for which consumers on the Internet may prefer to pay higher prices.

Attitude Toward and Usage of Price-Based Models

Several retailer forms have evolved on the Internet, offering differentiated prices and buying processes. Therefore, consumers with different motivations on the Web will differentially evaluate these price-based models. We have determined 6 different online price-based model heavily used in the Internet, listed below:

1. Shopbot: Internet-based services that provide 'one-click' access to price and product information from numerous competing retailers.

2. Outlet: Online stores which sell remainder stocks of name brands at lower prices.

3. Discount Store: Online stores which sell limited number of products at lower price for a limited time.

4. Auction: A process of buying and selling goods or services by offering them up for bid, taking bids, and then selling the item to the highest bidder.

5.   Reverse Auction: Type of auction where the auctioneer begins with a high asking price which is lowered until some participant is willing to accept the auctioneer's price, or a predetermined reserve price (the seller's minimum acceptable price) is reached.

6.   Barter: An online medium in which goods or services are directly exchanged for other goods and/or services without the use of money.

In order to measure the attitude and usage of these types of web sites, three dimensions of the variable – awareness, usage frequency, and preference – has been examined.

1.   Awareness of Online Price-Based Models: Consumers' knowledge on existence of each of six different online shopping models.

2.   Usage Frequency of Online Price-Based Models: Consumers' frequency of visiting each of online shopping models.

3.   Preference of Online Price-Based Models: Consumers' tendency to shop from each of online shopping models.

Hypotheses of this study to be analyzed are given below:
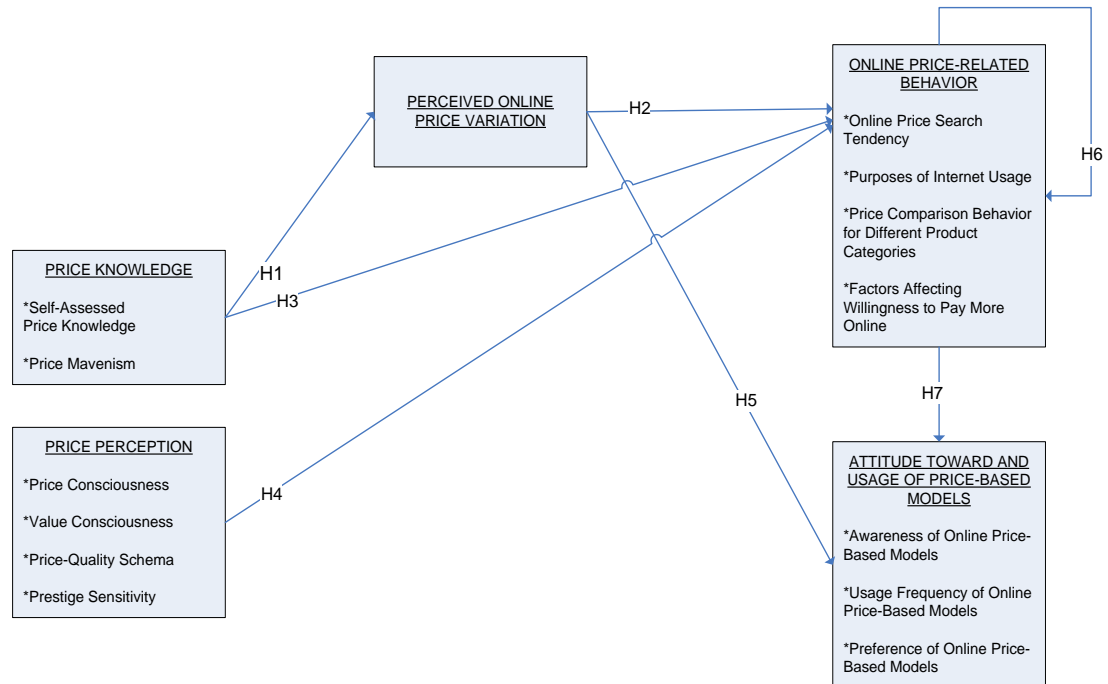
Figure 2 – Hypotheses in the theoretical model

- Hypothesis 1: There is a relationship between consumers' price knowledge and their perceived online price variations.

- Hypothesis 2: There is a relationship between consumers' perceived online price variation and their online price search tendency.

- Hypothesis 3: There is a relationship between consumers' price knowledge and their online price search tendency.

- Hypothesis 4: There is a relationship between consumers' price perceptions and their online price search tendency.

- Hypothesis 5: There is a relationship between consumers' perceived online price variations and their attitude toward and usage of price-based models.

- o Hypothesis 5a: There is a relationship between consumers' perceived online price variations and their awareness of online price-based models.

- o Hypothesis 5b: There is a relationship between consumers' perceived online price variations and their usage frequency of online price-based models.

- o Hypothesis 5c: There is a relationship between consumers' perceived online price variations and their preference of online price-based models.

- Hypothesis 6: There is a relationship between consumers' online price search tendency and their online price-related behavior.

  - o Hypothesis 6a: There is a relationship between consumers' online price search tendency and their price comparison behavior for different product categories.

  - o Hypothesis 6b: There is a relationship between consumers' online price search tendency and their purposes of Internet usage.

- Hypothesis 7: There is a relationship between consumers' online price search tendency and their attitude toward and usage of price-based models.

  - o Hypothesis 7a: There is a relationship between consumers' online price search tendency and their awareness of online price-based models.

  - o Hypothesis 7b: There is a relationship between consumers' online price search tendency and their usage frequency of online price-based models.

  - o Hypothesis 7c: There is a relationship between consumers' online price search tendency and their preference of online price-based models.

CHAPTER IV

RESEARCH METHODOLOGY

In this chapter, the technical details of the survey for this study are described. Each stage in the preparation process, such as generating the research problem, questionnaire development, variables and measurement constructs, sampling practices, the method and procedure of data collection and, data analysis approach are explained.

Problem Development and the Literature Review

Being aware of the promising concept of online consumer behavior within the field of marketing, in order to decide on which aspect of the concept should be focused on, currently popular subjects on the literature and consumer trends on the Internet were investigated before the rigorous research of the literature for the study. One of the main factors of consumers' behaving differently in the online environment from the offline environment is determined as the structural changes in pricing patterns of products or services on the Internet. After examining numerous online sellers, consumers' increasing attention and preferences for online retailing, thus increasing number of websites offering their customers the opportunity to shop with different pricing mechanisms, are observed. Thereupon, the research is decided to conduct on finding out, in the broadest sense, how consumer knowledge and perception of price affect their attitude and behavior toward their online price and shopping orientations,

as well as how these effects reflect upon the shopping environments with differentiated pricing mechanisms.

After conducting an extensive research on literature about these questions, we came up with a new model of our own, which is inspired and extended from various researches modeled previously. Subsequently, a questionnaire was generated in order to test the model and the hypotheses. The final and distribution-ready version of the questionnaire was formed after some adjustments with respect to the reviews of the thesis committee. The final questionnaire and measurement scales are described in detail.

The Questionnaire

The final questionnaire consists of 8 pages, including the cover page. It is divided into 5 main sections with 16 questions and total of 82 scale items, expected to be responded in 10 minutes on average. After a one page introduction part defining purpose of the study, each section and related variables with measurement constructs are defined in detail as:

Section 1: Demographic Information and Internet Usage

Demographic information asked from respondents includes age, gender, marital status, education, and personal monthly income, and Internet usage was including Internet usage experience in years, and Internet usage frequency. Nominal scale was used to measure all items in this section.

Section 2: Consumer Attitude and Behavior toward Price

The second section of the questionnaire was composed of 24 items, asking respondents to rate each statement to indicate their level of agreement, considering purchase processes of durable goods, in order to determine how consumers develop their the price knowledge and price perceptions. All items were measured by a 5-point interval scale (1- Strongly Disagree, 2- Disagree, 3- Neither Agree Nor Disagree, 4- Agree, 5- Strongly Agree).

Price knowledge items were divided into two as self-assessed price knowledge and price mavenism. Self-assessed price knowledge statements were derived from the study of Yin and Paswan (2007) in which the relationships among the factors associated with changing shopping environment, consumer knowledge and reference price are examined. Price mavenism statements were derived from Lichtenstein *et al.* (1993), in which 7 price perception constructs were introduced. However, one of the 7 price perception constructs, price mavenism, is regarded as a price knowledge construct within the scope of our study, since price mavenism concept identifies a consumer motivation to develop price knowledge, more than the interpretation of price in consumers' mind.

Price perception items were divided into four as value consciousness, price-quality schema, prestige sensitivity, and price consciousness. Value consciousness, price-quality schema, and prestige sensitivity statements were either derived or adapted, in order to satisfy the scope of our study, from Lichtenstein *et al.* (1993). Price consciousness statements were adapted from both price consciousness scale of Lichtenstein *et al.* (1988), price sensitivity scale of Wakefield and Inman (2003), price consciousness scale of Lichtenstein *et al.* (1993), attitude toward price search

scale of Shankar *et al.* (1999), and price sensitivity for new fashions scale of

Goldsmith and Newell (1997).

The question items related to the variables in this second section are listed

below:

Table 1: Variables in Price Knowledge and Price Perception Part and Their Measurement Constructs

Variable and Measurement Construct	Derived / Adapted from	Method
Price Knowledge		
<u>Self-Assessed Price Knowledge</u>		
1 I can remember the accurate prices of the products I often buy.	Self-Assessed Price Knowledge Scale - Yin and Paswan (2007)	5-Point Likert Scale
2 I still remember the price of the products I recently bought.		
3 I can tell if the price of a product is increased or decreased.		
<u>Price Mavenism</u>		
1 People ask me for information about prices for different types of products.	Price Mavenism Scale - Lichtenstein *et al.* (1993)	5-Point Likert Scale
2 I am considered somewhat of an expert when it comes to knowing the prices of products.		
3 For many kinds of products, I would be better able than most people to tell someone where to shop to get the best buy.		
4 I like helping people by providing them with price information about many types of products.		
Price Perceptions		
<u>Value Consciousness</u>		
1 When purchasing a product, I always try to maximize the quality I get for the money I spend.	Value Consciousness Scale - Lichtenstein *et al.* (1993)	5-Point Likert Scale
2 When I shop, I usually compare the "price per ounce" information for brands I normally buy.		
3 I always check the store prices in order to get the best value for the money I spent.		
<u>Price-Quality Schema</u>		
1 Generally speaking, the higher the price of a product, the higher the quality.	Price-Quality Schema Scale - Lichtenstein *et al.* (1993)	5-Point Likert Scale
2 The price of a product is a good indicator of its quality.		
<u>Prestige Sensitivity</u>		
1 It gains me prestige around me when I buy the most expensive brand of a product.	Prestige Sensitivity Scale - Lichtenstein *et al.* (1993)	5-Point Likert Scale
2 Buying a high priced brand makes me feel good about myself.		
3 Constantly buying the cheaper products will cause you to have an unfavorable image around you.		
4 I have purchased the most expensive brand of product just because I knew other people would notice.		
5 I think others make judgments about me by the brand and the price of a product I buy.		

Table 1. Continued

Variable and Measurement Construct	Derived / Adapted from	Method
Price Consciousness		
1 I usually buy the product I want when it is on sale.	Price Consciousness Scale - Lichtenstein *et al.* (1988)	
2 When I want to buy a product, I rely heavily on price.		
3 I will change what I had planned to buy in order to take advantage of a lower price.	Price Sensitivity Scale – Wakefield and Inman (2003)	
4 I am not willing to go to extra effort to find lower prices	Price Consciousness Scale - Lichtenstein *et al.* (1993)	5-Point Likert Scale
5 I do not feel pity for the time and effort wasted by finding low prices.		
6 The money saved by finding low prices is important for me.	Attitude Toward Price Search Scale – Shankar *et al.* (1999)	
7 I don't mind paying more to buy a product I really want.	Price Sensitivity for New Fashion – Goldsmith and Newell (1997)	

Section 3: Consumer Attitude towards Pricing Applications on the Internet

The third section of the questionnaire was composed of 6 items, asking respondents to rate each statement to indicate their level of agreement, in order to determine their perceptions on price variations on the Internet. All items were measured by a 5-point interval scale (1- Strongly Disagree, 2- Disagree, 3- Neither Agree Nor Disagree, 4- Agree, 5- Strongly Agree).

The concept of perceived online price variations was adapted from perceived online price volatility and perceived online price dispersion scales, derived from Yin and Paswan (2007) and Sen, King, and Shaw (2006) respectively.

The question items related to the variables in this third section are listed below:

Table 2: Variables in Perceived Online Price Variations and Their Measurement Constructs

Variable and Measurement Construct	Derived / Adapted from	Method
Perceived Online Price Variations		
1 The price on the net changes more often than traditional stores.		
2 The price of some products on the Internet changes more often than that of others.	Price Volatility Scale - Yin and Paswan (2007)	
3 It is highly possible that the price of the product I bought on the Internet will change when I want to repurchase it.		5-Point Likert Scale
4 The price on the net is volatile.		
5 All Internet-based sellers have more or less similar prices for this product.	Buyers' Perceived Online Price Dispersion Scale - Sen, King, and Shaw (2006)	
6 Some Internet-based sellers have a lot lower prices than others.		

Section 4: Consumer Behavior towards Pricing Applications on the Internet

The fourth section of the questionnaire was developed as 4 questions, total of 27 items, in order to determine consumer behavior with different dimensions of pricing applications online; consumers' online price search tendency, purposes of the Internet usage with given price-related tools, price comparison behavior across different product categories, and factors affecting willingness to pay more.

The first question covers online consumer behavior toward price search, with 8 items; all measured by a 5-point interval scale (1- Strongly Disagree, 2- Disagree, 3- Neither Agree Nor Disagree, 4- Agree, 5- Strongly Agree). The purpose of this question is to identify the importance consumers give to the price search opportunity on the Internet, and how they perceive and utilize this opportunity. Items were derived from Zo and Ramamurthy's (2009) price sensitivity scale, Rohm and Swaminathan's (2004) information seeking scale, Yin and Paswan's (2007) price comparison propensity scale, and Su's (2008) attitudes toward price search scale.

