PERCEIVED VALUE IN THE ONLINE SHOPPING ENVIRONMENT:

THE CASE OF SUPERMARKET SHOPPING

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Perceived Value in the Online Shopping Environment:

The Case of Supermarket Shopping

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DECLARATION OF ORIGINALITY

I, Seçkin Karabağ, certify that

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- this thesis contains no material that has been submitted or accepted for a degree or diploma in any other educational institution;

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ABSTRACT

Perceived Value in the Online Shopping Environment:

The Case of Supermarket Shopping

Online retail sales grow faster than total retail sales every year. It is not only because of increasing internet penetration but also due to product diversification. Supermarket shopping has also been transformed to an online experience by many brands today. This study aims to measure the importance of perceived value and behavioral perception on online supermarket shopping intention and purchase decision. The theoretical framework and hypotheses are based on the perceived online channel value (POCVAL) model. The original model is extended with SERVQUAL, experiential value and behavioral perception scales in order to detail the effects of service performance, emotional value, perceived capability and social encouragement factors. Data collected from 458 respondents are analyzed on SPSS using descriptive, multiple and logistic regression, mediation, one-way ANOVA and independent sample t-test analyses. Results show that behavioral perception factors have both significant direct and indirect impacts on online supermarket shopping intention. Beside that personalized features and information quality from service performance values have positive or negative impacts on both intention and actual purchase decision. Furthermore, without social encouragement both enjoyment and visual aesthetics of online supermarkets become futile, which implies that word-of-mouth effect is strongly needed for online supermarkets as well. Nevertheless, this study reflects only the perspective of Turkish consumers. Validation of the applied model in other cultural settings is needed. Moreover, hands-on experiments and focus groups are needed for further research to explore more of purchase triggers.

ÖZET

İnternet Alışverişinde Algılanan Değer: Süpermarket Alışverişi Örneği

Sanal perakende satışları toplam perakende satışlarından her yıl daha hızlı büyümektedir. İnternetin yaygınlaşmasının yanında, artan ürün çeşitliliğinin de bu durumda payı bulunmaktadır. Bugün pek çok marka, sanal süpermarket alışverişini de bir hizmet olarak müşterilerine sunmaktadır. Bu çalışma algılanan değerler ve davranışsal etkenlerin sanal süpermarket alışverişi niyet ve kararı üzerindeki etkilerini belirlemeyi amaçlamaktadır. Çalışmanın kuramsal temeli ve ön savları, sanal mecrada algılanan değerler modeline göre oluşturulmuştur. Özgün model, hizmet performansı, duyusal, deneyimsel ve davranışsal değişkenler içeren farklı modellerin eklenmesiyle genişletilmiştir. Toplamda 458 internet kullanıcısından toplanan veriler SPSS üzerinde tanımlayıcı, çoklu ve lojistik regresyon, dolaylı etki, tek yönlü varyans ve bağımsız grup t testi analizleri ile incelenmiştir. Sonuçlar, algılanan davranışsal kontrol ve sosyal çevre teşvikinin sanal süpermarket alışveriş niyeti üzerinde hem dolaylı hem de doğrudan etkisi olduğunu göstermektedir. Bunun yanında servis performansı değişkenlerinden kişiselleştirme ve bilgi kalitesinin hem satın alma niyeti hem de satın alma kararı üzerinde etkili olduğu belirlenmiştir. Dahası, sosyal çevre teşviki olmadan, duyusal değerlerin sanal süpermarket alışverişi üzerinde etkili olmadığı da tespit edildi. Dolaysıyla, kulaktan kulağa pazarlamanın sanal süpermarket alışverişi için de önemi teyit edildi. Diğer yandan, bu çalışma sadece Türk tüketicisinin sanal süpermarket alışverişine yaklaşımını yansıtmaktadır. Uygulanan modelin farklı kültürel ortamlarda da denenmesi gerekir. Daha ileri araştırmalar için satın alma davranışını tetikleyen etkenlere yönelik uygulamalı deneyler ve odak gruplarına dayanan çalışmalar yapılması önerilmektedir.

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CHAPTER 1

INTRODUCTION

1.1 Internet usage in the World

ITU, the United Nations specialized agency for information and communication technologies (2019) predicts that 3.9 billion people in the world were connected to the Internet by late 2018. That is to say, the global internet penetration reached 51.2%, which was 48% in 2017 and 47% in 2016. Figure 1 emphasizes the higher the Internet adoption among young people ages 15-24, which accounts for one fourth of the world population, reached 70.6% in 2017. Adoption in the developed countries is twice as in the developing countries and more than four times of the least developed countries. In terms of regions, the adoption growth rates are the slowest in Europe and the Americas while it is the strongest in Africa region in which the adoption increased from 2.1% in 2005 to 24.4% in 2018 (ITU, 2019).
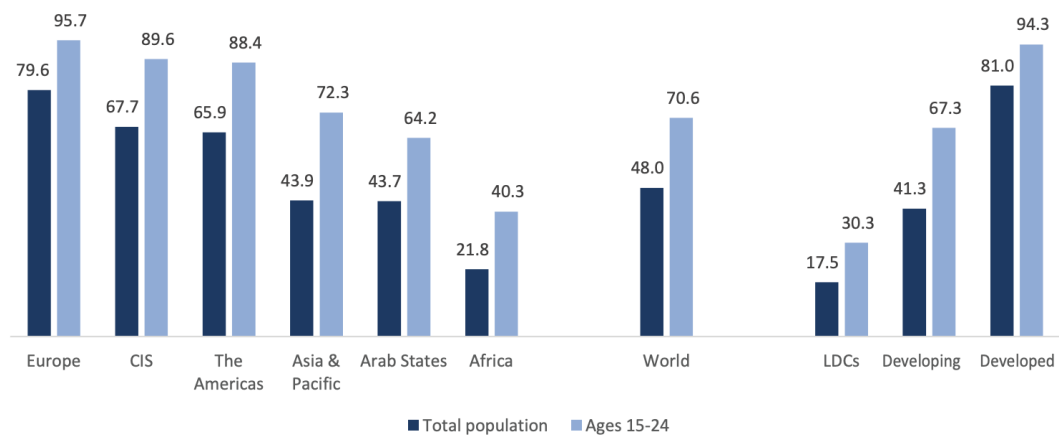
Figure 1. Percentage of individuals using the Internet in 2017

Source: Adapted from ITU (July, 2017)

Furthermore, the way people connect to the Internet has also changed dramatically. Figure 2 displays the households with the Internet rose from 18% to

51.2% between 2005 and 2018. Mobile-cellular telephone subscriptions surpassed the world population in 2018, which was driven by the demand coming from Africa and Asia-Pacific regions in the last five years. Similarly, mobile-broadband subscriptions took over the home subscriptions in 2014, which is in comply with the Comscore's report (2014) that the Internet time spent on mobile devices -for the first time in the history- exceeded the Internet time spent on desktop in the U.S. in 2014.
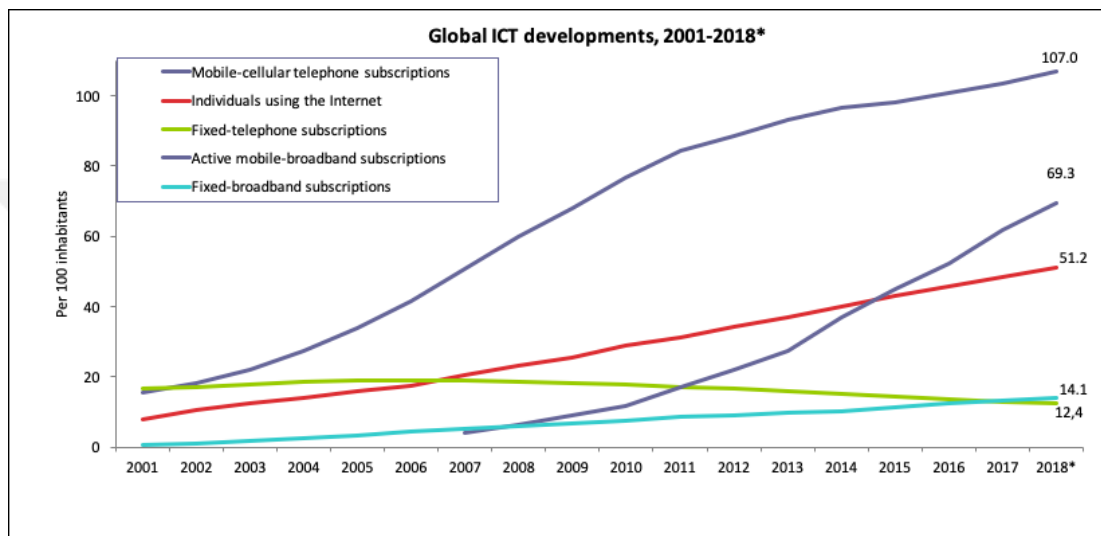
Figure 2. 17 years of ICT growth

Source: Adapted from ITU (April, 2019)

1.2 Online shopping in the World

Shopping has never been simpler. Modern world offers many business channels developed to sell and buy goods. (Avery et al., 2013). However, online channel has been growing faster than any other channel. The U.S. Census Bureau (2019) reports that total e-commerce sales in the U.S. reached $513.6 billion in 2018, an increase of 14.2% from 2017 while total retail sales is increased by 4.8% in 2018. E-commerce sales in 2018 accounted for 9.7% of total sales, which was 8.9% in 2017.