The second question asked respondents to specify their Internet usage frequency for each purpose, identified in the items. The items were self-constructed

and designed after observing many shopping-based websites with their price and product related tools available to their customers. There are 6 different tools used commonly by online consumers; including shopping, price tracking, price comparing, obtaining product information, tracking new products, and reading product comments. Items were measured by a 3-point interval scale (1- Never, 2- Sometimes, 3- Frequently), to find out the usage frequency distinctly.

The third question aims to find out price comparison frequency on the Internet for 6 different product groups. The product groups were gathered and grouped by their utility in order to distinguish consumers with products of interest, after observing many online retailer product categories with the most common and most selling products. The 6 different product groups were determined as electronical/technological products, clothing/accessories, hobbies, personal care products, home appliances/products, and antiques/art/collectibles. A 5-point interval scale is used to measure the comparison frequency (1-Never, 2- Rarely, 3- Sometimes, 4- Frequently, 5- Always).

The fourth question is about the factors which may affect price sensitivity and thus consumers' decision making for higher prices. Respondents are asked for the situations they are willing to pay more when shopping on the Internet, allowing multiple choice to response. There are 7 specific situations found according to the interviews with online shoppers and observations of online retailers who set price premiums, namely, delivery time, website reliability, brand reputation, new model product, gift points, promotions, convenience of purchasing.

The question items related to the variables in the fourth section are listed below:

Table 3: Variables in Online Price-Related Behavior and Their Measurement Constructs

Variable and Measurement Construct	Derived / Adapted from	Method
Online Price-Related Behavior		
Online Price Search Tendency		
1 I shop on the web if only it provides me price advantage.	Price Sensitivity Scale – Zo and Ramamurthy (2009)	
2 Price of the product and getting a good deal is the number one factor for me when shopping on the web.		
3 I always compare prices while I shop on the Internet.	Information Seeking Scale – Rohm and Swaminathan (2004)	
4 I use the Internet to search and compare prices for a product, even if I will not buy the product on the net.	Price Comparison Propensity Scale – Yin and Paswan (2007)	5-Point Likert Scale
5 It is easier to compare prices on the Internet.		
6 I save a lot of money by comparing price		
7 I consider the money saved by finding lower prices on-line to be worth the effort.	Attitudes Toward Price Search Scale – Su (2008)	
8 I consider the time taken to find lower prices on-line to be worth the effort.		
Purposes of Internet Usage		
1 Shopping		
2 Tracking price		
3 Comparing price	Self-constructed	3-Point Likert Scale
4 Obtaining product information		
5 Tracking new products		
6 Reading product comments		
Price Comparison Behavior for Different Product Categories		
1 Electronical/Technological products (Computer, phone, TV, camera, audio systems...)		
2 Clothing/accessories (Men's clothing, Women's clothing, underwear, shoes, handbag, belt, watch...)		
3 Hobbies (Book, DVD, Magazine, PC/Video games, Toys...)	Self-constructed	5-Point Likert Scale
4 Personal care products (Hair dryer, shaver, cosmetic products, health products...)		
5 Home appliances/products (White goods, kitchen utensil, cleaning materials, home decoration...)		
6 Antiques/Art/Collectibles (Painting, stamp, antiques...)		
Factors Affecting Willingness to Pay More Online		
1 For shorter delivery time		
2 For purchasing from more reliable website		
3 For purchasing more reputable brand		
4 For purchasing a new model product	Self-constructed	Multiple-choice
5 For earning gift points		
6 For taking advantage of promotions		
7 For purchasing faster/easier		

<u>Section 5: Attitude Toward and Usage of Price-Based Models</u>

In the last section of the questionnaire, 3 questions were directed to respondents about 6 different pricing models on the Internet, which are shopbot, outlet, discount store, auction, reverse auction, and barter, regardless of previous usage or awareness of these models. These pricing models are gathered and grouped after a research of alternative online sellers. The main idea of these types of sites is that they may direct different online price-related attitude and behavior of consumers. Firstly, each model was briefly defined for information. Afterwards, the first question asks respondents to indicate their awareness for each of online price-based models, measured with a dichotomous (Yes-No) nominal scale. Second question tries to find out the usage frequency for each online price-based model, measured with a 3-point scale (1- Never, 2- Sometimes, 3- Frequently). Last question asks respondents to rate their probability to prefer each of online price-based models in their shopping process, with a 5-point interval scale, range from 1- very low to 5- very high.

The question items related to the variables in the fifth section are listed below:

Table 4: Variables in Attitude toward and Usage of Price-Based Models, and Their Measurement Constructs

Variable and Measurement Construct	Derived / Adapted from	Method
Attitude Toward and Usage of Price-Based Models		
<u>Awareness of Online Price-Based Models</u>		
1 Shopbot		
2 Outlet		Nominal
3 Discount Store	Self-constructed	(Dichotomous)
4 Auction		Yes/No Scale
5 Reverse Auction		
6 Barter		
<u>Usage Frequency of Online Price-Based Models</u>		
1 Shopbot		
2 Outlet		
3 Discount Store	Self-constructed	3-Point Likert
4 Auction		Scale
5 Reverse Auction		
6 Barter		

Table 4. Continued

Variable and Measurement Construct	Derived / Adapted from	Method
Preference of Online Price-Based Models		
1 Shopbot		
2 Outlet		
3 Discount Store	Self-constructed	5-Point Likert Scale
4 Auction		
5 Reverse Auction		
6 Barter		

Sampling

In this research, the targeted individuals were those who have a certain level of Internet usage, with an accumulated knowledge of consumption experience, either on the offline or online environment. In addition, the population should be over the age of 18 in order to be able to shop on the Internet legally. Since there is no sampling frame to list this population, convenience sampling was used.

The questionnaire was prepared on the Internet through a survey preparation tool provider web site, and brought individuals via the reserved link for the questionnaire of this website, as well as the hard-copy form. Since there were no obligations for respondents of previous engagement with online shopping, each convenient individual using the Internet may constitute our sample. Within this approach, the survey link was shared on Facebook, and also many people have been reached through individual e-mails. Hard-copy form of the survey was distributed among several master students in Boğaziçi University, participants of a certificate program conducted again at Boğaziçi University, and convenient individuals in face-to-face occasions. At the end of data collection process, we came up with 300 responses.

Data Analysis

Total final data were transferred to SPSS for further statistical analysis. Firstly, data cleaning process was conducted in order to eliminate the responses with repetitive null values, which may occur if a respondent quit the questionnaire after a certain point, or skipped a section unanswered, because s/he may find the questions tiresome. Consequently, 47 of responses were eliminated, and 253 clean data were ready to analyze.

Since a number of statements were inversely directed, and response choices are inversely ordered in some sections, they are recoded before the analysis. Afterwards, the following analyses were applied to the data:

− Reliability of all multi-item scales was examined before starting the analyses.

− Descriptive analyses were applied for price knowledge constructs, price perception constructs, online perceived price variations, online price search tendency, and preference of online price-based models; in order to compute some statistics such as mean and standard deviation.

− Correlation analyses were applied between

   o Price knowledge constructs and online perceived price variations,

   o Online perceived price variations and online price search tendency,

   o Price knowledge constructs and online price search tendency,

   o Online perceived price variations and preference of online price-based models,

   o Online price search tendency and price comparison behavior for different product categories,

- Online price search tendency and preference of online price-based models; in order to measure how these variables are related.

– Regression analyses were applied between four constructs of price perceptions and online price search tendency; in order to find out the success of price perception variables in explaining online price search tendency.

– T-tests were applied for online perceived price variations and online price search tendency on awareness of online price-based models; in order to find out the significance in relationship between these variables.

– ANOVA analyses were applied between

- Online perceived price variations and usage frequency of online price-based models,

- Online price search tendency and purposes of Internet usage,

- Online price search tendency and usage frequency of online price-based models; in order to determine the significant differences between respondent groups.

CHAPTER V

ANALYSES AND FINDINGS

In this part of the study; descriptive, reliability, and relational analyses were

performed to test the hypotheses and provide the findings.

Descriptive Findings

In this section of the analyses and findings part of the study, descriptive findings,

which include the statistical data such as mean, standard deviation, and frequency

distribution values of variables are presented.

Frequency Values for Demographic Profile

Table 5: Demographic Profile

	18-25	26-35	36-45	46-55	>56	
Age	78	106	39	22	8	
	31%	42%	15%	9%	3%	
Gender	Female	Male				
	142	111				
	56%	44%				
Marital Status	Single	Married				
	151	102				
	60%	40%				
Education	Elementary School Graduate	High school Graduate	University Student	Bachelor's degree	Master's / PhD student	Master's / PhD degree
	2	13	37	136	49	16
	1%	5%	15%	54%	19%	6%
Income	< 1000 TL	1000 – 2500 TL	2500 – 4000 TL	4000 – 5500 TL	>5500 TL	
	58	148	23	17	7	
	23%	58%	9%	7%	3%	

According to the demographic findings, the general profile of the sample is mostly composed of early adults with 31% in 18-25 range, and adults with 42% in 26-35 range. They are followed by middle-aged people with 15%, and elder than 46 years-old with 12%. The overall percentage for respondents who are between the ages of 18 and 35 is 73; thus the sample constitutes relatively more technology-oriented portion of the population.

Gender distribution within the sample is adequate for representing each group, 56% for females and 44% for males.

Since the density of young population in the sample, single respondents (60%) are more than married respondents (40%), as expected.

Demographic findings show that the sample is composed mainly of educated people. A significant majority of the respondents are at least university graduates, including master/PhD students and graduates, with 79%. In addition, university students also compose a remarkable slice with 15%. However, only 6% of the sample is composed of elementary school and high school graduates, thus we can infer that the population is dominantly technology literate.

For personal average monthly income, findings reveal that 23% of the respondents have less than 1000 TL, and 58% of them have monthly income between 1000 TL and 2500 TL. Thus, the majority of the sample with 81% has less than 2500 TL per month, which can be considered as they plan cautiously for their expenditures. The remaining 19% of the respondents have more than 2500 TL per month.

Frequency Values for Internet Usage Profile

Table 6: Internet Usage Profile

Internet usage experience (in years)	< 2	2 - 4	4 - 6	> 6
	8	16	48	181
	3%	6%	19%	72%
Internet usage frequency	Rarely (Once or twice a month)	Sometimes (Once or twice a week)	Frequently (Few times a week)	Very Frequently (Almost everyday)
	10	23	28	192
	4%	9%	11%	76%

The sample is found to be dominated by those who use Internet for more than 6 years with 72%, and the frequency of the Internet usage of the sample is found to be very frequent, almost everyday (76%); as we expected the majority of our sample is composed of people that use Internet very frequently and more than 6 years. One of the reasons that we accomplished to reach that sample may be the fact that the survey is mainly conducted on the Internet. Moreover, the sample is composed of young people that have high education level and highly involved in computer and Internet usage both at school and at work. An important implication of these results is that the Internet becomes a daily routine in the flow of our lives, even it has become the flow itself.

Descriptive Values for Price Knowledge, Price Perceptions, Perceived Online Price Variations, and Online Price Search Tendency

Table 7: Descriptive Statistics for Price Knowledge, Price Perceptions, Perceived Online Price Variations, and Online Price Search Tendency

	Mean (over 5)	Std. Deviation
Self-Assessed Price Knowledge	4.00	.77
Online Price Search Tendency	3.98	.68
Value Consciousness	3.94	.81
Perceived Online Price Variations	3.55	.57
Price Consciousness	3.43	.67
Price Mavenism	2.99	.96
Price-Quality Schema	2.97	1.03
Prestige Sensitivity	2.29	.85

The collective results of price knowledge, price perception, perceived online price variations, and online price search tendency reveal that people are able to construct a price knowledge of frequently purchased products, and notice the price shifts for these products, with the highest mean value of 4.00 over 5 and relatively lower standard deviation of .77. The following variable with a higher mean (3.98), online price search tendency, strengthen the idea that people frequently search on the Internet for prices in order to benefit from the best deal. In addition, we can infer that higher price search tendency is helpful in constructing a higher level of price knowledge, as assumed by the previous literature.

Value consciousness has the highest mean value (3.94) within the four price perception constructs, meaning people heavily evaluate their purchase decisions in relative terms of gains and losses, rather than simply focusing on paying less or getting more. Value consciousness is followed by price consciousness (with the mean value of 3.43) within price perception constructs, thus it is still more important to pay less to a product in question. Moreover, people value their time and effort spent for finding a cheaper alternative. On the other hand, price-quality schema and prestige sensitivity have the lowest mean values (2.97 and 2.29 respectively) which

represent the price cue in its positive role. It is reasonable to expect lower mean values in quality and prestige perceptions while price knowledge and value consciousness are giving the highest values, because of that people are aware of the plausible price range for a given quality, thus higher prices does not always mean higher quality and higher prestige within their environment.

A relative high value of perceived online price variation (3.55) can be explained with the high tendency for price search online and higher price knowledge of consumers in a way that they construct price knowledge as they search for prices online, thus they become more sensitive to price variations on the Internet. On the other hand, lower mean value of price mavenism (2.99) verify that price knowledge is subconsciously constructed for being vigilant against implausible price rates, but not show itself in remembering prices in its exact values, even for the motivation of helping others.

Frequency Values for Internet Usage Purposes

Table 8: Respondent Profile for Internet Usage Purposes

	Never	Sometimes	Frequently
Shopping	42	170	41
	16.6%	67.2%	16.2%
Tracking Price	26	142	84
	10.3%	56.1%	33.2%
Comparing Price	19	141	93
	7.5%	55.7%	36.8%
Obtaining Product Information	10	93	150
	4.0%	36.8%	59.3%
Tracking New Products	22	112	119
	8.7%	44.3%	47.0%
Reading Product Comments	30	127	91
	11.9%	50.2%	36.0%

Table 8 shows the respondent profile for Internet usage purposes. Within the people who use Internet for price and product related activities, obtaining product

52

information is most frequently preferred, followed by tracking new products, thus the Internet is heavily utilized for searching product related information. On the other hand, 16.6% of the respondents have never used the Internet for shopping, the highest percentage of never engaging with any of these activities.