Similarly, Europe region is estimated to reach €602 million business to consumer e-commerce volume in 2018, which is an increase of 11% from 2017 while the total retail volume increased only 2% in 2018 from 2017 (EuroCommerce, 2018; Eurostat, 2019).

Eurostat (2019) also reports that average 50% of individuals residing in the European Union area stated that they had at least one online purchase in the past three months in 2018, which has increased by 7% since 2015. The United Kingdom has the highest online shoppers in 2018 with 77% of individuals engaged in an online purchase in the past three months, followed by Denmark and Netherlands with 73% and 70% respectively.

Looking at the far east, Nielsen's survey (2016) showed that South Korea has become a mature market for e-commerce in which 77% of surveyed people reported that they purchased clothes online in 2015, which is the highest among other countries surveyed including the U.S., European Union and other developing nations.

According to Nielsen (2016) China is another mature and booming e-commerce market. Survey showed that one third of Baby-related sales were made online in 2015 and it was 40% more than the previous year while only the 2% of Beverage sales were made online in 2015, which was 72% more than in 2014.

Researchers validated that online purchasers have concerns regarding security, privacy, non-deception and reliability in online transactions (Voz et al., 2014). However, trust formation is a dynamic process rather than a static one (Kim et al., 2012). PwC's Global Retail Survey (2016) confirms that trust factor has improved globally, even created an e-commerce trend: offshore ordering. The survey conveyed that 56% of the global sample has stated that they would order from a distant abroad retailer for cheaper prices.

1.3 Online supermarket shopping in the World

Not every online purchase is the same. Nielsen (2016) reveals that consumers claim they had purchased more durable goods than consumer goods online. However, it does not necessarily mean that e-commerce is not an option for consumer goods. Especially categories that enables personalization to some extent like personal care and cosmetics have promising future. Brick Meets Click (2018) claims that online grocery shopping took 5.5% of total U.S. grocery spending in 2018. They also noted that 30% of the households buy groceries from digital stores in the U.S. Nielsen (2016)'s survey found out that mature markets in Asia and Europe has been developing more online space for consumer goods. Survey results showed that 65% of surveyed individuals from South Korea confirmed that they had purchased personal care goods online at least once. Furthermore, 37% of them has also confirmed an online fresh grocery order at least once (Nielsen, 2016).

China has a booming online fresh food industry since 2010. Suppliers have observed that selling fresh foods online decreased product delivery process to fewer steps, which improved the delivered product qualities. Therefore, the market boomed by expanding online sales in seafood, fresh fruits, vegetables and poultry categories. Yihoadian, an online supermarket, even started to sell live crabs, which are delivered to the major cities within three days (Xiang et al., 2014).

1.4 Internet usage in Turkey

Figure 3 summarizes the Turkish Statistical Institute's (TurkStat) ICT usage in household survey in 2018, which asserts that the Internet penetration has become 72.9%, which is a 6% increase from 2017 and 11.7% more than in 2016. Moreover, 83.8% of the households have Internet access. Although, population sizes are almost

equal in terms of gender, 80.4% of males use the Internet while it reduces to 65.5% among females.

Figure 3. Computer and the Internet usage in households in Turkey

Source: Adapted from TurkStat's ICT Usage Survey 2018

Another finding shows that 45.6% of the Internet users aged between 16 and 74 have used the state web portal, e-Devlet for private purposes in 2018. It was estimated as 42.4% in 2017.

1.5 Online shopping in Turkey

TurkStat (2018) reported that 29.3% of the Internet users made an online purchase in 2018, which was 24.9% in 2017. Clothes and sports goods were purchased by 65.2% of the e-shoppers, followed by travel purchases with 31.9%, household goods (furniture, toys etc. excluding consumer electronics) with 26.8%, food or groceries with 22.1%, books, magazines, e-books with 20.6%.

According to the Interbank Card Center (2019), online payments with credit cards reached to the volume of 139 billion Turkish Liras in 2018, rose by 29% from 99 billion in 2017. TUBISAD, a union in Turkey consists of business owners in the

information technology sector, published a report (2018) that e-commerce sales were 42.2 billion Turkish Liras in 2017 achieving a growth rate of 37% from 2016. They also pointed out that 4.1% total retail sales were online in 2017 increasing from 3.5% in 2016. It was less than the developed nations' average of 9.8% and developing nations' average of 4.8% in 2017.

1.6 Online supermarket shopping in Turkey

Turkish retail sector was dominated by traditional retailers (bakkals and open-air bazzars) until the early 2000's. However, after the 2001 banking crisis, discount retailers started to grow exponentially and as Table 1 shows they took market dominance from traditional retailers with other organized retailers in 2011 (Erdoğan et al., 2012).

Table 1. Channel distribution of retail sector in Turkey

% Shares	2005	2006	2007	2008	2009	2010	2011 (First Half)
Organized Retailers	31,26	34,4	39,86	42,31	45,51	49,08	50,86
Traditional Retailers	68,74	65,6	60,14	57,69	54,49	50,92	49,14

Source: Adapted from Erdoğan et al. (2012)

Online landscape was used for supermarket shopping first by Migros in 1997 with Sanal Market (Migros Sanal Market, 2019) and it is still the biggest online supermarket in Turkey (Euromonitor, 2016). Online share is reached 2% of all turnover of Migros in 2017 (Beyhan, 2017). However, it has a yearly growth rate of

40% (Eviz, 2018). Although, Migros is the biggest omni channel supermarket, it is not alone in the online space. Other brick and mortar players Altunbilekler, Bizim Toptan, Mopaş, Üçler and Show Market also started their online operations (Eviz, 2018). Table 2 shows Hepsiburada, n11.com and gittigidiyor.com as the largest three online retailers whom are operating solely on the Internet, have supermarket sub-categories as well (Euromonitor, 2016). However, we cannot know the supermarket sales share in the total turnovers for the top three since they are not publicly traded companies yet on the contrary of Migros.

Apart from the listed companies in Table 2, there has been some other enterprises in the online supermarket business that tried to disrupt the market. Tazedirekt and Getir enterprises could be mentioned as examples. Tazedirekt was operated in the fresh grocery vertical. Despite the reported monthly 30% growth rate, it was unexpectedly shut down in February 2016, reportedly due to the excessive operating costs (Kara, 2016). Later, it was acquired by Migros in November 2016 and started to operate again (Demirel, 2016). Other disruptive enterprise is Getir, which is started in 2015. It is a mobile app that accepts orders in limited supermarket product categories and promises to deliver within ten minutes with highly mobile agents only in the central parts of Istanbul as the date of April 2019 (Getir, 2019). In April 2019, Yemeksepeti, an online food delivery network in Turkey, announced the Banabi app service, which will compete with Getir on supermarket delivery (Ferah, 2019). Finally, Scotty and Glovo may be mentioned as other players in the market. Both can be used in ordering supermarket goods but, supermarket delivery is not their core business (Scotty, 2019; Glovo, 2019).

Table 2. Internet retailing brand shares: % retail value 2012-2015

% retail value excluding sales tax	2012	2013	2014	2015	Supermarket Category
Hepsiburada	12.5	12.1	18.2	19.1	Yes
n11.com	-	4.5	11.0	13.6	Yes
gittigidiyor.com	6.4	8.4	8.1	10.0	Yes
Teknosa	2.8	5.0	5.9	5.9	No
Markafoni	5.6	5.6	5.7	5.9	No
Trendyol	4.5	5.1	5.4	5.5	No
Migros	4.8	5.0	5.5	5.1	Yes
Kliksa	0.9	2.2	3.6	4.2	No
Morhipo	1.6	1.4	2.4	2.7	No
App Store	1.5	2.6	2.4	2.0	No
Hizlial	2.5	2.5	2.2	1.9	Yes
Amazon	2.5	2.4	2.1	1.8	No
Vatan Bilgisayar	2.1	2.2	1.8	1.5	No
Gold	0.5	1.8	1.7	1.5	No
Istanbul Bilisim	2.8	2.2	1.7	1.4	No
1v1y.com	1.9	1.9	1.6	1.4	No
CicekSepeti	2.1	1.8	1.6	1.4	No
Bimeks	1.1	0.9	1.3	1.3	No
LC Waikiki	0.8	0.8	0.9	1.2	No
KocTAS	0.9	1.0	1.2	1.1	No
Others	42.1	30.9	15.9	11.6	
Total	100.0	100.0	100.0	100.0	

Source: Adapted from Euromonitor – Internet Retail in Turkey (2016)

CHAPTER 2

LITERATURE REVIEW

2.1 Online shopping motivation

With the expansion of the Internet usage, online shopping has been studied a lot within diverse dimensions in research. The most emphasized motivations regarding the online shopping behavior could be summarized as convenience (time-consciousness) and cost (price-consciousness) (Chen & Chang, 2003; Chiang & Dholakia, 2004). Punj (2011) adds a third motivation as finding the right product that satisfies the need (product-fit consciousness). In addition to that, early studies described the online shoppers as highly educated higher income groups with strong time restriction. Hence, early adopters of online shopping were depicted as more convenience and less price sensitive. However, it was expected that as other social groups gain access to the online space, the depicted sensitivities were open to change (Andrews & Currim, 2004).

Furthermore, online shoppers are categorized in terms of motivation as utilitarian or hedonic shoppers. Utilitarian shoppers are more concerned with the functional performance of the purchase while hedonic shoppers seek more experiential drivers like fun and pleasure from the purchase activity (Liu & Forsythe, 2011; Close & Kukar-Kinney, 2010).

Punj (2011) points out that income and online shopping are positively correlated. Rich consumers are time-conscious while the poor are price-conscious. In terms of consumer motivation, utilitarian consumers ignore the search cost for the sake of finding the right product as hedonic consumers perceive that the search cost matters and online shopping is beneficial at the extent of decline in the search cost.

On the other hand, it is not easy to draw strict lines between utilitarianism and hedonism in the online shopping context. Scarpi (2012) compared hedonic and utilitarian online shoppers in terms of price consciousness, repurchase intention, shopping frequency, purchased amount and the Internet expertise. There were no significant differences between hedonic and utilitarian shoppers for all dimensions except purchased amount. Hedonic shoppers are found out as spending more than utilitarian shoppers. Moreover, Scarpi et al. (2014) reported that both hedonic and utilitarian online shoppers are price conscious. However, they differ in terms of product search motivation. Hedonic shoppers enjoy finding the best priced deals while utilitarian shoppers aim not to enjoy but, to spend efficiently by taking time and advantage of easier price comparison online.

2.2 Online shopping behavior

Davis et al. (1989) proposed the Technology Acceptance Model (TAM) that asserts that the potential purchasers of new technologies go through the stages of:

1. Belief

    1. Perceived usefulness

    2. Perceived ease of use

2. Attitude

3. Intention

4. Behavior

Ha and Stoel (2009) applied the TAM on online shopping with some modifications. They proposed and proved that belief on online shopping has an antecedent of e-shopping quality. As shown in Figure 4, belief stage consists of (1) trust, (2)

enjoyment and (3) ease of use factors. Moreover, (1) web site design, (2) customer service, (3) privacy and security and (4) atmospheric and experiential factors were determined to be correlated to the perception of e-shopping quality and web site design was found to be the most influential factor more than others combined.

1. Antecedent to Belief

    1. E-shopping quality

        1. Web site design

        2. Customer service

        3. Privacy / Security

        4. Atmospheric / Experiential

2. Belief about online shopping

    1. Trust

    2. Enjoyment

    3. Ease of use
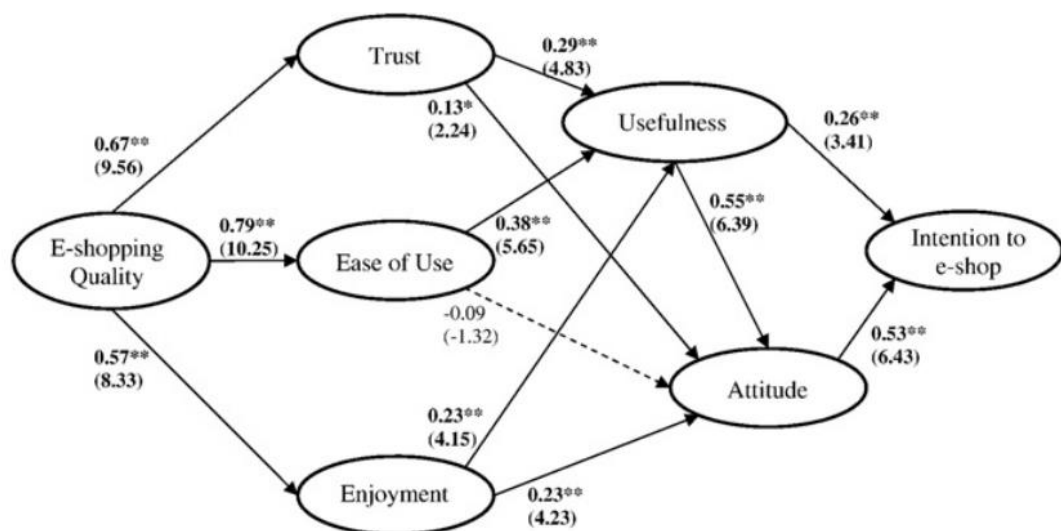
Figure 4. Online shopping acceptance model with the antecedent of e-shopping quality

Source: Adapted from Ha and Stoel (2009)

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Lee and Lin (2005) developed a model that measures online service quality based on Parasuraman et al.'s (1988) SERVEQUAL model in which service quality has originally five dimensions:

1. Tangibles: Physical facilities and personnel

2. Reliability: Ability to deliver the promised service

3. Responsiveness: Willingness to help customers

4. Assurance: Employee skills that ensure customer trust

5. Empathy: Personalized customer service support

Lee and Lin modified the SERVEQUAL in order to measure the e-service quality and converted the five dimensions into:

1. Web site design

2. Reliability

3. Responsiveness

4. Trust

5. Personalization

Consequently, they found that trust has the highest impact on e-service quality perception of consumers, which is followed by reliability, responsiveness and web site design while personalization marked as insignificant.

On the other side, there are claims that e-shopping quality is not solely sufficient to persuade customers to repurchase online. Kim et al. (2012) suggested

quality → value → satisfaction → loyalty

chain explains the influence of online customers and vendors. Furthermore, they proved it in Korean internet business settings. Figure 5 displays that product and shopping quality are evaluated by the perceptions of meeting functional and hedonic expectations. Moreover, these expectations can be met by providing an accessible,

secure, quick to serve and receptive system for utilitarian customers, while information variety, service quickness and receptiveness are critical for hedonic customers. In other words, businesses should have a system that is easy to access and fast in responding customer queries with relevant information (utilitarian), and serve wide range of product information with quick delivery and return processes (hedonic).
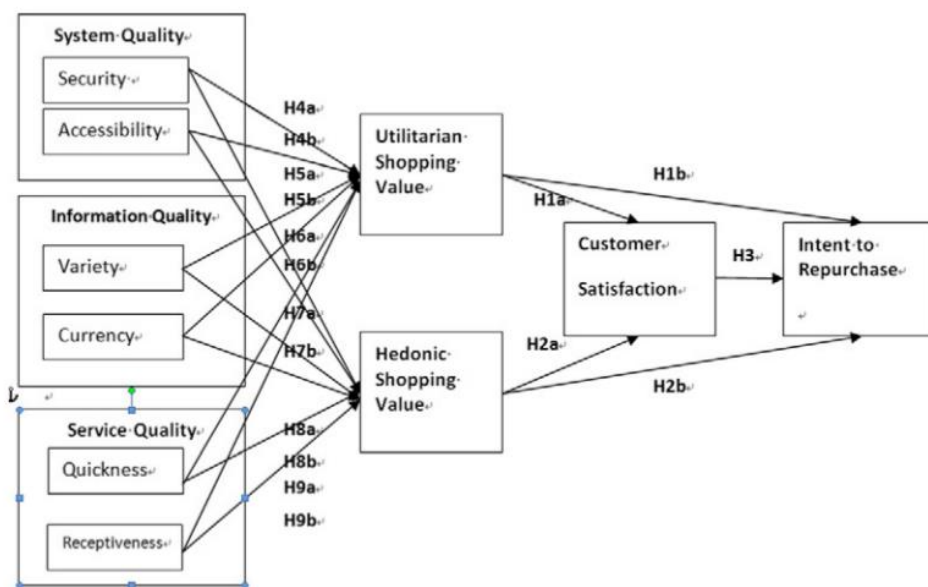
Figure 5. Value based repurchase intention model

Source: Adapted from Kim et al. (2012)

Figure 6 summarizes the mode of Chang and Chou (2011) that is associated the relationship of customers and online service providers with the expectation-confirmation theory (ECT). They divided the relationship under two factors: dedication-based (willingness) and constraint-based (mandatory) relationships.