According to the findings, shopping activity is dominantly used sometimes, with the highest percentage (67.2%) of sometimes engaging with an activity. 56.1% of the respondents sometimes prefer tracking price from the Internet, and 33.2% of them prefers frequently. Frequency of price comparison behavior slightly differs from frequency of price tracking that 55.7% of respondents sometimes compare prices and 36.8% of them frequently do. Obtaining price information and tracking new prices have the highest percentages on frequent engagements (59.3% and 47% respectively). Lastly, half of the respondents sometimes prefer reading product comments on the Internet, and 36% of them frequently prefer.

These results reveal that the majority of the respondents (more than 90% for each activity) found Internet as a convenient way of obtaining product and price-related information. Moreover, more than 80% of the respondents have at least used the Internet sometimes for shopping and reading product comments. That is to say that, online marketing activities are successfully dispersed through the population.

Frequency Values for Price Comparison Behavior for Different Product Categories

Table 9: Price Comparison Behavior of Respondents for Different Product Categories

	Never	Rarely	Sometimes	Frequently	Always
Electronical / Technological products	13	32	70	71	66
	5.1%	12.6%	27.7%	28.1%	26.1%
Clothing / accessories	44	56	88	44	21
	17.4%	22.1%	34.8%	17.4%	8.3%
Hobbies	37	59	74	57	26
	14.6%	23.3%	29.2%	22.5%	10.3%
Personal care products	67	69	72	32	13
	26.5%	27.3%	28.5%	12.6%	5.1%
Home appliences / products	44	64	77	43	25
	17.4%	25.3%	30.4%	17.0%	9.9%
Antiques / Art / Collectibles	157	55	27	8	6
	62.1%	21.7%	10.7%	3.2%	2.4%

Table 9 reveals the respondent profile of online price comparison behavior for different product categories. Electronical/technological products are the most compared category with 54.2% of respondents who at least frequently compare within this category; whereas antiques/art/collectibles are the least compared with 5.6%. Electronical/technological products are followed by hobbies category with 32.8% of respondents who at least frequently compare within this category. Common feature of the two most compared product categories is that they are composed of homogeneous goods in their nature, thus the price differences of a product within these categories does not imply the quality differences, which may explain the improved behavior of price comparison. Besides, the most heterogeneous product category, antiques/art/collectibles are the least compared category, which supports our implication.

Another important statistical information shown in the Table 9 is that only 5.1% of the respondents have never compared electronical/technological product prices; whereas 62.1% have never compared prices for antiques/art/collectibles. Price comparison behavior for other product categories is mostly aggregated on comparing sometimes, while there is a close to equal distribution of responses between rarely, sometimes and frequently.

Frequency Values for Factors Affecting Willingness to Pay More

Table 10: Factors Affecting Willingness to Pay More Online

	Yes	No
For shorter delivery time	86	167
	34%	66%
For purchasing more reliable website	166	87
	65.6%	34.4%
For purchasing more reputable brand	108	145
	42.7%	57.3%
For purchasing a new model product	90	163
	35.6%	64.4%
For earning gift points	26	227
	10.3%	89.7%
For taking advantage of promotions	97	156
	38.3%	61.7%
For purchasing faster/easier	139	114
	54.9%	45.1%

In some situations, people do not want to search for the lowest price in the market and rely on other cues rather than price in their purchase decisions. Table 10 shows some factors people may be willing to pay a price premium in their purchases. According to the results, purchasing from a more reliable website (with 65.6%) is the most important factor in willingness to pay more, thus the reliability problem occurs from a spatial distance between seller and buyer reflects more reliable websites as setting higher prices.

Another important factor in consumers' willingness to pay more is found as purchasing faster/easier from an online seller (54.9%). Some online sellers design their website for convenience in a purchase process. Consumers who use Internet for shopping are assumed to have high costs of search and time spent, thus easier and faster purchase process of a website is attracting them, even at the expense of paying more.

These factors are followed by purchasing from a more reputable brand (42.7%), taking advantage of promotions (38.3%), purchasing a new model product (35.6%), shorter delivery time (34%), and earning gift points (10.3%). The reason of majority of respondents' not willing to pay more for earning gift points may be the fact that earning gift points necessitates to be a member of a specific online seller and points will be utilized in consecutive purchases. Therefore, consumers may want to take advantage of premiums of an online seller immediately and not want to be dependent to a seller for further purchases.

Frequency Values for Awareness of Online Price-Based Models

Table 11: Awareness Profile of Respondents for Online Price-Based Models

	Yes	No
Shopbot	197	56
	77.9%	22.1%
Outlet	202	51
	79.8%	20.2%
Discount Store	200	51
	79.1%	20.2%
Auction	193	60
	76.3%	23.7%
Reverse Auction	111	142
	43.9%	56.1%
Barter	119	134
	47%	53%

Associated with the previous findings of this study, such as high Internet usage

profile among respondents, high tendency for online price search and high degree of

engagement with price-related activities on the Internet, the results for awareness of

online price-based models is dominantly positive, as expected. Within 6 different

price-based models on the Internet, more than 75% of the respondents are aware of

these models, except reverse auction and barter models.

Outlet and discount store models get the highest awareness rate (with 79.8%

and 79.1%, respectively), and this can be explained by the fact that these models are

the adapted to the Internet forms of well-known and frequently prefered models in

the offline environment. However, shopbot, which is a price-based model unique to

the Internet, is following in the awareness rate with 77.9%. Thus, people are able to

search for and be informed about the opportunities given by the Internet.

Standard form of auction is also a well-known price model in the offline

environment, thus the online form of a standard auction is found to be well-known

(76.3%), as expected. However, more than half of the respondents does not aware of

reverse auction and barter models (43.9% and 47% of respondents are aware of these

models, respectively), since they are relatively not common in either online and

offline markets.

Frequency Values for Usage Frequency of Online Price-Based Models

Table 12: Usage Frequency Profile of Respondents for Online Price-Based Models

	Never	Sometimes	Frequently
Shopbot	54	118	80
	21.3%	46.6%	31.6%
Outlet	68	119	64
	26.9%	47%	25.3%
Discount Store	51	119	81
	20.2%	47%	32%
Auction	142	92	18
	56.1%	36.4%	7.1%
Reverse Auction	201	48	3
	79.4%	19%	1.2%
Barter	219	30	2
	86.6%	11.9%	.8%

Table 12 reveals that the models with the high awareness rates are used more

frequently by consumers. Discount store and shopbot are found to be the most

frequently used models among them, and also nearly anyone who are aware of these

models are using them. High usage frequency of discount store can be explained by

the fact that consumers are also familiar with this model in the offline environment

and want to benefit from the temporary remarkable discounts. On the other hand,

shopbot model utilizes the Internet by offering consumers a convenient opportunity

for finding lower prices. High usage frequency of shopbots implies that Internet

users can be classified as innovative, and they are able to take advantage of an

innovation.

The significant implication of this result is that 56.1% of the respondents have

never used auction even the 23.7% of them was not aware of this model, thus

compared to its recognition, auction is not a very popular model among respondents.

Samely, reverse auction and barter models have commonly never used (79.4% and

86.6% of respondents have never used these models, respectively), compared to its nearly twice high awareness percentages.

Descriptive Values for Preference of Online Price-Based Models

Table 13: Preference Profile of Respondents for Online Price-Based Models

	Mean (over 5)	Std. Deviation
Shopbot	3.72	1.34
Discount Store	3.53	1.42
Outlet	3.40	1.48
Auction	2.04	1.22
Reverse Auction	1.65	1.03
Barter	1.46	.94

Respondents are asked to rate each model according to their preferences for the online price-based models in their purchases. Table 13 shows that shopbot is the most preferred model for previous or future purchases with 3.72 mean over 5. Discount store with 3.53 mean and outlet model with 3.40 mean also have a high potential for preference of consumers in a purchase situation. Auction, reverse auction, and barter models have lower than average mean of preference (2.04, 1.64, and 1.46 mean values, respectively) as a shopping environment. Moreover, overall standard deviation seems to be higher that people are not homogeneously dispersed among their preferences for a model.

Reliability / Internal Consistency of the Survey Items and Scales

Reliability of the survey items were measured by a consistency analyses with Cronbach's Alpha. All scales, except price consciousness, have been found reliable

with over than 0.7 value of Cronbach's Alpha. Reliability of price consciousness

scale was improved after deleting two items (fourth and seventh items) from the

scale, and increased to the value of 0.67, which can be acceptable as consistent. The

number of items in each scale, and the final reliability values for each scale is

provided in the Table 14 below.

Table 14: Reliability / Internal Consistency of the Survey Items

	Number of Items	Cronbach's Alpha
Price Mavenism	4	0.86
Price-Quality Schema	2	0.85
Online Price Search Tendency	8	0.85
Prestige Sensitivity	5	0.83
Self-Assessed Price Knowledge	3	0.77
Value Consciousness	3	0.75
Perceived Online Price Variations	6	0.75
Price Consciousness	5	0.67

Improvements of reliability values for price consciousness scale are provided in the

Table 15.

Table 15: Initial and Final Reliability Values for Price Consciousness

	Number of Items	Cronbach's Alpha
Price Consciousness (initial scale)	7	0.62
Price Consciousness (deleted 7th item)	6	0.66
Price Consciousness (deleted 7th and 4th item)	5	0.67

(The reliability of the scale cannot be improved further.)

Relational Findings

In this section of the study, the findings of statistical analyses, which were

conducted in order to test the hypotheses of this study, are represented. The analyses

that were applied to test the hypotheses were correlation, regression, t-test, and

ANOVA.

Correlational Findings between Price Knowledge and Perceived Online Price Variations

Hypothesis 1: There is a relationship between consumers' price knowledge and their

perceived online price variations.
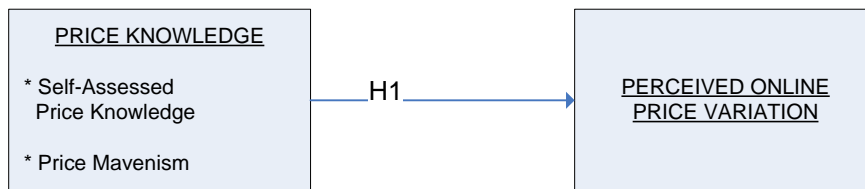
Figure 3: Hypothesis 1

In order to test this hypothesis, a correlation analysis was performed between the

two dimensions of price knowledge and perceived online price variations.

Correlation analysis using Pearson correlation coefficient was applied on the

research data, to discover if any relationship exists between these constructs based

on the research framework.

Table 16: Correlation between Price Knowledge and Perceived Online Price
Variation

	Perceived Online Price Variations	
Price Knowledge	Pearson Correlation	Sig. (2-tailed)
Self-Assessed Price Knowledge	0.167**	0.008
Price Mavenism	0.145*	0.021

**. Correlation is significant at the 0.01 level (2-tailed)
*. Correlation is significant at the 0.05 level (2-tailed)

Table 16 shows the correlation between price knowledge constructs and perceived online price variations. There is a significant positive correlation between self-assessed price knowledge and perceived online price variations with correlation coefficient of 0.167, in 99% confidence level. Price mavenism is also found positively correlated with perceived online price variations with correlation coefficient of 0.145, in 95% confidence level, but the relationship is not found to be strong. These findings can be rationalized with the implication that increased price knowledge obtained through past experiences will result in increased perceptions of online price variations. On the other hand, increased information load of prices will reduce the level of increase in online price variation perceptions. Consequently, the outcome of the analysis reveals that both price knowledge constructs are positively correlated with the perceived online price variations, thus Hypothesis 1 is supported.

Correlational Findings between Perceived Online Price Variations and Online Price Search Tendency

Hypothesis 2: There is a relationship between consumers' perceived online price variation and their online price search tendency.

Figure 4: Hypothesis 2

The aim of conducting correlation analyses between perceived online price variations and one of the dimensions of online price-related behavior, online price

search tendency, is to discover whether a significant relationship exists between these selected variables. Table 17 reveals the correlation scores of the second hypothesis.

Table 17: Correlation between Perceived Online Price Variations and Online Price Search Tendency

	Online Price Search Tendency	
	Pearson Correlation	Sig. (2-tailed)
Perceived Online Price Variations	0.455**	0.000

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

According to the findings of correlation analysis between perceived online price variations and online price search tendency, correlation coefficient is calculated to be 0.455 within 99% confidence level, which denotes a strong positive correlation. The results can be interpreted as perceived online price variations will lead the tendency for online price search in a positive manner. In other words, increased perceptions of online price variations will result in higher tendency for online price search behavior. Therefore, Hypothesis 2 is also supported.

Correlational Findings between Price Knowledge and Online Price Search Tendency

Hypothesis 3: There is a relationship between consumers' price knowledge and their online price search tendency.
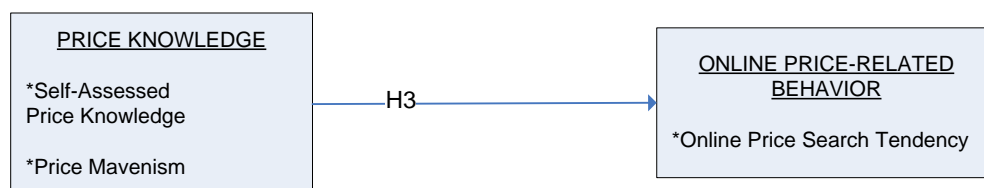
Figure 5: Hypothesis 3

Correlation analysis was performed in order to find if there is a relationship between two constructs of price knowledge and one dimension of online price-related behavior, online price search tendency. Table 18 shows the correlation scores between these variables.