1. Factors

   1. Willingness: Dedication-based

      1. Satisfaction

      2. Perceived usefulness

   2. Lack of Alternatives: Constraint-based

      1. Trust

      2. Perceived switching cost

2. Antecedents of Factors

   1. Antecedents of Constraint-based

      1. Closeness

         1. Relationship investment

         2. Perceived cohesion

      2. Effectiveness

         1. Perceived operational competence

         2. Communication

   2. Antecedents of Dedication-based

      1. Confirmation

         1. Expectation

         2. Perceived level of confirmation

They concluded that antecedents of both factors are influential in recurring online shopping behavior. However, it has been noted that constraint-based variables are more effective than dedication-based variables in explaining continuous online shopping behavior.
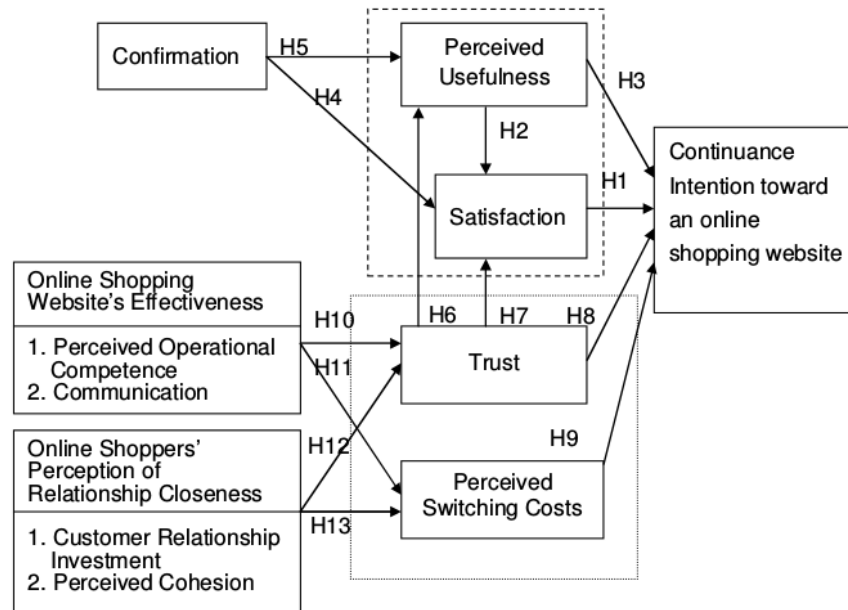
Figure 1. Research model. Dotted lines (− − − −) indicates the constraint-based variables; round-dotted line (··············) indicates the dedication-based variables.

Figure 6. Expectation-confirmation theory based continuance intention explanation of online shoppers

Source: Adapted from Chang and Chou (2011)

2.3 Online supermarket shopping

The main reasons reported for online supermarket shopping are convenience and saving time. However, questioning the amount of time saving showed that the perception of time saving comes from avoiding to travel to store rather than purchase time gain (Morganosky & Cude, 2000). However, Roberts et al. (2003) reported that convenience comes third as a reason for online supermarket shopping after price and quality. Moreover, they also claimed that shoppers who switched to online grocery shopping think that traditional shopping is time consuming and tiring.

Rohm and Swaminathan (2004) studied online grocery shoppers in terms of convenience, information seeking, variety seeking, immediate possession and social interaction motives. Consequently, online grocery shoppers are clustered into four

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main groups, which are variety seekers, balanced (both convenience – variety seeking effective) users, convenience users and store-oriented users with respect to cluster sizes. In other words, convenience and variety seeking behavior dominate the online grocery landscape.

Mortimer et al. (2016) asserted that online shopping experience for food and groceries strictly differs from other forms of online shopping due to non-durable nature of products and frequency of shopping. In addition to that, online shoppers attach relative advantage and more complexity to online grocery shopping, which does not comply with convenience and ease of use attached to the other forms of online shopping. Furthermore, they tested influence of online satisfaction, repurchase intention, trust and perceived risk.

As a result, they figured out that:

- Frequent shoppers on the contrary of non-frequent shoppers do not perceive risk and do not have trust issues.

- Once a frequent shopping relationship is formed, shoppers will spend less effort for other criteria such as price, quality or service.

Furthermore, Hand et al. (2009) studied the reasons to shop groceries online by an exploratory analysis and found out that life events in particular (e.g. having a baby, health problems) might be the triggers for starting online grocery shopping and they also noted that shopping may stop as reasons to start are removed. On the other side, they figured out that online grocery shopping was less enjoyable compared to other internet activities or other forms of online shopping and less satisfactory than traditional supermarket shopping. Therefore, online shopping was marked as complementary rather than substitutive for grocery and food market.

Moreira et al. (2013) also conducted an exploratory study for online supermarket shoppers used Zona Sul Atende supermarkets' web site in Brazil. Similar to Han et al. (2009), online customers of Zona Sul Atende concluded that they prefer shopping online per convenience and price advantages. However, despite reported advantages, they perceived the process boring and tiring.

Degeratu et al. (2000) compared the online and traditional supermarkets in terms of search attributes effect on purchase decisions. They categorized attributes under brand, price, sensory and non-sensory attributes. Consequently, they noted that:

- Sensory data are more visible in traditional setting while non-sensory data is emphasized in online setting.

- Search costs are lower in online as the differences between products are displayed over non-sensory attributes.

- Convenience features like shopping lists may shift customers' focus on non-sensory attributes.

- Brand name gains/loses importance at the extent of available information. More information about products lesser brand importance and price sensitivity.

- Brand name gains importance when products differ by brand image or other attributes.

- Brand name is not influential for functional products since they are compared by detailed information given online.

Similar to Degeratu et al. (2000), Andrews and Currim (2004) also claimed that online shoppers have less price sensitivity, prefer larger sizes and search products under brands more than traditional shopper.

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2.4 Perceived value

Carlson et al. (2015) devised the POCVAL model in Figure 7, which is defined as "A personal perception of benefits or advantages arising from interactions with technology driven service processes in the online channel of a multichannel retailer that facilitates achievement of customer goals or purposes".

They proved that perceived online channel value has five antecedents and among them service performance value has the strongest effect while emotional value has the least influential effect on perceived online value. Therefore, they emphasized the online channel managers should empower their functional performance value in order to build loyal relationships with customers.
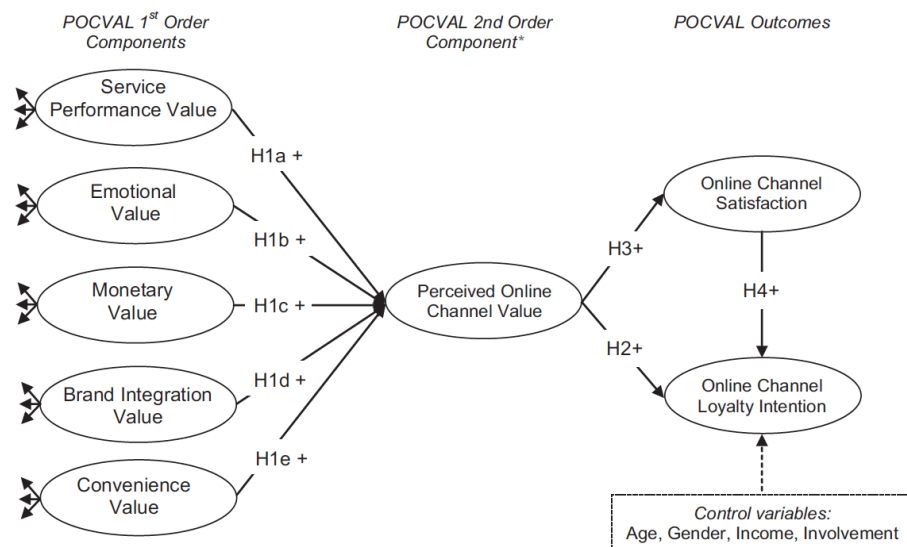
Note: Perceived online channel value is configured as a hierarchical component, second-order construct.

Figure 7. POCVAL model of perceived online channel value
Source: Adapted from Carlson et al. (2015)

Tapar et al. (2015) studied the influence of the risk perceptions and online purchase intention mediated by perceived online value. Hence, they proposed the model summarized in Figure 8 in which there are six risk categories regarding an online purchase. They concluded that to reduce risk perception of customers, vendors

should empower perceived customer values in terms of functional terms like price, quality and service that will strengthen purchase intention.
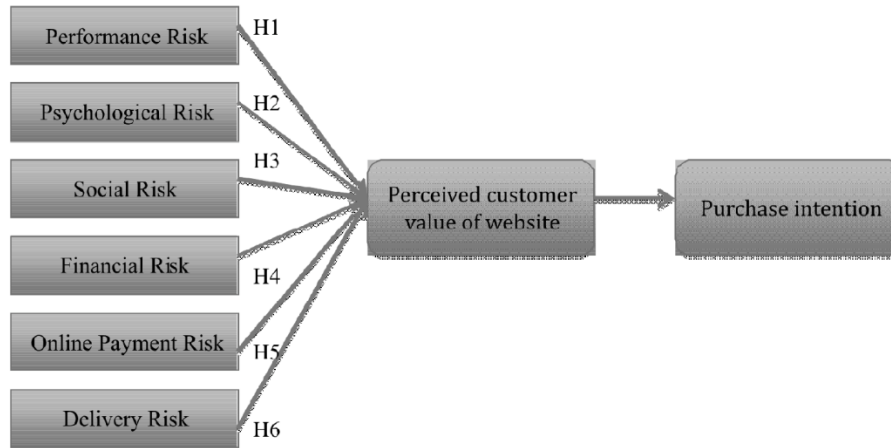
Figure 8. Risk perception and perceived customer value model
Source: Adapted from Tapar et al. (2015)

E-store atmospherics is another factor, which is heavily studied in order to figure out its effect on perceived value. Charfi and Lombardot (2015) studied online perceived value in two dimensions as hedonic and utilitarian values as shown in Figure 9. They confirmed that both values are correlated with the intention to purchase, revisit and word-of-mouth behaviors. However, they noted that hedonic values appeal more to visitors compared to utilitarian ones. Furthermore, they tested the correlation between website atmospheric variables and online perceived value dimensions and concluded that virtual agents, 3D, level of control have different effects on hedonic and utilitarian customers. 3D material and strong control command are evaluated as helpful by utilitarian values while only virtual agents are denoted as helpful for hedonic customers.

Environmental Elements		**Perceived Value**		**Behavior Intentions**
Virtual Agent		Utilitarian		Intention to purchase
Control command	H1 to H6	Hedonic	H7 to H12	Intention to revisit
3D				Word-of-mouth
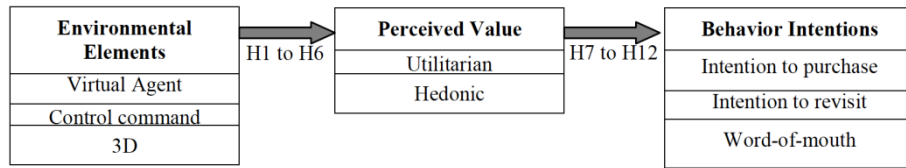
Figure 9. E-atmospheric elements and perceived value model

Source: Adapted from Charfi and Lombardot (2015)

2.5 Online experiential value

Mathwick et al. (2001) stated that vendors should also design experiences in the online space in order to turn visitors into frequent customers. Hence, they proposed an experiential value model in which there are four experience value types: playfulness, aesthetics, customer return on investment (CROI) and service excellence. Furthermore, they categorized value types are under two active/passive and intrinsic/extrinsic dimensions. To elaborate, extrinsic values represents utilitarian benefits derived from shopping trips or attempts while intrinsic values are subjective and reflect intrinsic perceptions of shopping experiences. Active values represent consumer collaboration in shopping activity while reactive values are consumer responses to a shopping, service or product experience. As Figure 10 displays, playfulness is an active source of intrinsic value and differs from CROI in terms of utilitarian implications while differs from aesthetics in terms of involvement level. Moreover, playfulness is placed at right opposite of service excellence since service excellence is an extrinsic reactive value.

They also defined and tested dimensions of experiential value items that are summarized in Figure 11. Emotional value attributes playfulness and aesthetics have both two dimensions. Playfulness has escapism and enjoyment dimensions while

aesthetics has visual appeal and entertainment. CROI has also two dimensions of economic value and efficiency while service excellence has none.

	Active	Reactive
Intrinsic Value	Playfulness	Aesthetics
Extrinsic Value	Consumer Return on Investment (CROI)	Service Excellence

Active Value — Reactive Value
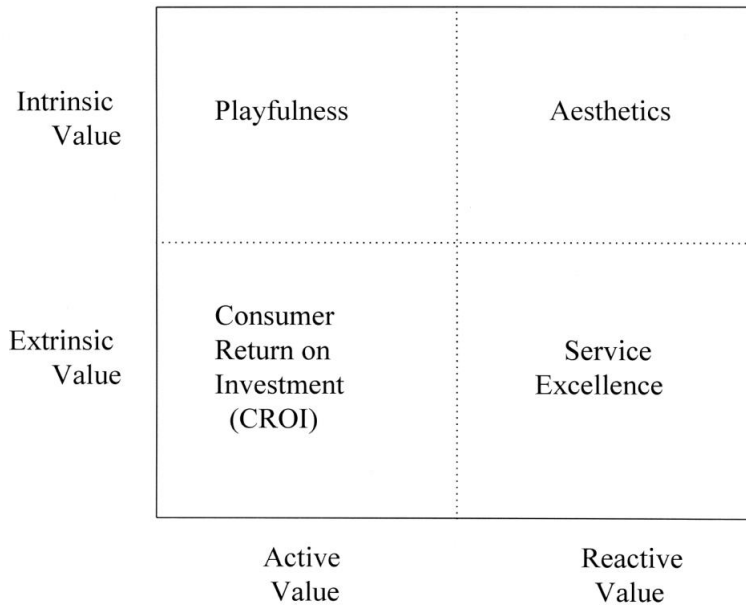
Figure 10. Typology of experiential value model
Source: Adapted from Mathwick et al. (2001)

Later, Mathwick et al. (2002) also suggested that shopping purpose is an important factor and has an effect on experiential value perceptions. Goal-directed shoppers are more prone to perceive service excellence and economic return whereas experiential consumers are more inclined to feel enjoyment after a purchase. They also found out that aesthetics has a complementary effect on service excellence perception.

Verhagen et al. (2011) tested experiential value scale in virtual world environment and claimed that experiential values are crucial in explaining satisfaction of IS services. They also confirmed the interconnectedness of intrinsic and extrinsic values.
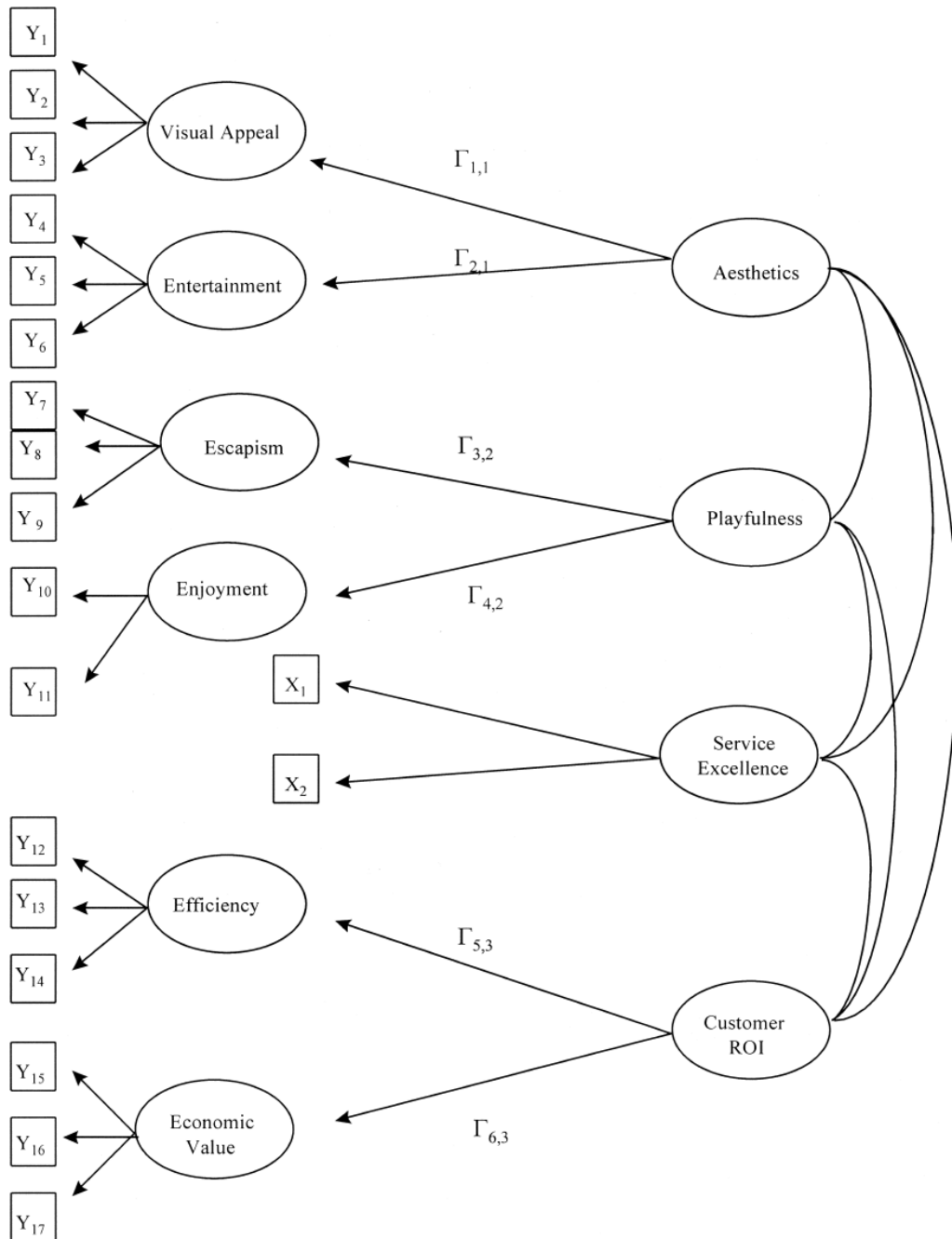
Figure 11. Hierarchical model of experiential value

Source: Adapted from Mathwick et al. (2001)

Shobeiri et al. (2015) compared online buying experiences of physical goods and services. Due to having less search attributes, experiential value types have more influence on e-services. However, it was asserted that aesthetics and service

excellence are vital for online physical good sellers, which also confirms Mathwick et al. (2002)'s findings on complementary effect of aesthetics on service excellence perception.