Table 18: Correlation between Price Knowledge and Online Price Search Tendency

	Online Price Search Tendency	
Price Knowledge	Pearson Correlation	Sig. (2-tailed)
Price Mavenism	0.200**	0.001
Self-Assessed Price Knowledge	0.192**	0.002

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

As it can be seen from Table 18, price mavenism and self-assessed price knowledge are all positively correlated with online price search tendency; the most correlated factor was price mavenism with slightly higher correlation score than self-assessed price knowledge. Correlation coefficient is calculated to be 0.200 for price mavenism and 0.192 for self-assessed price knowledge, which denotes a positive correlation in lower strength, although the relationship is significant for both variables at 99% confidence level. Thus, we can expect that the one who has high levels of price knowledge is more eager to search for prices on the Internet. Accordingly, Hypothesis 3 is supported.

Multiple Regression Findings between Price Perceptions and Online Price Search Tendency

Hypothesis 4: There is a relationship between consumers' price perceptions and their online price search tendency.
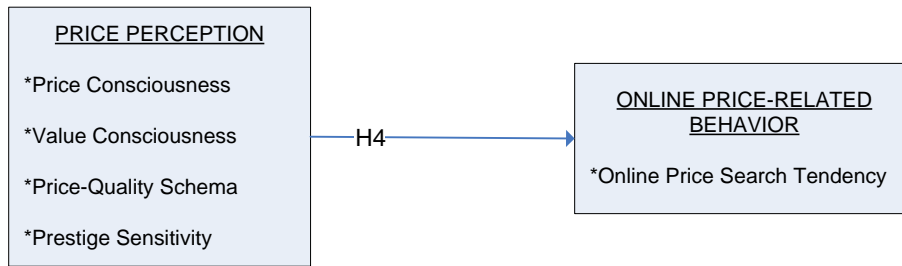
Figure 6: Hypothesis 4

Through multiple regression analysis, we aimed to identify the dimensions of price

perception in explaining the independent variable, online price search tendency, in

the best way.

Table 19: ANOVA[b] Table of Regression between Price Perceptions and Online Price Search Tendency

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	25.287	4	6.322	17.003	.000[a]
	Residual	92.208	248	.372		
	Total	117.495	252			

a.   Predictors: (Constant), Prestige Sensitivity, Price Consciousness, Value Consciousness, Price-Quality Schema
b.   Dependent Variable: Online Price Search Tendency

According to the ANOVA table of regression analysis, predictive level by the

dependent variable is high with an F value of 17.003 and a significance level under

0.01. Thus, the model is acceptable for predicting online price search tendency

through price perceptions.

Table 20: Model Summary of Price Perceptions and Online Price Search Tendency

Model	R	R square	Adjusted R Square	Std. Error of the Estimate
1	.464[a]	.215	.203	.60976

a.   Predictors: (Constant), Prestige Sensitivity, Price Consciousness, Value Consciousness, Price-Quality Schema

The model summary table shows the explanation power of the model. As given in the Table 20, R value is calculated to be 0.464, which can be perceived as a high value in -1 to +1 range of R, and R^2 value is 0.215. Therefore, the result of regression equation is satisfying.

Table 21: Regression Coefficients[a] of Dependent Variable Online Price Search Tendency

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.095	.271		7.724	.000
	Price Consciousness	.148	.060	.146	2.473	.014
	Value Consciousness	.306	.049	.395	6.225	.000
	Price-Quality Schema	.102	.041	.153	2.473	.014
	Prestige Sensitivity	-.056	.049	-.070	-1.139	.256

a. Dependent Variable: Online Price Search Tendency

When we look at the coefficients of the model, prestige sensitivity is the only variable with lower than 95% significance level (Sig. level of prestige sensitivity is .256), thus it should be excluded from the model in order to ensure the predictability of the dependent variable through predictors of the model. The regenerated regression analysis between price perception constructs, excluding prestige sensitivity, and online price search tendency is provided in the Table 22 below.

Table 22: ANOVA[b] Table of Regression between Price Perceptions (excluding Prestige Sensitivity) and Online Price Search Tendency

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	24.804	3	8.268	22.211	.000[a]
	Residual	92.691	249	.372		
	Total	117.495	252			

a. Predictors: (Constant), Price-Quality Schema, Value Consciousness, Price Consciousness
b. Dependent Variable: Online Price Search Tendency

ANOVA table of regenerated regression analysis reveals that predictive level by the dependent variable is found to be higher with an F value of 22.211 and a significance level under 0.01. Thus, online price search tendency can be predicted by the regression equation of the price perception variables.

Table 23: Model Summary of Price Perceptions (excluding Prestige Sensitivity) and Online Price Search Tendency

Model	R	R square	Adjusted R Square	Std. Error of the Estimate
1	.459[a]	.211	.202	.61012

a.   Predictors: (Constant), Price-Quality Schema, Value Consciousness, Price Consciousness

According to the model summary table, R value is calculated to be 0.459, and R^2 value is 0.211. These results denote that the results of the regenerated regression equation are also satisfying.

Table 24: Regression Coefficients[a] of Dependent Variable Online Price Search Tendency (excluding Prestige Sensitivity)

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.999	.258		7.750	.000
	Price Consciousness	.148	.060	.146	2.470	.014
	Value Consciousness	.311	.049	.371	6.359	.000
	Price-Quality Schema	.084	.038	.125	2.203	.029

a.   Dependent Variable: Online Price Search Tendency

As we regenerate the regression analysis excluding prestige sensitivity, significance level for all predictors fall within the 95% of confidence, thus it is ensured to predict dependent variable by using all predictors in the model. In addition, when we look at the B values, value consciousness with the highest B value (.311) has the highest contribution in explaining online price search tendency. Further, price consciousness

(.148) and price-quality schema (.084) are the other important factors affecting online price search tendency.

Therefore, regression equation of online price search tendency is:

Online Price Search Tendency = 1.999 + .146*(Price Consciousness) + .311*
(Value Consciousness) + .084*(Price-Quality Schema)

The results of regression analysis between price perceptions and online price search tendency will reveal that 3 of 4 price perception constructs are important determinants for online price search tendency. Moreover, value consciousness has the highets effect on consumers' tendency of online price search behavior, in a way that value is explained in relative terms of price and quality, and needs more search in order to form a consciousness. To put together, Hypothesis 4 is supported with only one exclusion in predictors of dependent variable.

Findings between Perceived Online Price Variations and Attitute toward and Usage of Price-Based Models

Hypothesis 5: There is a relationship between consumers' perceived online price variations and their attitude toward and usage of price-based models.
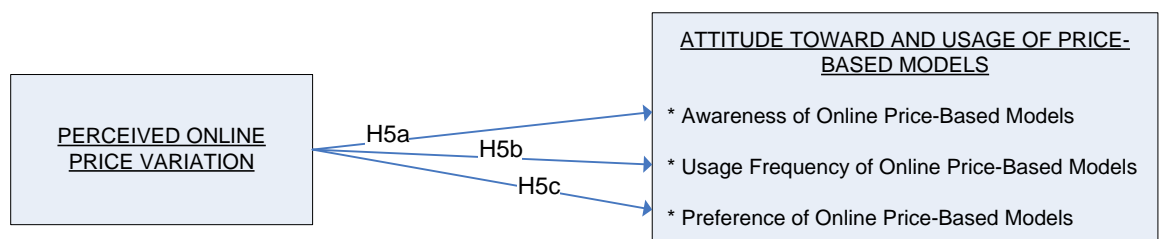
Figure 7: Hypothesis 5

T-test, ANOVA, and correlational analyses were performed in order to test these

hypotheses.

<u>T-Test Findings between Perceived Online Price Variations and Awareness of</u>

<u>Online Price-Based Models</u>

Hypothesis 5a: There is a relationship between consumers' perceived online price

variations and their awareness of online price-based models.

Independent samples t-test analysis was performed between perceived online

price variation and awareness of 6 different online price-based models, in order to

compare the awareness rate for each different price-based model in terms of

perceived online price variation. The results of the analysis are explained in detail

below.

Table 25: Group Statistics for Perceived Online Price Variation and Awareness of Online Price-Based Models

Group Statistics			
		N	Mean (over 5)
Perceived Online Price Variation	Awareness of Shopbot	197	3.60
	Non-awareness of Shopbot	56	3.37
	Awareness of Outlet	202	3.55
	Non-awareness of Outlet	51	3.54
	Awareness of Discount Store	200	3.60
	Non-awareness of Discount Store	51	3.34
	Awareness of Auction	193	3.61
	Non-awareness of Auction	60	3.35
	Awareness of Reverse Auction	111	3.55
	Non-awareness of Reverse Auction	142	3.54
	Awareness of Barter	119	3.57
	Non-awareness of Barter	134	3.53

Group statistics show that the mean values of perceived online price variation slightly change between awareness and non-awareness for each price-based model. Thus, we need to investigate independent samples test results for further commentary.

Table 26: T-Test Analysis for Awareness of Online Price-Based Models and Perceived Online Price Variation

Independent T-Test			
	Awareness of:	t	Sig. (2-tailed)
Perceived Online Price Variations	Shopbot	2.73	.007**
	Outlet	0.10	.923
	Discount Store	2.95	.003**
	Auction	3.17	.002**
	Reverse Auction	0.12	.903
	Barter	0.60	.552

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

As shown in the Table 26, there is a significant difference between awareness and non-awareness of shopbot (with .007 Sig.), discount store (with .003 Sig.), and auction (with .002 Sig.), in terms of perceived online price variation, with under 99% confidence level for each model. In other words, perceived online price variation can explain the awareness rate for these price-based models. On the other hand, the relationship between perceived online price variation and awareness of outlet, reverse auction, and barter models is denied. Thus, Hypothesis 5a is partially supported.

According to the previous findings, reverse auction and barter models are found to have very low awareness rates among the respondents, thus it is impractical for the awareness of these models to be related with perceived online price variation. But outlet is also found to be unrelated with perceived online price variation while it is a highly known model, thus we can infer that outlet prices do not vary significantly to affect the price variation perceptions of respondents. Based on the

same point of view, perceived online price variation is found to be the most significant determinant for awareness of auction, thus prices observed within the auction model vary significantly, thus contributing the perceptions of online price variations.

ANOVA Findings between Perceived Online Price Variations and Usage Frequency of Online Price-Based Models

Hypothesis 5b: There is a relationship between consumers' perceived online price variations and their usage frequency of online price-based models.

ANOVA analysis is performed in order to find out if there are any significant differences between different usage frequency levels of online price-based models in terms of perceived online price dispersion. As we hypothesized, it is expected to differentiate usage frequency levels as perceived online price variation differs.

Table 27: ANOVA Analysis of Perceived Online Price Variations for Usage Frequency Groups of Online Price-Based Models

		Usage Frequency	N	Mean (over 5)	F	Sig.
Perceived Online Price Variation	Shopbot	Never	54	3.28	9.446	.000
		Sometimes	118	3.52		
		Frequently	80	3.78		
	Outlet	Never	68	3.39	8.185	.000
		Sometimes	119	3.52		
		Frequently	64	3.79		
	Discount Store	Never	51	3.33	4.96	.002
		Sometimes	119	3.53		
		Frequently	81	3.71		
	Auction	Never	142	3.46	3.375	.019
		Sometimes	92	3.64		
		Frequently	18	3.80		
	Reverse Auction	Never	201	3.52	0.789	.501
		Sometimes	48	3.65		
		Frequently	3	.50		
	Barter	Never	219	.53	0.787	.502
		Sometimes	30	.64		
		Frequently	2	.00		

As the Table 27 indicates, shopbot, outlet, discount store, and auction models have different perceptions of online price variations in terms of their usage frequency. According to the results, relationships between perceived online price variations and usage frequency of shopbot, outlet, and discount store are supported with over 99% confidence level, and usage frequency of auction is also supported with under 95% confidence level. However, there is no link found with perceived online price variations in explaining different usage frequencies of reverse auction and barter models, thus Hypothesis 5b is partially supported.

According to the result, an increase in usage frequency of shopbot, outlet, discount store, and auction is corresponding to an increase in the mean value of perceived online price variation. Since all the 6 of price-based models use different pricing mechanisms which vary the prices within the model between different fragments of time, it is expected to increase one's price variation perception as usage of these models gets frequent. On the other hand, majority of the respondents have

never used reverse auction and barter models, which explains why this hypothesis do not supported for these two models.

Correlational Findings between Perceived Online Price Variations and Preference of Online Price-Based Models

Hypothesis 5c: There is a relationship between consumers' perceived online price variations and their preference of online price-based models.

In order to test this hypothesis, a correlation analysis was performed between perceived online price variations and consumer preferences for 6 different online price-based models. Correlation analysis using Pearson correlation coefficient was applied on the research data, to discover if any relationship exists between these variables.

Table 28: Correlation between Perceived Online Price Variations and Preference of Online Price-Based Models

	Perceived Online Price Variations	
	Pearson Correlation	Sig. (2-tailed)
Preference of Shopbot	.310**	.000
Preference of Outlet	.172**	.006
Preference of Discount Store	.154*	.014
Preference of Auction	.057	.369
Preference of Reverse Auction	-.069	.274
Preference of Barter	-.103	.104

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

Table 28 shows the correlation between perceived online price variations and preferences of online price-based models. Significant positive relationship exists between perceived online price variations and consumer preference of shopbot (with correlation coefficient of 0.310) and outlet (with correlation coefficient of 0.172),

within 99% confidence level. Discount store is also found positively correlated with perceived online price variations with correlation coefficient of 0.154, at the 95% confidence level, but the relationship is found to be weak. There is no correlation found between perceived online price variations and preference of auction, reverse auction, and barter models.

These findings can be interpreted as increased perceptions of online price variations will result in consumers to prefer a shopbot, outlet, and discount store increasingly in their purchase decisions. Besides, if a consumer prefers to shop from an auction, reverse auction, or barter, consumer's perception for online price variations has nothing to do with it. Consequently, the outcome of the analysis reveals that perceived online price variations are positively correlated with the preference of 3 of the 6 online price-based models, thus Hypothesis 5c is partially supported.