In another study, influence of experiential value types on repeated purchases was tested for an online apparel website. It was determined that improvement in product displays has positive effect on experiential value types. However, the effect in total was designated as not that significant. Authors drew attention to the point that there must also be other factors that influence experiential value types. In addition to that, entertainment and aesthetic experiences have been found as instrumental for utilitarian shoppers by supplying additional information about product and brands. (Won Jeong et al., 2009).

2.6 Behavioral perception

Behavioral perception dimension consists of only two variables, which are perceived behavioral control and subjective norm.

2.6.1 Perceived behavioral control

Online shopping intention could also be related to behavioral dimensions as well. Perceived behavioral control has been developed by Ajzen (2002) as an extension of theory of planned behavior. It formulates human action towards a goal as a combination of perceived capability of solely practicing the action and the control over the practice. Giantari, Zain & Solimun (2013) tested and figured out that there is a mediation effect of perceived behavioral control between trust and online purchase intention. Additionally, Zhang et al. (2015) proposed that perceived behavioral control is related to online purchase intention.

2.6.2 Subjective norm

Fishbein and Ajzen (1975) suggested that one's belief of how others perceive performing an action is important for intention to perform. It has been also applied in online shopping setting. Zhang et al. (2015) suggested that subjective norm is correlated with online purchase intention behavior in their Korea study. Moreover, Çelik (2011) concluded that subjective norm might both positively and negatively affect the perceived ease of use of shopping online in a study carried out in Turkey.

CHAPTER 3

THEORETICAL MODEL AND HYPOTHESES

This chapter layouts the theoretical model of the study and hypotheses formed based on the perceived value and behavioral perception oriented online supermarket shopping model. Figure 12 shows that online channel purchase intention and decision are the explained variables as the perceived value and behavioral perception variables are the explanatory ones.

Carlson et al. (2015)'s perceived online channel value; the POCVAL model constituted the foundation of the framework in this study. However, the POCVAL is extended with additional attributes taken from the literature. Service performance value attributes are adapted from Lee and Lin (2005)'s SERVEQUAL model, which is to measure the service performance of online services. Nevertheless, web site design scale of SERVEQUAL is replaced with a self-constructed scale with the help of industry experts. Additionally, the reliability attribute of SERVEQUAL is replaced with Kim et al. (2012)'s system and information quality scales, which come with four additional attributes. Emotional value was one attribute in the POCVAL, which is replaced with two attributes adapted from Mathwick et al. (2001)'s experiential value model in which enjoyment is defined as an intrinsic active, visual appeal as an intrinsic reactive attribute. Monetary and convenience value attributes are kept as they are in the POCVAL model. Finally, with the inclusion of behavioral perception attributes; perceived behavioral control from Ajzen (2002) and subjective norm from Fishbein and Ajzen (1975), the theoretical framework is finalized.
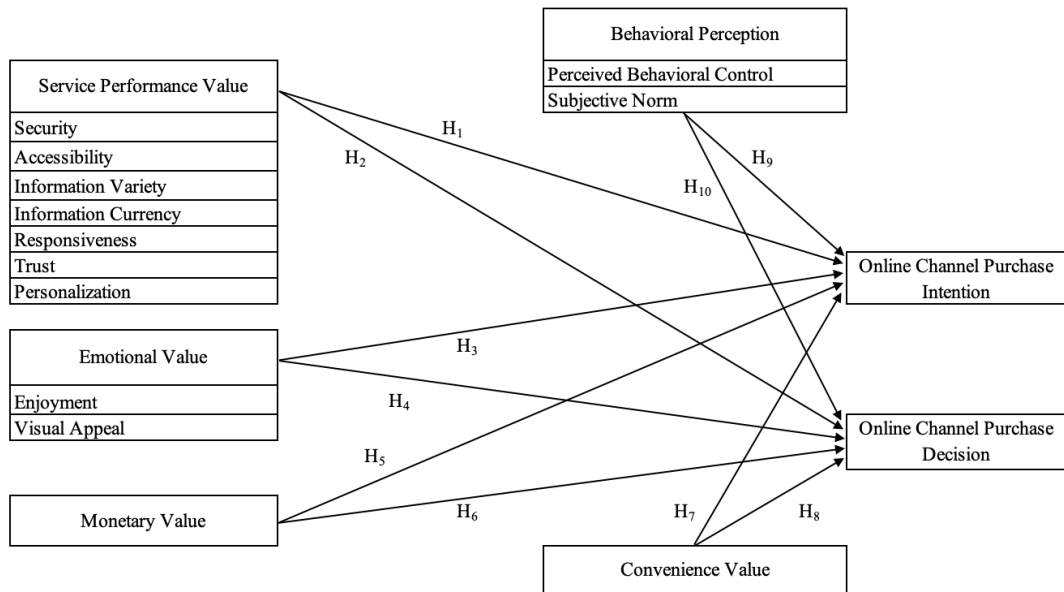
Figure 12. Theoretical Framework of the study

3.1 Modules of theoretical model

In this section, the theoretical model of the study, which includes a detailed explanation of variables and hypotheses. The model is an application of perceived channel value aspect for online supermarket shopping.

3.1.1 Service performance value

This module includes service performance attributes of an online supermarket, which are as the following:

1. Website design: One of the fundamental aspects of online shopping is how the shopping experience is constructed. This attribute is used in order to determine what type of design choices and website features are stimulating the online purchase decision and intention.

2. Security: This characteristic aims to measure the effect of perceived and experienced security on online interactions and transactions in online supermarket.

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3. Accessibility: This attribute aims to detect the effect of technical performance (loading and responding time etc.) of online supermarket on purchase decision and intention.

4. Information quality: Information displayed regarding the products and services are crucial parts of online shopping. The quality is measured within two dimensions: information variety and currency and aims to detect the effect on online purchase decision and intention.

5. Responsiveness: This characteristic aims to measure online supermarket's promptness in customer service and its correlation to online purchase decision and intention.

6. Trust: This attribute is to measure user perception of online supermarket's trustworthiness and its relation to online purchase decision and intention.

7. Personalization: As retailers try to personalize the experience for every user and customer, we also track this tendency to determine the influence of personalized online supermarket features on online purchase decision and intention.

3.1.2 Emotional value

This module consists of emotional value attributes of web store experience, which are as the following:

1. Enjoyment: This attribute aims to determine the influence of intrinsic enjoyment that could be felt on online supermarket.

2. Visual appeal: This attribute aims to determine the importance of aesthetic features of online supermarket on purchase intention and decision.

3.1.3 Monetary value

This module has the aim to determine the effects of monetary benefits on online purchase intention and decision.

3.1.4 Convenience value

This module aims to find the influence of advantages of shopping online without actually visiting the store on online purchase intention and decision.

3.1.5 Behavioral perception

This module is about grasping the behavioral attributes of online decision making. It is divided into two as follows:

    1. Perceived behavioral control: This attribute is to test whether perceived ability or control over online shopping is influential on online supermarket purchase intention and decision.

    2. Subjective norm: This attribute aims to explore the influence of social perception of the online supermarket shopping on online purchase intention and decision.

3.1.6 Online channel purchase intention

This module aims to measure online supermarket shopping tendency for the future.

3.1.7 Online purchase decision

This module is based on a binary question that detects the current status of being an online supermarket shopper.

3.2 Hypotheses

The following ten groups of hypothesis are formulated based on the theoretical model of the study.

Hypothesis 1a: There is a significant influence of security on online channel purchase intention.

Hypothesis 1b: There is a significant influence of accessibility on online channel purchase intention.

Hypothesis 1c: There is a significant influence of information quality on online channel purchase intention.

Hypothesis 1d: There is a significant influence of responsiveness on online channel purchase intention.

Hypothesis 1e: There is a significant influence of trust on online channel purchase intention.

Hypothesis 1f: There is a significant influence of personalization on online channel purchase intention.

Hypothesis 2a: There is a significant influence of security on online channel purchase decision.

Hypothesis 2b: There is a significant influence of accessibility on online channel purchase decision.

Hypothesis 2c: There is a significant influence of information quality on online channel purchase decision.

Hypothesis 2d: There is a significant influence of responsiveness on online channel purchase decision.

Hypothesis 2e: There is a significant influence of trust on online channel purchase decision.

Hypothesis 2f: There is a significant influence of personalization on online channel purchase decision.

Hypothesis 3a: There is a significant influence of enjoyment on online channel purchase intention.

Hypothesis 3b: There is a significant influence of visual appeal on online channel purchase intention.