<u>Findings within Online Price-Related Behavior</u>

Hypothesis 6: There is a relationship between consumers' online price search tendency and their online price-related behavior.
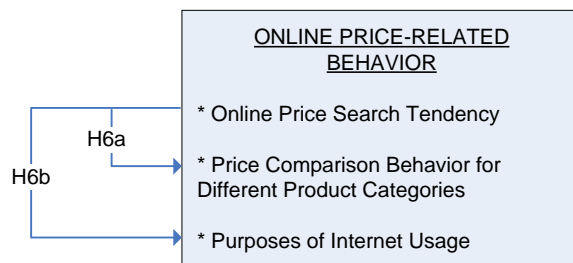
Figure 8: Hypothesis 6

Correlation and ANOVA analyses were run to test these parts of the hypothesis.

Correlational Findings between Online Price Search Tendency and Price
Comparison Behavior for Different Product Categories

Hypothesis 6a: There is a relationship between consumers' online price search
tendency and their price comparison behavior for different product categories.

The aim of conducting correlation analyses between online price search tendency
and price comparison behavior for different product categories is to find out if there
is a significant relationship exists between these variables. Table 29 reveals the
correlation scores of this hypothesis.

Table 29: Correlation between Online Price Search Tendency and Price
Comparison Behavior for Different Product Categories

	Online Price Search Tendency	
	Pearson Correlation	Sig. (2-tailed)
Electronical/Technological products	.428**	.000
Home appliances/products	.291**	.000
Hobbies	.243**	.000
Personal care products	.211**	.001
Clothing/accessories	.182**	.004
Antiques/Art/Collectibles	.105	.096

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

According to the results of correlation analysis between online price search tendency
and comparison behavior for different product categories shown in the Table 29,
comparison behavior for all product categories (except the product group of
antiques/art/collectibles) is found correlated with online price search tendency
within 99% confidence level, which denotes a strong positive correlation. Price
comparison behavior for electronical/technological products has the highest

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correlation coefficient with the value of 0.428, indicating the strongest correlation with online price search tendency, followed by the price comparison behavior for home appliances/products (0.291), hobbies (0.243), personal care products (0.211), and clothing/accessories (0.182). The results show that online price search tendency is a significant determinant in price comparison behavior for 5 of 6 different product categories, and an increase in online price search tendency will result in an increase in price comparison behavior for these product categories, therefore Hypothesis 6a is supported with only one exclusion.

ANOVA Findings between Online Price Search Tendency and Purposes of Internet Usage

Hypothesis 6b: There is a relationship between consumers' online price search tendency and their purposes of Internet usage.

ANOVA analysis was used to test the relationship between online price search tendency and usage frequencies of Internet for price-related purposes. It is expected that different frequencies for price tracking and comparing behaviors differ with the level of online price search tendency.

Table 30: ANOVA Analysis of Online Price Search Tendency for Different Purposes of Internet Usage

		Usage Frequency	N	Mean (over 5)	F	Sig.
Online Price Search Tendency	Tracking Price	Never	26	3.14	29.739	.000
		Sometimes	142	3.91		
		Frequently	84	4.36		
	Comparing Price	Never	19	2.87	57.076	.000
		Sometimes	141	3.89		
		Frequently	93	4.34		

Table 30 shows that online price search tendency is significantly related with online price tracking and comparison behavior with over 99% confidence level, thus Hypothesis 6b is supported. According to the results, different frequency levels of online price tracking and comparison behavior correspond to different levels of online price search tendency. Moreover, frequency of online price comparison behavior increases with an increase in online price search tendency with the highest F value of 57.076, and price tracking behavior increases with an F value of 29.739.

<u>Findings between Online Price Search Tendency and Attitude toward and Usage of Price-Based Models</u>

Hypothesis 7: There is a relationship between consumers' online price search tendency and their attitude toward and usage of price-based models.
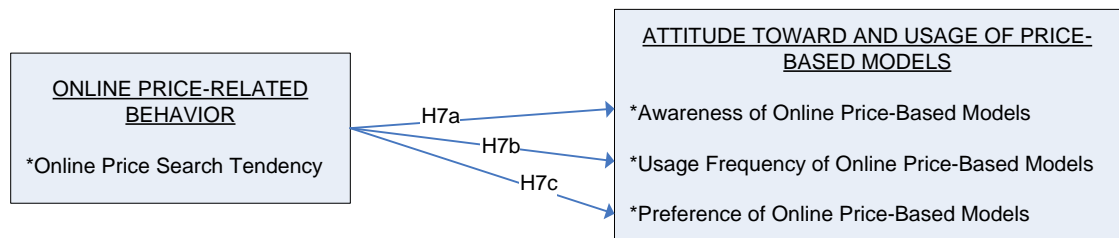
Figure 9: Hypothesis 7

T-test, ANOVA, and correlation analyses were performed in order to test these hypotheses.

T-Test Findings between Online Price Search Tendency and Awareness of Online

Price-Based Models

Hypothesis 7a: There is a relationship between consumers' online price search

tendency and their awareness of online price-based models.

Independent samples t-test analysis was performed between online price search

tendency and awareness of 6 different online price-based models, in order to

compare the awareness rate for each different price-based models in terms of online

price search tendency. The results of the analysis are explained in detail below.

Table 31: Group Statistics for Online Price Search Tendency and Awareness of
Online Price-Based Models

Group Statistics			
		N	Mean (over 5)
Online Price Search Tendency	Awareness of Shopbot	197	4.08
	Non-awareness of Shopbot	56	3.62
	Awareness of Outlet	202	4.00
	Non-awareness of Outlet	51	3.90
	Awareness of Discount Store	200	4.03
	Non-awareness of Discount Store	51	3.79
	Awareness of Auction	193	4.04
	Non-awareness of Auction	60	3.77
	Awareness of Reverse Auction	111	4.05
	Non-awareness of Reverse Auction	142	3.93
	Awareness of Barter	119	3.97
	Non-awareness of Barter	134	3.99

Group statistics show that the mean values of online price search tendency slightly

change between awareness and non-awareness for each price-based model. Thus, we

need to investigate independent samples test results for further commentary.

Table 32: T-Test Analysis for Awareness of Online Price-Based Models and Online Price Search Tendency

Independent T-Test			
	Awareness of:	t	Sig. (2-tailed)
Online Price Search Tendency	Shopbot	4.709	.000**
	Outlet	0.887	.376
	Discount Store	2.219	.027*
	Auction	2.727	.007**
	Reverse Auction	1.454	.147
	Barter	-0.303	.762

**. Correlation is significant at the 0.01 level (2-tailed)
*. Correlation is significant at the 0.05 level (2-tailed)

As shown in the Table 32, there is a significant difference between awareness and non-awareness of shopbot (with t value of 4.709) and auction (with t value of 2.727) in terms of online price search tendency, with under 99% confidence level, and discount store (with t value of 2.219) within 95% confidence level, for each model. In other words, online price search tendency can explain the awareness rate for these price-based models. On the other hand, the relationship between online price search tendency and awareness of outlet, reverse auction, and barter models is denied. Thus, Hypothesis 7a is partially supported.

ANOVA Findings between Online Price Search Tendency and Usage Frequency of Online Price-Based Models

Hypothesis 7b: There is a relationship between consumers' online price search tendency and their usage frequency of online price-based models.

In order to find out the relationship defined in this hypothesis, ANOVA analysis was used. With ANOVA analysis, we examine the differences of usage frequencies of 6 different online price-based models in terms of online price search

tendency, and expect to find significant differences in online price search tendency

for each usage frequency level of a model examined.

Table 33: ANOVA Analysis of Online Price Search Tendency for Different Usage Frequencies of Online Price-Based Models

		Usage Frequency	N	Mean (over 5)	F	Sig.
Online Price Search Tendency	Shopbot	Never	54	3.48	21.577	.000
		Sometimes	118	3.96		
		Frequently	80	4.35		
	Outlet	Never	68	3.74	6.111	.001
		Sometimes	119	3.99		
		Frequently	64	4.22		
	Discount Store	Never	51	3.62	7.837	.000
		Sometimes	119	4.00		
		Frequently	81	4.19		
	Auction	Never	142	3.83	5.685	.001
		Sometimes	92	4.17		
		Frequently	18	4.23		
	Reverse Auction	Never	201	3.92	2.564	.055
		Sometimes	48	4.22		
		Frequently	3	3.92		
	Barter	Never	219	3.95	1.133	.336
		Sometimes	30	4.19		
		Frequently	2	4.13		

As the Table 33 indicates, shopbot, outlet, discount store, and auction models have

different degree of tendency for online price search behavior in terms of their usage

frequency. According to the results, relationships between online price search

tendency and usage frequencies of shopbot, outlet, discount store, and auction are

confirmed with over 99% confidence level. However, there is no relationship found

with online price search tendency in explaining different usage frequencies of

reverse auction and barter models, thus Hypothesis 7b is partially supported.

According to the result, as the usage frequencies of shopbot, outlet, discount

store, and auction increase, the mean value of online price search tendency increases

as well. Since all the 6 of price-based models have different pricing applications

which differentiates them in their price levels offered, a price search activity should

include all price-based models for getting informed of a wide range of price levels to find the best deal. Therefore, it is expected to increase one's frequency of usage of these models as online price search tendency increases. However, majority of the respondents have never used reverse auction and barter models and are not familiar with the price levels offered. Thus, their online price search tendency levels do not affect their usage frequencies for these models, which explain why this hypothesis do not supported for these two models.

Correlational Findings between Online Price Search Tendency and Preference of Online Price-Based Models

Hypothesis 7c: There is a relationship between consumers' online price search tendency and their preference of online price-based models.

This hypothesis is tested by using correlation analysis with the expectation of online price search tendency's being correlated with consumers' preference of online price-based models in their purchase decisions. Table 34 shows the results for this analysis.

Table 34: Correlation between Online Price Search Tendency and Preference of Online Price-Based Models

	Online Price Search Tendency	
	Pearson Correlation	Sig. (2-tailed)
Preference of Shopbot	.530**	.000
Preference of Outlet	.246**	.000
Preference of Discount Store	.238**	.000
Preference of Auction	.138*	.028
Preference of Reverse Auction	.030	.638
Preference of Barter	-.020	.754

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

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Findings reveal that there is a strong positive correlation exists between online price search tendency and respondent's shopping preferences from shopbot, outlet, and discount store with 99% confidence level. According to their correlation coefficients, online price search tendency is found to be the strongest determinant for preference of shopbot with 0.530 value, followed by outlet with 0.246 value, and discount store with 0.238 value. Purchase preference from auction is also found to be correlated with online price search tendency with 95% confidence level, implying a weak positive correlation. Purchase preferences from reverse auction and barter models are not found to be correlated with online price search tendency. Therefore, Hypothesis 7c is partially supported.

Preference of online price-based models includes preference of purchase decisions from these models for previous and future shopping occasions. Consumers with high tendency of online price search are more eager to seize the opportunity of a better deal for the product in question by purchasing from shopbot, outlet, discount store, or auction models. Purchase preferences from reverse auction and barter models do not have any connections with the tendency of online price search behavior. Within the majority of the population who are not aware of these two price-based models and also have never used them, preference for these models can be expected to be irrelevant with price search behavior, because there may be formed a prejudice for reverse auction/barter related behaviors.

As a result, all hypotheses offered and their supported states within the model of our study are shown in the Figure 10 below:
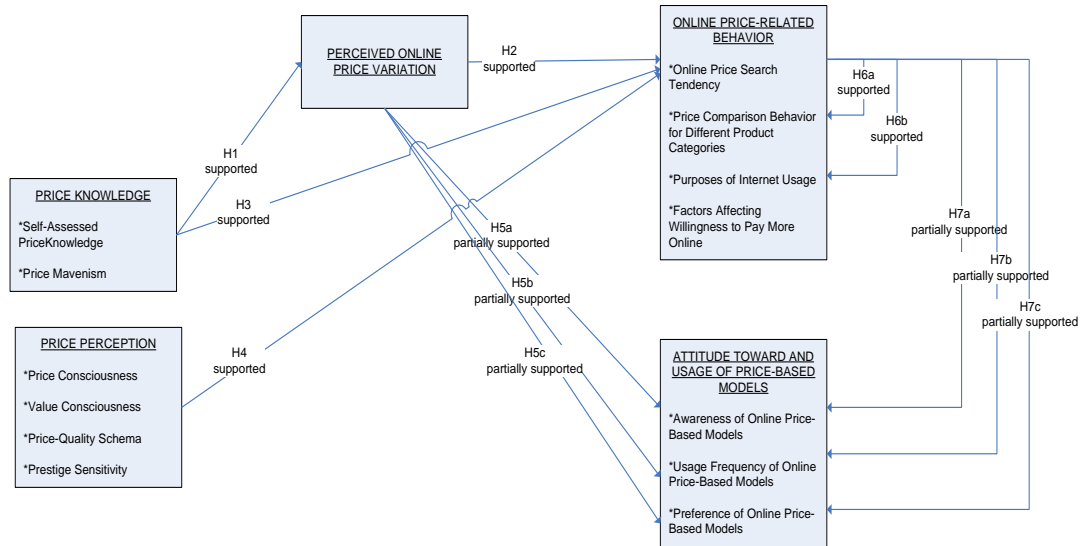
Figure 10: Supported states of hypotheses

CHAPTER VI

IMPLICATIONS AND LIMITATIONS

This research provides an intense insight for the factors influencing consumers'

price-related behavior in the online environment, and their awareness and

acceptance of different online price-based model usage.

In this study, a comprehensive list of studies about price knowledge concepts,

including reference price formation, theories on the operationalization of reference

price in consumers' mind, self-assessed price knowledge, and price mavenism; price

perception constructs as an internal representation of a price cue, and the features of

the marketplace in the online medium affecting consumers' perceptions and

formation of reference price were explored in the literature. After an extensive

survey on literature, plenty of websites offering differentiated prices and purchasing

opportunities were investigated. Based on these researches, a model was developed

with the hypotheses, and a questionnaire was generated and delivered to individuals

in both online and printed forms.

At the end of the data gathering process descriptive, reliability, correlation,

multiple regression, t-test, and ANOVA analyses were performed by using SPSS

19.0 with 253 respondents' data.

Demographic profile is majorly composed of the respondents who are between

the ages of 18 and 35 with higher education level and are experienced Internet users.

In terms of measuring people's price knowledge, it was found that participants are

able to construct price knowledge of frequently purchased products, and notice the

price shifts for these products. However, price knowledge does not raise much to advanced levels with the motivation of being a price source for others. This implies that people construct their price knowledge subconsciously in order to recall in a purchase situation for personal utilitarian motives such as being aware of implausible price rates, or judging a deal in terms of its reasonableness.

On the other hand, price knowledge of consumers reflects to online price-related behavior as higher tendency for price search. Therefore, the one who has high levels of price knowledge is expected to be more eager to search for prices on the Internet. In other words, while the multitude of price encounters is the reason of price knowledge in high levels, increased price knowledge will also result in more price encounters by leading a high tendency for online price search in a purchase situation.

In connection with the findings of price perception, price cue is dominantly represented as relative terms of gain and loss in consumers' mind, thus price is perceived as a value by comparing the money paid with the quality received. Still, it is important to pay less to a product in question with the cost of spending time and effort for finding a cheaper alternative in a specific quality. Further, a price cue does not seem to represent the quality level of a product, and high-priced products do not reflect as more prestigious to the buyer's social environment. It is reasonable that consumers' do not always interpret a price cue as an indicator of quality or prestige, since they are good at price knowledge and value consciousness, thus are aware of reasonable price range for a given quality.

When consumers enter the online market, they face with different conditions in shopping. Therefore, they build up different search and purchasing strategies from brick-and-mortar markets. According to the results, consumers perceive higher price

volatility on the Internet than in conventional channels, as well as higher inter-firm and inter-temporal price dispersion on the web. This result connected with the high levels of price knowledge of consumers and increased search opportunity of prices on the Internet in a way that consumers construct price knowledge as they search for prices online. Thus, they become more sensitive to price variations on the Internet.

As expected, self-assessed price knowledge and online price search tendency are found to be strongly correlated with perceived online price variations. The first implication of these results is that an increased price knowledge obtained through past experiences will lead to an increased perception of online price variations. Another implication derived from the findings is that increased perception of online price variation will result in higher tendency for online price search behavior, thus consumers who are aware of the high price variation on the Internet are more tend to seek for a better deal.

Online price search tendency is also found to be affected by the price perception of consumers. Within the 4 constructs of price perception, value consciousness has the most significant effect on price search behavior, in a way that value is explained in relative terms of price and quality, and needs more search in order to form a consciousness. Prestige sensitivity is excluded from the model because of its low significance level in order to ensure the predictability of online price search tendency through price perception constructs.

Results also indicate that increased opportunity of price search on the Internet has led to high price search tendency online, independent from the environment where consumers decide to purchase from. In addition, respondents are found to benefit from the Internet frequently in order to obtain product and price-related information. More specifically, higher tendency for online price search is found to

increase the frequency of obtaining price-related information, such as tracking and comparing prices. In terms of price-related information, electronical/technological products such as computer, mobile phone, or TV, are the most tracked and compared product category, followed by the hobbies including products such as book, DVD, or PC/Video games. This result implies that consumers develop an improved price comparison behavior online for highly homogeneous goods which do not differ in quality across different stores. Moreover, the most heterogeneous product category which includes antiques, art, and collectibles is found as the least compared product category and does not affected by the online price search tendency.

As previously suggested by the literature, consumers do not always seek for the lowest price on the Internet, but give more importance to other cues in order to increase their satisfaction from a purchase decision. The most significant cue which will increase consumers' willingness to pay more in an online purchase transaction is found to be the seller's reliability. There are a number of ways of reflecting a website's reliability for e-businesses, such as more secure payment processes, high trust associated with the sellers' brand, and high quality in post-purchase services. Reliability problem occurs on the Internet stems form the spatial distance between buyer and seller, thus when consumers notice the cues of reliability and perceive an online seller as reliable, they are willing to pay a price premium to purchase from a more secure buyer.

Another important factor affecting consumers' willingness to pay more is found to be as convenience in purchase process. Consumers want to achieve their online purchase process easier and faster, thus look for the cues of convenience in a website. Convenience in consumers' purchase process can be ensured with the design of sellers' websites by more specific product categorization, search and

compare tools a seller is providing, and simple and user-friendly interface design through entire shopping process. Since online buyers are assumed to have higher costs of search and time spent, the easier and faster purchase processes will attract them at the expense of paying more for a product. On the other hand, consumers do not want to pay a price premium to an online seller which has high switching costs such as being a member of a seller and benefiting the advantages in consecutive purchases; whereas they want to benefit from premiums immediately while not being dependent to a seller for further purchases.

Based on an extensive research on sellers with applying different price-based models on the Internet, we determine the most common price-based models and categorize them into 6 main header; namely, shopbot, outlet, discount store, auction, reverse auction, and barter. Outlet, discount store, auction, reverse auction, and barter model to some extent are the adaptations of the same models in the offline markets to the Internet. Thus, for these models, consumers are majorly found to be aware of them, except reverse auction and barter models with less than 50% awareness rate. In addition, although shopbot is a price-based model unique to the Internet, it has also high awareness rate among respondents. This result implies that people are able to search for and make use of the opportunities given by the Internet. Awareness rates for these models are also examined for their predictability of perceived online price variations and online price search tendency, and found only the awareness of shopbot, discount store, and auction models explanatory. In other words, consumers who are aware of these models have higher levels of perceived online price variations and online price search tendency.

The online price-based models with high awareness rate are also found to be used more frequently by consumers and more preferable in their purchases, with an

exception of auction model. Although 76% of the respondent found to be aware of auction model, 56% of them have never visited the website of an auction seller, implies that auction is a well-known but unpopular price-based model. In addition, reverse auction and barter models also have never been used by the majority of the respondents. On the contrary, discount store is found to be the most frequently used price-based model, and shopbot is found to have the highest preference of consumers in their purchase decisions. Moreover, general attitudes toward shopbot, outlet, and discount store are found to be as positive, while consumers tend to take cautious attitude towards auction, reverse auction, and barter models.

In addition, usage frequencies of online price-based models with high awareness rate (shopbot, outlet, discount store, and auction) are found to be related with perceived online price variation and online price search tendency. Since all 6 price-based models use different pricing mechanism which differentiates the prices and buying processes, it is expected to increase consumers' price variation perception as usage of these models gets frequent. Therefore, the first implication of this finding is that the prices on highly known models are perceived to vary significantly, thus affecting the price variation perceptions of consumers. The second implication is that these price-based models also differentiate in their price levels offered, thus higher tendency to online price search activity includes searching for prices in all known price-based models for getting informed of a wide range of price levels.

Finally, consumers who perceive high variation in online prices and who tend to search for prices online are also found to prefer shopbot, outlet, and discount store models in their previous or future purchases. These consumers are willing to benefit from these models by noticing the better deal for their purchase decision. Since the

majority of the respondents have never used auction, reverse auction, and barter models, they may be biased against these models in terms of profitability, reliability or convenience.

The findings of this study provide constructive suggestions to e-businesses and researchers. Online businesses can benefit from this study in terms of consumer segmentation and understanding price-related consumer expectations from an online seller. Firstly, it should be noticed that there are many rivals in the online marketplace, and consumers are able to search for a higher quality with lower prices among all rivals. So, online firms should carefully set their pricing strategies as well as taking advantage of Internet in utilizing price and product related tools. Secondly, this study provides general attitude of consumers toward online price-based models. Therefore, for the firms which apply different online price-based model, the familiarity of the model and their website with consumers is strictly important, thus these firms should spend an extra effort to attract consumers and create awareness even if consumers do not intend to purchase. Finally, an online firm should improve their reliability and reputation among consumers and consider the convenience requirements in their website design, to gain a competitive advantage among its rivals.

One of the implications of this study for researchers is that successful and high reliability scales are developed. Additionally, online price-based models are categorized, and it is pointed that these models can be considered as an extension of online price-related behavior. This categorization and price-based models approach may be used for further researchers or other approaches, which give importance not only to consumers' awareness of and attitudes toward these models, but also other dimensions, as well.

In this study, we have examined the current factors influencing consumers' price-related behavior in the online environment, and their awareness and acceptance of different online price-based model usage. Because Internet is continuously evolving and offering new opportunities to its users, these results may lose its validity with improved price-related applications or any legal regulation changing the current structure of pricing on the Internet. In addition, Internet usage rate among individuals are continuously increasing, thus findings about awareness and usage of online price-based models may be irrelevant, and scales need to be improved in the near future.

Another limitation of this study is that, in this study we also measured perceptions, attitudes, and behavior in order to understand consumers' point of view towards online price-related applications. Thus, the findings may not cover each individual. Further, the sample size is limited with 253 respondents, dominantly a young generation with high education level, which may constitute a limitation, and may not reflect general attitude within the scope of this study. However, online price-related attitudes and behavior should address a broader sample like wider age range with different education and income levels within Internet literate individuals. With this intention, a new research may be conduced by representing more uniform population distribution of the Internet users in Turkey.

APPENDIX A

QUESTIONNAIRE

PART 1 – Information about the Questionnaire

Dear Participant,

This questionnaire is presented as part of the graduation thesis of Boğaziçi Üniversitesi Management and Information Systems graduation student Gözde Özdemir, within the context of "Price Related Consumer Behavior on the Internet". Any identity information will not be necessary in order to respond the questions.

Your support to our study has great importance on the success of the project. Thank you for your time and contribution.

For your questions and opinions:
hande.kimiloglu@boun.edu.tr
gozde.ozdemir2@boun.edu.tr

PART 2 – Demographic Information and Internet Usage

1. What is your age group?

	18 – 25
	26 – 35
	36 – 45
	46 – 55
	More than 56

2. What is your gender?

	Woman
	Man

3. What is your marital status?

	Single
	Married

4. What is your education level?

	Elementary school graduate
	High school graduate
	University student
	Bachelor's degree
	Master's / PhD student
	Master's / PhD degree

5. What is your personal monthly income level?

	1000 TL and less
	1000 TL – 2500 TL
	2500 TL – 4000 TL
	4000 TL – 5500 TL
	More than 5500TL

6. How many years do you use the Internet?

	0 – 2 years
	2 – 4 years
	4 – 6 years
	More than 6 years

7. How frequently do you use the Internet?

	Very frequently (Almost everyday)
	Frequently (Few times a week)
	Sometimes (Once or twice a week)
	Rarely (Once or twice a month)

PART 3 – Consumer Attitude and Behavior toward Price

8. Please rate each statement below to indicate your level of agreement, considering your purchase processes of DURABLE GOODS (white goods, television, mobile phone etc.).

	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree
I can remember the accurate prices of the products I often buy.					
I still remember the price of the products I recently bought.					
I can tell if the price of a product is increased or decreased.					
People ask me for information about prices for different types of products.					
I am considered somewhat of an expert when it comers to knowing the prices of products.					
For many kinds of products, I would be better able than most people to tell someone where to shop to get the best buy.					
I like helping people by providing them with price information about many types of products.					
When purchasing a product, I always try to maximize the quality I get for the money I spent.					
When I shop, I usually compare the "price per ounce" information for brands I normally buy.					
I always check the store prices in order to get the best value for the money I spent.					
Generally speaking, the higher the price of a product, the higher the quality.					
The price of a product is a good indicator of its quality.					
It gains me prestige around me when I buy the most expensive brand of a product.					
Buying high priced brand makes me feel good about myself.					
Constantly buying the cheaper products cause you to have an unfavorable image around you.					
I have purchased the most expensive brand of a product just because I know other people would notice.					

	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree
I think others make judgments about me by the brand and the price of a product I buy.					
I usually buy the product I want when it is on sale.					
When I want to buy a product, I rely heavily on price.					
I will change what I had planned to buy in order to take advantage of a lower price.					
I am not willing to go to extra effort to find lower prices.					
I do not feel pity for the time and effort wasted by finding low prices.					
The money saved by finding low prices is important for me.					
I don't mind paying more to buy a product I really want.					

PART 4 – Consumer Attitudes toward Pricing Applications on the Internet

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9.   Please rate each statement below to indicate your level of agreement.

	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree
The price on the net changes more often than traditional stores.					
The price of some products on the Internet changes more often than that of others.					
It is highly possible that the price of the product I bought on the Internet will change when I want to repurchase it.					
The price on the net is volatile.					
All Internet-based sellers have more or less similar prices for this product.					
Some Internet-based sellers have a lot lower prices than others.					

PART 5 – Consumer Behavior towards Pricing Applications on the Internet

10.   Please rate each statement below to indicate your level of agreement.

	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree
I shop on the web if only it provides me price advantage.					
Price of the product and getting a good deal is the number one factor for me when shopping on the web.					
I always compare prices while I shop on the Internet.					
I use the Internet to search and compare prices for a product, even if I will not buy the product on the net.					
It is easier to compare prices on the Internet.					
I save a lot of money by comparing price.					
I consider the money saved by finding lower prices online to be worth the effort.					
I consider the time taken to find lower prices online to be worth the effort.					

11. Specify your Internet usage frequency for each purpose below.

	Frequently	Sometimes	Never
Shopping			
Tracking price			
Comparing price			
Obtaining product information			
Tracking new products			
Reading product comments			

12. Specify your price comparison frequency on the Internet for each product group   below.

	Always	Frequently	Sometimes	Rarely	Never
Electronical / Technological products (Computer, phone, TV, camera, audio systems..)					
Clothing / Accessories (Men's clothing, women's clothing, underwear, shoes, handbag, belt, watch..)					
Hobbies (Book, DVD, magazine, PC/Video games, toys..)					
Personal Care Products (Hair dryer, shaver, cosmetic products, health products..)					
Home Appliances /Products (White goods, kitchen utensil, cleaning materials, home decoration..)					
Antiques / Art / Collectibles (Painting, stamp, antiques..)					

13. Indicate that which of the situation below you are willing to pay more when shopping on the Internet?

	For shorter delivery time		For earning gift points
	For purchasing from more reliable website		For taking advantage of promotions
	For purchasing more reputable brand		For purchasing faster / easier
	For purchasing a new model product		

PART 6 – Pricing Models on the Internet

There are questions about 6 different pricing models on the Internet in this last section of the questionnaire. It is not important that you know or use these websites. Please answer with the most appropriate choice for each statement below in accordance with the explanations.