Hypothesis 4a: There is a significant influence of enjoyment on online channel purchase decision.

Hypothesis 4b: There is a significant influence of visual appeal on online channel purchase decision.

Hypothesis 5: There is a significant influence of monetary value on online channel purchase intention.

Hypothesis 6: There is a significant influence of monetary value on online channel purchase decision.

Hypothesis 7: There is a significant influence of convenience value on online channel purchase intention.

Hypothesis 8: There is a significant influence of convenience value on online channel purchase decision.

Hypothesis 9a: There is a significant influence of perceived behavioral control on online channel purchase intention.

Hypothesis 9b: There is a significant influence of subjective norm on online channel purchase intention.

Hypothesis 10a: There is a significant influence of perceived behavioral control on online channel purchase decision.

Hypothesis 10b: There is a significant influence of subjective norm on online channel purchase decision.

Hypothesis 11a: There is a significant difference among different online shopping frequency groups regarding online channel purchase intention.

Hypothesis 11b: There is a significant difference among different online supermarket shopping frequency groups regarding online channel purchase intention.

Hypothesis 11c: There is a significant difference among different monthly income groups regarding online channel purchase intention.

Hypothesis 11d: There is a significant difference among different online shopping spending limit groups regarding online channel purchase intention.

Hypothesis 11e: There is a significant difference among different education level groups regarding online channel purchase intention.

Hypothesis 11f: There is a significant difference among different age groups regarding online channel purchase intention.

Hypothesis 11g: There is a significant difference among different gender groups regarding online channel purchase intention.

Hypothesis 11h: There is a significant difference among different marital status groups regarding online channel purchase intention.

CHAPTER 4

RESEARCH METHODOLOGY

This chapter provides details of the research methodology applied for this study. A questionnaire is designed in line with the literature review discussed in Chapter 2 to collect data, which is analyzed with several methods in Chapter 5 to verify the hypotheses listed in Chapter 3.

Objectives of the questionnaire are parallel to the research, which are:

- To measure the effects of the service performance value on online channel purchase intention and decision for supermarket shopping.

- To detect the effects of the emotional value on online channel purchase intention and decision for supermarket shopping.

- To specify the effect of the monetary value on online channel purchase intention and decision for supermarket shopping.

- To mark the effect of the convenience value on online channel purchase intention and decision for supermarket shopping.

- To discover the effect of the behavioral perception on online channel purchase intention and decision for supermarket shopping.

- To list the mediating effects of behavioral perception between the perceived values and online channel purchase intention for supermarket shopping.

- To reveal the significant differences in online channel purchase intention by demographics and online shopping characteristics.

4.1 Preparation of the questionnaire

The questionnaire is devised after reviewing the online shopping, marketing, e-retailing and information systems literature. Moreover, several Turkish and foreign online shopping and online supermarket web sites and apps are investigated in several dimensions including their business models. Besides active online shoppers, industry experts in the Turkish e-commerce ecosystem are consulted in order to extend, restrict and validate the scope and wording of the questionnaire. As a result of evaluations and academic review of professors in the Department of Management Information Systems at Bogaziçi University, the questionnaire has been finalized both in English and Turkish languages, which are provided in Appendix A and B respectively.

The survey starts off with an introduction reflecting the aim, collectors and a remark addressing the concerns of data privacy. Online supermarket is also defined in the context used throughout the survey at this stage. Then, the questions about online shopping characteristics come next. After the shopping characteristics, Likert scale questions on perceived value and behavioral perception are asked. Finally, demographic questions are listed at the end. The survey refers to the online shopping experiences and perception of online environments. The structure, questions and wording of the survey were the same for all respondents throughout the data collection period. Collected data is imported and analyzed on SPSS Statistics 23.

4.2 Sampling for the questionnaire

Convenience sampling is used in this thesis. Neither online shopping nor online supermarket shopping experience is expected as a prerequisite. Internet usage is solely sufficient. The questionnaire is prepared on an online survey tool and all

respondents are guided to the survey through a hyperlink. Paper-based surveys are not preferred for this study. In order to spread the survey among different demographic groups, social media web sites are actively used. Academic and social groups on Facebook, WhatsApp and LinkedIn are the main sources of participants in addition to Ekşi Sözlük. The questionnaire has been completed by 458 respondents in total after the incomplete and missing answers are deleted.

4.3 Components of the questionnaire

The questionnaire consists of twelve pages beginning with one page long introduction addressing the purpose, contact information and privacy concerns. There are 27 multiple choice questions in the survey some of which have also sub-questions. The survey is made up of 8 components:

1. Online shopping and online supermarket shopping habits of respondents,

2. The effects of service performance value on online channel purchase intention,

3. The effects of emotional value on online channel purchase intention,

4. The effects of monetary value on online channel purchase intention,

5. The effects of convenience value on online channel purchase intention,

6. The effects of behavioral perception on online channel purchase intention,

7. Online channel purchase intention,

8. Demographic profiles of respondents.

The first component of the survey records online shopping and online supermarket shopping habits of the respondents including:

1. Weekly internet use in hours, which has an ordinal scale of three options "less than 10 hours", "between 10 to 20 hours" and "more than 20 hours".

2. Internet shopping frequency, which has an ordinal scale of five options "Daily once", "Weekly once", "Weekly more than once", "Monthly more than once" and "Yearly more than once".

3. Product categories have ever been shopped online having 11 categories as books, apparel, technology, food, shoes, hobby, home goods, digital services, supermarket, home appliances and health.

4. Online spending limit, which has an ordinal scale of six options "less than 100 TL", "between 100-499 TL", "between 500-999 TL", "between 1000-2499 TL", "between 2500-4999 TL" and "more than 5000 TL".

5. Any purchases have ever been made on online supermarket, which is a binary scale with yes and no answers. If this question is answered as yes, then the items 6th and 7th in this component are asked to the respondents.

6. Product categories have ever been shopped from online supermarket having 10 categories as cleaning, snacks, soft drinks, dairy, fresh food, cosmetics, meat-fish, baby, pet and other as an open ended option.

7. Online supermarket shopping frequency, which has an ordinal scale of four options like "Yearly more than once", "Monthly more than once", "Weekly more than once" and "Weekly once".

The second component of the survey is to detect the influence of service performance value on online channel purchase intention that consists of eight self-constructed scales. Scales have three to thirteen items, which are responded based on a five-point Likert scale as "Not Important", "Slightly Important", "Moderately Important", "Important" and "Very Important". Respondents have evaluated 37 items all of which have to be answered in this component. The variables and items are as follows:

Web site design (13 items):

1. Easy to grasp menu structure

2. Searching by product and brand name

3. Commenting about products

4. Searching products by prices

5. Searching products by customer rating

6. Recommending products that I may like

7. Purchasing without signing up

8. Consisting of detailed information about products

9. Consisting of informative visuals and videos

10. Offering flexible payment options cash, credit cards and cash on delivery

11. Having live chat agents that respond customer requests and problems.

12. Offering different delivery dates and times options

13. Displaying personalized promotions and campaigns

Security (3 items):

1. Internet shopping system provides good protection of personal information

2. Internet shopping system does not cause discomfort in the checkout & payment process

3. Internet shopping system generally offers safe transactions

Accessibility (4 items):

1. Internet shopping site offers relatively quick connection

2. Internet shopping site has a simple URL address

3. Internet shopping site is easy to browse

4. Internet shopping site reacts immediately to menu clicks

Information variety (4 items):

1. Internet shopping site provides abundant information regarding product functions and quality

2. Internet shopping site offers useful information related to shopping

3. Internet shopping site offers active user reviews and evaluations of its product

4. Internet shopping site tends to provide features that allow price comparisons with other sites

Information currency (3 items):

1. Internet shopping site provides the latest product information

2. Internet shopping site sends the latest news via e-mail to its customers

3. Internet shopping site frequently updates site information

Responsiveness (3 items):

1. I think the online supermarket gives prompt service

2. I believe the online supermarket is always willing to help customers

3. I believe the online supermarket is never too busy to respond to customer requests

Trust (4 items):

1. I believe the online supermarket is trustworthy

2. The online supermarket instils confidence in customers

3. Not having experienced a problem with the online supermarket in past purchases

4. The Website's image matches that of this retailer

Personalization (3 items):

1. The online supermarket provides the targeting e-mail to customers

2. The online supermarket provides the recommendation of products by customers' preferences

3. The online supermarket provides customers free personal homepage

The third component of the survey is to detect the influence of emotional value on online channel purchase intention that consists of two self-constructed scales. There are three items per scale, which are responded based on a five-point Likert scale as "Not Important", "Slightly Important", "Moderately Important", "Important" and "Very Important". Respondents have evaluated 6 items all of which have to be answered in this component. The variables and items are as follows:

Enjoyment (3 items):

1. I enjoy shopping from XYZ's Internet site for its own sake, not just for the items I may have purchased

2. I shop from XYZ's Internet site for the pure enjoyment of it

3. The online supermarket helps me to discover products that I've never known

Visual appeal (3 items):