14. Please specify your knowledge about the existence of each pricing model.

	Yes	No
SHOPBOT: Internet-based services that provide 'one-click' access to price and product information from numerous competing retailers.		
OUTLET: Online stores which sell remainder stocks of name brands at lower prices for a limited time.		
DISCOUNT STORE: Online stores which sell limited number of products at lower price for a limited time.		
AUCTION: A process of buying and selling goods or services by offering them up for bid, taking bids, and then selling the item to the highest bidder.		
REVERSE AUCTION: Type of auction where the auctioneer begins with a high asking price which is lowered until some participant is willing to accept the auctioneer's price, or a predetermined reserve price (the seller's minimum acceptable price) is reached.		
BARTER: An online medium in which goods or services are directly exchanged for other goods and/or services without the use of money.		

15. Please specify how frequently you visit each type of these sites.

	Frequently	Sometimes	Never
Shopbot			
Outlet			
Discount Store			
Auction			
Reverse Auction			
Barter			

16. Please rate your probability to prefer each type of these sites when you shop (5= very high; 1= very low)

	5	4	3	2	1
Shopbot					
Outlet					
Discount Store					
Auction					
Reverse Auction					
Barter					

QUESTIONNAIRE (TURKISH)

1. BÖLÜM – Anket ile İlgili Bilgi

Değerli Katılımcı,

Bu anket Boğaziçi Üniversitesi Yönetim Bilişim Sistemleri yüksek lisans programı öğrencisi Gözde Özdemir'in mezuniyet tezi kapsamında gerçeklerştirilen "İnternet Ortamında Fiyata Yönelik Tüketici Davranışları" konulu araştırmanın bir parçasıdır. Anketi yanıtlamak için herhangi bir kimlik bilgisi gerekmemektedir.

Çalışmamıza vereceğiniz destek, projenin başarısı için büyük önem taşımaktadır. Katkınız ve zaman ayırdığınız için çok teşekkür ederiz.

Soru ve görüşleriniz için:
hande.kimiloglu@boun.edu.tr
gozde.ozdemir2@boun.edu.tr

2. BÖLÜM – Demografik Bilgiler ve İnternet Kullanımı

1. Yaş aralığınız:

	18 – 25
	26 – 35
	36 – 45
	46 – 55
	56 ve üzeri

2. Cinsiyetiniz:

	Kadın
	Erkek

3. Medeni durumunuz:

	Bekar
	Evli

4.   Eğitim durumunuz:

	İlköğretim / Ortaokul mezunu
	Lise mezunu
	Üniversite öğrencisi
	Üniversite mezunu
	Yüksek lisans / Doktora öğrencisi
	Yüksek lisans / Doktora mezunu

5.   Aylık ortalama kişisel geliriniz:

	1000 TL ve altı
	1000 TL – 2500 TL
	2500 TL – 4000 TL
	4000 TL – 5500 TL
	5500TL ve üzeri

6.   Kaç yıldır İnternet kullanıyorsunuz?

	0 – 2 yıl
	2 – 4 yıl
	4 – 6 yıl
	6 yıldan fazla

7.   İnternet'i ne sıklıkta kullanıyorsunuz?

	Çok sık (hemen hemen her gün)
	Oldukça sık (haftada birkaç kez)
	Bazen (haftada 1 – 2 kez)
	Nadiren (ayda 1 – 2 kez)

3. BÖLÜM – Tüketicinin Fiyata Yönelik Tutum ve Davranışları

8.   Lütfen aşağıdaki her ifadeye, DAYANIKLI TÜKETİM ÜRÜNLERİ (örn. beyaz eşya, televizyon, cep telefonu vb.) ile ilgili satın alma süreçlerinizi göz önünde bulundurarak, ne derece katıldığınızı belirtiniz.

	Kesinlikle Katılıyorum	Katılıyorum	Kararsızım	Katılmıyorum	Kesinlike Katılmıyorum
Sıklıkla satın aldığım ürünlerin fiyatlarını tam olarak hatırlayabiliyorum.					
Yakın zamanda satın aldığım ürünlerin fiyatlarını halen hatırlıyorum.					
Bir ürünün fiyatının arttığını veya düştüğünü fark ederim.					
İnsanlar çeşitli ürünlerin fiyatları hakkında bilgi almak için bana başvururlar.					
Ürünlerin fiyatlarını bilme konusunda uzman olduğum düşünülür.					
Birçok ürünün en uygun fiyatla nereden satın alınabileceğini çoğu kişiden daha iyi bilirim.					
İnsanlara, onları çeşitli ürünlerin fiyatları hakkında bilgilendirerek yardımcı olmaktan hoşlanırım.					
Bir ürün satın alırken, ödediğim fiyata göre en yüksek kaliteyi verecek seçeneği bulmaya çalışırım.					
Alışveriş sırasında, tercih ettiğim farklı markaların birim fiyatlarını karşılaştırırım.					
Harcadığım paranın karşılığını en yüksek düzeyde alabilmek için, mağaza fiyatlarını sürekli takip ederim.					
Genelde bir ürünün fiyatı yükseldikçe kalitesi de artar.					
Bir ürünün fiyatı, kalitesinin iyi bir göstergesidir.					
Bir ürünü en pahalıya satan markadan almak bana çevremde prestij kazandırır.					
Yüksek fiyatlı bir markanın ürününü satın almak bana kendimi iyi hissettirir.					

	Kesinlikle Katılıyorum	Katılıyorum	Kararsızım	Katılmıyorum	Kesinlike Katılmıyorum
Sürekli ucuz ürünler satın almak insanın çevresinde olumsuz bir imaj edinmesine neden olur.					
Sadece diğer insanların farkedeceğinibildiğim için, en pahalı ürünü aldığım oldu.					
Çevremdekiler beni aldığım ürünün markası ve fiyatına göre değerlendirebilirler.					
Genelde almak istediğim bir ürünü indirimdeyken satın alırım.					
Bir ürün satın almak istediğimde fiyatına dayanarak seçim yaparım.					
Daha uygun bir fiyattan yararlanabilmek için satın almayı düşündüğüm ürünü değiştiririm.					
Bir ürünün daha ucuzunu bulabilmek için fazladan çaba sarfetmek istemem.					
Daha ucuz bir fiyat bulabilmek için harcadığım zamana ve çabaya acımam.					
Daha ucuz bir fiyat bulduğumda elde ettiğim kazanç benim için önemlidir.					
Gerçekten istediğim bir ürünü satın almak için çok para ödemeyi göze alırım.					

4. BÖLÜM – Tüketicinin İnternet'teki Fiyatlandırma Uygulamalarına Yönelik Tutumu

9.   Lütfen aşağıdaki her ifadeye ne derece katıldığınızı belirtiniz.

	Kesinlikle Katılıyorum	Katılıyorum	Kararsızım	Katılmıyorum	Kesinlike Katılmıyorum
İnternet'te fiyatlar mağazadaki fiyatlara kıyasla daha sık değişiyor.					
İnternet'teki bazı ürünlerin fiyatları diğerlerine kıyasla daha sık değişiyor.					
İnternet'ten satın aldığım bir ürünü yeniden satın almak istediğimde fiyatının değişmiş olma olasılığı çok yüksek.					
İnternet'te fiyatlar çok değişken.					
Bir ürünün farklı İnternet mağazalarındaki fiyatları birbirine çok yakındır.					
Bazı İnternet mağazalarındaki fiyatlar diğerlerine kıyasla daha düşüktür.					

5. BÖLÜM – Tüketicinin İnternet'teki Fiyatlandırma Uygulamalarına Yönelik Davranışları

10. Lütfen aşağıdaki her ifadeye ne derece katıldığınızı belirtiniz.

	Kesinlikle Katılıyorum	Katılıyorum	Kararsızım	Katılmıyorum	Kesinlike Katılmıyorum
Bir ürünü ancak bana fiyat avantajı sağlayacak ise İnternet'ten satın alırım.					
İnternet'te alışveriş yaparken en önem verdiğim nokta, bir ürünü çok uygun bir fiyata satın alabilmektir.					
İnternet'te alışveriş yaparken mutlaka fiyat karşılaştırması yaparım.					
Bir ürünü İnternet'ten satın almayacak olsam bile, fiyat araştırma ve karşılaştırması yapmak için İnternet'i kullanırım.					
İnternet'te fiyat karşılaştırması yapmak daha kolay.					
İnternet'te fiyat karşılaştırması yaparak çok karlı alışverişler yapabiliyorum.					
Bence İnternet'te daha ucuz fiyatı bularak elde ettiğim kazanç, harcadığım çabaya değer.					
Bence İnternet'te daha ucuz fiyatı bularak kazandığım zaman, harcadığım çabaya değer.					

11. İnternet'i aşağıdaki amaçlardan herbiri için ne sıklıkta kullandığınızı belirtiniz.

	Sık sık	Arasıra	Hiçbir zaman
Alışveriş yapmak			
Fiyat takip etmek			
Fiyat karşılaştırması yapmak			
Ürün bilgisi edinmek			
Yeni ürünleri takip etmek			
Ürün yorumlarını okumak			

12.   Lütfen aşağıdaki her bir ürün kategorisi için, İnternet'te hangi sıklıkla fiyat karşılaştırması yaptığınız belirtiniz.

	Her zaman	Sık sık	Bazen	Nadiren	Hiçbir zaman
Elektronik / teknolojik ürünler (Bilgisayar, telefon, tv, kamera, ses sistemleri..)					
Giyim / aksesuar (Erkek giyim, bayan giyim, iç giyim, ayakkabı, takı, çanta, kemer, saat..)					
Hobi (Kitap, DVD, Dergi, PC/Video oyunları, Oyuncak..)					
Kişisel bakım (Saç kurutma makinesi, traş makinesi, kozmetik ürünler, sağlık ürünleri..)					
Ev aletleri / ürünleri (Beyaz eşya, mutfak aletleri, temizlik gereçleri, ev dekorasyonu..)					
Antika / sanat / koleksiyon (Tablo, pul, antika objeler..)					

13.   İnternet'te alışveriş yaparken aşağıdaki durumların hangileri için daha fazla ödemeyi göze alacağınızı belirtiniz (Birden fazla seçeneği işaretleyebilirsiniz).

	Daha kısa teslimat süresi için		Hediye puanı kazanabilmek için
	Daha güvenilir bir siteden satın almak için		Promosyonlardan faydalanabilmek için
	Daha bilinen bir markayı satın alabilmek için		Daha hızlı/kolay satın alabilmek için
	Yeni model bir ürün alabilmek için		

6. BÖLÜM– İnternet'teki Fiyatlandırma Modelleri

Anketin bu son bölümünde İnternet'teki 6 farklı fiyatlandırma modeli ile ilgili sorular yer almaktadır. Bu siteleri daha önce duymamış ya da kullanmıyor olmanız hiçbir önem taşımamaktadır. Lütfen açıklamalar doğrultusunda alttaki her ifadeye sizin için en uygun yanıtı seçerek cevaplayınız.

14.   Aşağıdaki fiyatlandırma modellerinin herbirinin varlığından haberdar olup olmadığınızı belirtiniz.

	Evet	Hayır
ÜRÜN/FİYAT KARŞILAŞTIRMA MOTORLARI: Bir ürünün veya hizmetin farklı İnternet mağazalarındaki satış fşyatlarını tek bir noktadan görebilmeyi ve karşılaştırabilmeyi sağlayan web siteleridir.		
OUTLET: Bilinen, prestijli markaların stok fazlalarını uygun fiyatlara satan İnternet mağazalarıdır.		
İNDİRİM MAĞAZALARI: Sınırlı sayıda ürünü kısa bir süre için çok uygun fiyata satan İnternet mağazalarıdır.		
AÇIK ARTIRMA: Bir ürün için alıcıların çeşitli fiyat teklifleri sunabildiği ve satan kişinin ürünü en yüksek teklif verene sattığı web siteleridir.		
AÇIK EKSİLTME: Bir ürünün fiyatının alıcılar tarafından yapılan düşük fiyat teklifleriyle azar azar düştüğü ve belli bir sürenin sonunda en düşük fiyatı teklif edenin ürünü satın aldığı web siteleridir.		
TAKAS: Ürünlerin doğrudan başka ürünlerle para kullanılmadan karşılıklı değiştirilebildiği web siteleridir.		

15.   Bu site türlerinden herbirini ne sıklıkla ziyaret ettiğinizi belirtiniz.

	Sık sık	Arasıra	Hiçbir zaman
Ürün/Fiyat Karşılaştırma Motorları			
Outlet			
İndirim Mağazaları			
Açık Artırma			
Açık Eksiltme			
Takas			

16.   Bu tür siteleri alışverişlerinizde tercih etme olasılığınızı 5 üzerinden puan vererek belirtiniz (5=çok yüksek; 1=çok düşük).

	5	4	3	2	1
Ürün/Fiyat Karşılaştırma Motorları					
Outlet					
İndirim Mağazaları					
Açık Artırma					
Açık Eksiltme					
Takas					

REFERENCES

Alba, J., Lynch, J., Weitz, B., Janiszewski, C., Lutz, R., Sawyer, A. and Wood, S. (1997), "Interactive home shopping: Consumer, retailer, and manufacturer incentives to participate in electronic marketplaces", *Journal of Marketing,* Vol. 61, Iss. 3 (July), pp. 38-53.

Alford, B.L. and Biswas, A. (2002), "The effects of discount level, price consciousness and sale proneness on consumers' price perception and behavioral intention", *Journal of Business Research,* Vol. 55, pp. 775- 783.

Baker, W., Marn, M. and Zawada, C. (2001), "Price smarter on the net", *Harward Business Review,* Vol. 79, Iss. 2 (February), pp. 122-127.

Bakos, J.Y. (1997), "Reducing buyer search costs: Implications for electronic marketplaces", *Management Science,* Vol. 43, Iss. 12, pp. 1676-1692.

Balasubramaniam, S. (1998), "Mail vs. mall: A strategic analysis of competition between direct marketers and conventional retailers", *Marketing Science,* Vol. 17, Iss. 13, pp. 181-195.

Berkowitz, E.N. and Walton, J.R. (1980), "Contextual influences on consumer price responses: An experimental analysis", *Journal of Marketing Research,* Vol. 17 (August), pp. 349-358.

Bettman, J., Johnson, E. and Payne, J. (1991), "Consumer decision making", in Robertson, T.S. and Kassarjian, H.H. (Eds), *Handbook of Consumer Research,* Prentice-Hall, Englewood Cliffs, NJ, pp. 50-84.

Biswas, A. and Blair, E.A. (1991), "Contextual effects of reference prices in retail advertisements", *Journal of Marketing*, Vol. 55 (July), pp. 1-12.

Biswas, A., Pulling, C., Krishnan, B.C. and Burton, S. (1999), "Consumer evaluation of reference price advertisements: effects of other brands' prices and semantic cues", *Journal of Public Policy & Marketing*, Vol. 18, Iss. 1 (Spring), pp. 52-65.

Boutillier, J., Boutillier, S.S. and Neslin, S.A. (1994), "A replication and extension of the Dickson and Sawyer price-awareness study", *Marketing Letters*, Vol. 5, Iss. 1, pp. 31-42.

Brynjolfsson, E. and Smith, M.D. (2000), "Frictionless commerce? A comparison of Internet and conventional retailers", *Management Science,* Vol. 46, Iss. 4 (April), pp. 563-585.

Burman, B. and Biswas, A. (2004), "Reference price in retail advertisements: moderating effects of market price dispersion and need for cognition on consumer value perception and shopping intention", *The Journal of Product and Brand Management*, Vol. 13, Iss. 6, pp. 379-389.

Burton, S., Lichtenstein, D.R., Netemeyer, R.G. and Garretson, J.A. (1998), "A scale for measuing attitude toward private label products and an examination of its psychological and behavioral correlates", *Journal of the Academy of Marketing Science*, Vol. 26, Iss. 4, pp. 293-306.

Clay, K., Krishnan, R. and Wolff, E. (2001), "Prices and price dispersion on the web: Evidence from the online book industry", *The Journal of Industrial Economics,* Vol. 49, Iss. 4 (December), pp. 521-539.

Daripa, A. and Kapur, S. (2001), "Pricing on the Internet", *Oxford Review of Economic Policy,* Vol. 17, Iss. 2 (Summer), pp. 202-216.

Dickson, P.R. and Sawyer, A.G. (1990), "The price knowledge and search of supermarket shoppers", *Journal of Marketing*, Vol. 54, Iss. 3 (July), pp. 42-53.

Erickson, G.M. and Johansson, J.K. (1985), "The role of price in multi-attribute products evaluations", *Journal of Consumer Research,* Vol. 12 (September), pp.195-199.

Feick, L.F. and Price, L.L. (1987), "The market maven: A diffuser of marketplace information", *Journal of Marketing*, Vol. 51 (January), pp. 83-97.

Frankenberger, D.K. and Liu, R. (1994), "Does consumer knowledge affect consumer responses to advertised reference price claims?", *Psychology & Marketing*, Vol. 11, Iss. 3, pp. 235-251.

Gaudin, S. (2003), "Majority of online stores fail search engine test", CyberAtlas (www.cyberatlas.com)

Grewal, D. and Marmorstein, H. (1994), "Market price variation, perceived price variation, and consumers' price search decisions for durable goods", *Journal of Consumer Research,* Vol. 21, Iss. 3 (December), pp. 453-460.

Grewal, D., Monroe, K.B. and Krishnan, R. (1998), "The effects of price-comparison advertising on buyers' perceptions of acquisition value, transaction value, and behavioral intentions", *Journal of Marketing,* Vol. 62, Iss. 2 (April), pp. 46-59.

Gutman, J. (1982), "A means-end chain model based on consumer categorization process", *Journal of Marketing,* Vol. 46, pp. 60-72.

Hardesty, D.M. and Suter, T.A. (2005), "E-tail and retail reference price effects", *The Journal of Product and Brand Management*, Vol. 14, Iss. 2/3, pp. 129-136.

Hardie, B.G.S., Johnson, E.J. and Fader, P.S. (1993), "Modeling loss aversion and reference dependence effects on brand choice", *Marketing Science*, Vol. 12, Iss. 4 (Fall), pp. 378-394.

Helson, H. (1964), "Adaptation-level theory", *New York: Harper & Row.*

Jacoby, J. and Olson, J.C. (1977), "Consumer response to price: An attitudinal, information processing perspective", in *Moving Ahead with Attitude Research,* eds. Yoram Wind and Marshall Greenberg, Chicago, IL: American Marketing Association, pp. 73-86.

Janiszewski, C. and Lichtenstein, D.R. (1999), "A range theory account of price perception", *Journal of Consumer Research,* Vol. 25, pp. 353-368.

Jiang, P. (2002), "A model of price search behavior in electronic marketplace", *Internet Research: Electronic Networking Applications and Policy,* Vol. 12, Iss. 2, pp. 181-190.

Johnson, E.J., Moe, W.W., Fader, P.S., Bellman, S. And Lohse, G.L. (2004), "On the depth and dynamics of online search behavior", *Management Science,* Vol. 50, Iss. 3 (March), pp. 299-308.

Kukar-Kinney, M., Walters, R.G. and MacKenzie, S.B. (2007), "Consumer responses to characteristics of price-matching guarantees: The moderating role of price consciousness", *Journal of Retailing*, Vol. 83, Iss. 2 (April), pp. 211-221.

Latcovich, S. and Smith, H. (2001), "Pricing, sunk costs, and market structure online: Evidence from book retailing", *Oxford Review of Economic Policy,* Vol. 17, Iss. 2 (Summer), pp. 217-234.

Lichtenstein, D.R. and Bearden, W.O. (1989), "Contextual influences on merchant-supplied reference prices", *Journal of Consumer Research*, Vol. 16 (June), pp. 55-66.

Lichtenstein, D.R., Bloch, P.H. and Black, W.C. (1988), "Correlates of price acceptability", *Journal of Consumer Research*, Vol. 15 (September), pp. 243-252.

Lichtenstein, D.R., Burton, S., Karson, E.J. (1991), "The effect of semantic cues on consumer perceptions of reference price ads", *Journal of Consumer Research*, Vol. 18, Iss. 3 (December), pp. 380-391.

Lichtenstein, D.R., Ridgway, N.M. and Netemeyer, R.G. (1993), "Price perceptions and consumer shopping behavior: A field study", *Journal of Marketing Research*, Vol. 30, Iss. 2 (May), pp. 234-245.

Link, F. (1997), "Diffusion dynamics and the pricing of innovations", PhD thesis, Lund University.

Lynch, J.G. and Ariely, D. (2000), "Wine online: Search costs affect competition on price, quality, and distribution", *Marketing Science,* Vol. 19, Iss. 1 (Winter), pp. 83-103.

Mannuka, J. (2008), "Customers' purchase intentions as reflection of price perception", *Journal of Product & Brand Management*, Vol. 17, Iss. 3, pp. 188-196.

Mayhew, G.E. and Winer, R.S. (1992), "An empirical analysis of internal and external reference prices using scanner data", *Journal fo Consumer Research*, Vol. 19, Iss. 1 (June), pp. 62-70.

Maynes, E.S. and Assum, T. (1982), "Informationally imperfect consumer markets: Empirical findings and policy implications", *Journal of Consumer Affairs,* Vol. 16 (Summer), pp. 62-87.

Mazumdar, T. and Papatla, P. (2000), "An investigation of reference price segments", *Journal of Marketing Research*, Vol. 37, Iss. 2 (May), pp. 246-258.

McGowan, K.M. and Sternquist, B.J. (1998), "Dimensions of price as a marketing universal: A comparison of Japanese and U.S. consumers", *Journal of International Marketing,* Vol. 6, Iss. 4, pp. 49-65.

Miller, G.A. (1956), "The magical number seven, plus or minus two: Some limits on our capacity for processing information", *Psychological Review*, Vol. 63, Iss. 2 (March), pp. 81-97.

Monroe, K.B. (1990), "Pricing, making profitable decisions", *New York: McGraw-Hill*. 2nd Edition.

Monroe, K.B. and Lee, A.Y. (1999), "Remembering versus knowing: Issues in buyers' processing of price information", *Journal of Academy of Marketing Science*, Vol. 27, Iss. 2 (Spring), pp. 207-225.

Murray, K.B. and Häubl, G. (2002), "The fiction of no friction: A user skills approach to cognitive lock-in", *Advances in Consumer Research,* Vol. 29, Iss. 1, pp. 11-18.

Nwokoye, N.G. (1975), "Subjective judgments of price: The effects of price parameters on adaptation levels", *Proceedings of Fall Conference,* American Marketing Association, Chicago, IL.

Olshavsky, R. and Wymer, W. (1995), "The desire for new information from external sources", in Mackenzie, S. And Stayman, R. (Eds), *Proceesings of the Society for Consumer Psychology,* Printmaster, Bloomington, IN, pp. 17-27.

Rao, A.R. and Monroe, K.B. (1988), "The moderating effect of prior knowledge on cue utilization in product evaluations", *Journal of Consumer Research,* Vol. 15, Iss. 2 (September), pp. 253-264.

Rohm, A.J. and Swaminathan, V. (2004), "A typology of online shoppers based on shopping motivations", *Journal of Business Research,* Vol. 57, pp. 748-757.

Rosch, E. (1975), "Cognitive reference points", *Cognitive Psychology*, Vol. 7, Iss. 4, pp. 532-547.

Salop, S. and Stiglitz, J. (1977), "Bargains and ripoffs: A model of monopolistically competitive price dispersion", *Review of Economic Studies,* Vol. 45, pp. 493-510.

Sen, R., King, R.C. and Shaw, M.J. (2006), "Buyers' choice of online search strategy and its managerial implications", *Journal of Management Information Systems,* Vol. 23, Iss. 1 (Summer), pp. 211-238.

Shankar, V., Rangoswamy, A. and Pusateri, M. (1999), "The online medium and customer price sensitivity", Working Paper, *Collage Park: University of Maryland.*

Sherif, M. and Hovland, C.I. (1961), "Social judgment: assimilation and contrast effects in communication and attitude change", *Oxford, England: Yale University Press*.

Smith, M.D., Bailey, J. and Brynjolfsson, E. (1999), "Understanding digital markets: Review and assessment", in *Understanding Digital Economy,* E. Brynjolfsson and B. Kahin, Eds. Cambridge, MA: MIT Press, pp. 99-136.

Smith, M.D. and Brynjolfsson, E. (2001), "Consumer decision-making at an Internet shopbot: Brand still matters", *The Journal of Industrial Economics,* Vol. 49, Iss. 4 (December), pp. 541-558.

Stigler, G.J. (1961), "The economics of information", *The Journal of Political Economy,* Vol. 69, Iss. 3 (June), pp. 213-225.

Su, B. (2008), "Characteristics of consumer search on-line: How much do we search?", *International Journal of Electronic Commerce,* Vol. 13, Iss. 1 (Fall), pp. 109- 129.

Suri, R., Long, M. and Monroe, K.B. (2003), "The impact of the Internet and consumer motivation on evaluation of prices", *Journal of Business Research*, Vol. 56, Iss. 5 (May), pp. 379-390.

Tedeschi, B. (1999), "E-commerce report", *New York Times,* March 8, C4.

Tellis, G.J. and Gaeth, G.J. (1990), "Best value, price seeking, and price aversion: The impact of information and learning on consumer choices", *Journal of Marketing,* Vol. 54 (April), pp. 34-45.

Telser, L.G. (1973), "Searching for the lowest price", *American Economic Review,* Vol. 63, Iss. 2 (May), pp. 40-49.

Urban, G.L., Hulland, J.S. and Weinberg, B.D. (1993), "Premarket forecasting for new consumer durable goods: Modeling categorization, elimination and consideration phenomena", *Journal of Marketing,* Vol. 57, Iss. 2 (April), pp. 47-63.

Urbany, J.E., Dickson, P.R. and Kalapurakal, R. (1996), "Price search in the retail grocery market", *Journal of Marketing,* Vol. 60, Iss. 2 (April), pp. 91-104.

Vanhuele, M. and Dreze, X. (2002), "Measuring the price knowledge shoppers bring to the store", *Journal of Marketing*, Vol. 66, Iss. 4 (October), pp. 72-85.

Varian, H.R. (1980), "A model of sales", *American Economic Review,* Vol. 70, Iss. 4, pp. 651-659.

Veblen, T. (1915), "The theory of the leisure class: An economic study of institutions", *New York: MacMillan.*

Wakefield, K.L. and Inman, J.J. (1993), "Who are the price vigilantes? An investigation of differentiating characteristics influencing price information processing", *Journal of Retailing*, Vol. 69 (Summer), pp. 216-233.

Waldeck, R. (2002), "Pricing and price dispersion in e-commerce", in *Proc. 5th ICECR,* Montreal, QC, Canada, pp. 1-9.

Wind, Y. And Mahajan, V. (2002), "Convergence marketing", *Journal of Interactive Marketing,* Vol. 16, Iss. 2 (Spring), pp. 64-79.

Yin, T. and Paswan, A.K. (2007), "Antecedents to consumer reference price orientation: an exploratory investigation", *Journal of Product & Brand Management,* Vol. 16, Iss. 4, pp. 269-279.

Zeithaml, V.A. (1984), "Issues in conceptualizing and measuring consumer response to price" in *Advances in ConsumerResearch*, Vol. 11, ed. Thomas C. Kinnear, Provo, UT: Association for Consumer Research, pp. 612-616.

Zeithaml, V.A. (1987), "Defining and relating price, perceived quality, and perceived value", Working Paper No. 87-101, Marketing Science Institute, Cambridge, MA 02138.

Zo, H. and Ramamurthy, K. (2009), "Consumer selection of e-commerce websites in a B2C environment: A discrete decision choice model", *IEEE Transactions on Systems, Management, and Cybernetics,* Part A: Systems and Humans, Vol. 39, Iss. 4 (July), pp. 819-838.