1. The way XYZ displays its products is attractive

2. XYZ's Internet site is aesthetically appealing

3. I like the way XYZ's Internet site looks

The fourth component of the survey is to detect the influence of monetary value on online channel purchase intention, which consists of only one scale. There are five items in the scale, which are responded based on a five-point Likert scale as "Not Important", "Slightly Important", "Moderately Important", "Important" and

"Very Important". Respondents have evaluated five items all of which have to be answered in this component. The variable and items are as follows:

Monetary value (5 items):

1. The pricing policies on the Website are fair

2. The Website provides me with consistent and accurate pricing policies

3. The Website provides me prices same as the market prices

4. The pricing policy on the Website are more beneficial for me than that of competitors

5. The Website provides me prices cheaper than the market prices

The fifth component of the survey is to detect the influence of convenience value on online channel purchase intention, which consists of only one scale. There are three items in the scale, which are responded based on a five-point Likert scale as "Not Important", "Slightly Important", "Moderately Important", "Important" and "Very Important". Respondents have evaluated three items all of which have to be answered in this component. The variable and items are as follows:

Convenience value (3 items):

1. This Website is easier to use than calling on the phone or visiting in-store for service

2. It is easier to use this Website for information/purchasing rather than other channels (e.g. visit the store, phone, or catalogue)

3. This Website is an alternative to calling customer service or visiting the retailer

The sixth component of the survey is to detect the influence of behavioral perception on online channel purchase intention, which consists of two scales. There are three and four-item respectively in the two scales. Perceived behavioral control is

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responded on five-point Likert scale as "Strongly Disagree", "Disagree", "Neither Agree Nor Disagree", "Agree" and "Strongly Agree". Subjective norm is responded based on a five-point Likert scale as "Not Important", "Slightly Important", "Moderately Important", "Important" and "Very Important". Respondents have evaluated seven items all of which have to be answered in this component. The variable and items are as follows:

Perceived behavioral control (3 items):

1. Shopping from an online supermarket is a super easy task for me.

2. I can easily handle if I ever have a problem while shopping from an online supermarket.

3. I am competent enough to shop from online supermarket

Subjective norm (4 items):

1. People's opinion whom I consider trustworthy think that online supermarket shopping is reasonable

2. My entourage encourages me to shop from online supermarket

3. My entourage who has shopped from online supermarket often state that they are quite pleased with the experience

4. Online supermarket shopping is getting more and more popular among my friends

The seventh component of the survey is online channel purchase intention, which is used as the dependent variable and consists of four items in the scale, which are responded based on a five-point Likert scale as "Strongly Disagree", "Disagree", "Neither Agree Nor Disagree", "Agree" and "Strongly Agree". Respondents have evaluated four items all of which have to be answered in this component. The variable and items are as follows:

Online channel purchase intention (4 items):

1. I think I will be increasing online supermarket shopping in the future.

2. I think online supermarket shopping will be a vital part of my daily shopping routine in near future.

3. I think the product range and quantity I shopped on online supermarket will get larger in near future.

4. I think I will permanently shift to online supermarket in the future

The eight and the last component of the survey is comprised of demographic questions including gender, age, marital status, education level and monthly personal income. All demographic questions are required to be answered. Purpose of this component is to compare the means of online channel purchase intention across different demographic segments in order to detect significant differences.

Finally, due to the target audience is the Turkish consumers, all questions and items are carefully translated into Turkish to make sure that original meanings have not changed. Turkish version of the survey is available with the components at the same order in Appendix B.

CHAPTER 5

ANALYSES AND FINDINGS

In this chapter, several analyses of the questionnaire responses will be presented starting from basic to more complex techniques. Two fundamental phenomena, online supermarket shopping intention and decision are explained with the perceived value variables like service performance to emotional, monetary, convenience values and behavioral perception variables.

Analyses start with the descriptive findings that layout the frequency distributions and summary statistics of all features. Average and deviation scores of all scales are provided in addition to the demographic profiles and online shopping characteristics of all respondents.

Multiple linear regression analyses are employed in order to find out the impacts of all perceived values and behavioral perception on online channel purchase intention for supermarket shopping. Moreover, logistic regression is used to demystify the similar relationships with the online channel purchase decision, which is a binary variable consists of only yes or no response.

Multiple regression is conducted for mediation analyses to test whether behavioral perception variables mediate any relationship between the perceived values and online channel purchase intention. A software add-on called PROCESS installed on SPSS Statistics is used to apply these techniques.

Finally, the mean comparison tests are performed for online channel purchase intention by demographics and online shopping characteristics. One-way ANOVA and independent samples t-tests are used based on the number of categories at each variable.

5.1 Descriptive statistics

Descriptive analyses consist of frequency distribution of demography, internet usage, online shopping, and online supermarket shopping behavior of respondents, followed by exploratory analysis of all scales. Table 3 displays the demographic profiles of the respondents in terms of gender, age, marital status, education and monthly income in Turkish lira.

Table 3. Demographic profiles

	Female	Male			
Gender	236	222			
	52%	48%			
	18 - 25	26 - 35	36 - 45	46 - 55	> 55
Age	57	293	85	17	6
	12%	64%	19%	4%	1%
	Married	Single			
Marital Status	206	252			
	45%	55%			
	High school graduate	Undergraduate student	Undergraduate	Graduate / PhD Student	Graduate / PhD
Education	10	32	209	103	104
	2%	7%	46%	22%	23%
	< 1500 TL	1500 - 2999 TL	3000 - 4999 TL	5000 - 9000 TL	> 9000 TL
Monthly Income	43	71	140	136	68
	9%	15%	31%	30%	15%

458 respondents have completed the questionnaire. The gender distribution of respondents is close with 52% females and 48% males. Moreover, the respondents are dominantly young as the 26-35 age group constitutes 64% of the total respondents whom are dominantly recent graduates and young professionals. Combining with the 18-25 age group, young respondents covers 76% of the overall

sample. 36-45 age group is 19%, which means that the 45 years old and younger covers 95% of the respondents.

Marital status distribution is not as close as the gender distribution with 55% is single and 45% is married. The respondents having at least an undergraduate degree cover 91% of the overall sample. 46% of the respondents are solely undergraduates while postgraduate students and postgraduates are 22% and 23% respectively.

Reported monthly incomes of the respondents are also quite varying. Respondents having monthly incomes of 3000 – 4999 and 5000 – 9000 TL are 31% and 30% respectively while 1500 – 2999 and more than 9000 TL are both 15%. Only 9% of the respondents' monthly income is lower than the minimum wage of 1603.12 TL in 2018 (Genç, 2018).

Table 4 demonstrates several characteristics of the respondents. Reported weekly time spent on the Internet followed by the online shopping frequency and perceived shopping limits in Turkish lira respectively. Table 5 lists the popular shopping categories purchased online.

Internet usage is varied however, respondents who spend more than 20 hours weekly (excluding the business purposes) correspond to 49% of the overall sample. However, only 23% of them report that they have at least one purchase weekly. 51% of the respondents claim that they purchase online more than once monthly. Perceived online shopping spending limit per one purchase is more than 5000 TL for 24% as the monthly income 5000 TL and more constitutes 45% of the overall sample. Online spending limit with more than 2500 TL are 42% and more than 1000 TL are 61% of the all respondents.

Table 4. Internet usage and online shopping characteristics

Weekly internet usage	< 10 hours	10-20 hours	> 20 hours			
	86	148	224			
	19%	32%	49%			
Online shopping frequency	Daily	Weekly	Weekly more than once	Monthly more than once	Yearly more than once	
	4	46	57	233	118	
	1%	10%	12%	51%	26%	
Online shopping spending limit for one purchase	< 100 TL	100 - 499 TL	500 - 999 TL	1000 - 2499 TL	2500 - 4999 TL	> 5000 TL
	8	111	59	86	83	111
	2%	24%	13%	19%	18%	24%

Table 5 displays the categories that respondents have purchased online. Among 11 distinct product categories, books, apparel and technology products are purchased most by 86%, 80% and 79% of the respondents relatively. 215 respondents state that they have purchased online supermarket goods who constitute 47% of the overall sample.

Table 5. Online purchased shopping categories

Product Category	Frequency	%
Books	395	86%
Apparel	368	80%
Technology	362	79%
Food	351	77%
Shoes	316	69%
Hobby	275	60%
Home Goods	265	58%
Digital Services	227	50%
Supermarket	215	47%
Home Appliances	119	26%
Health	106	23%

Table 6 summarizes the online supermarket shopping characteristics of the respondents, 53% of whom state that they have purchased from online supermarket, which seems contradictory with the Table 5 in which supermarket goods were purchased by 47% of the respondents. Because of the fact that the perception of supermarket goods and online supermarket might be different for some respondents. Hence, we will consider the latter as the truth since we aim to explore online supermarket shopping. Furthermore, we see that the online supermarket shopping has become a frequent activity for some of the respondents. 47% of the online supermarket shoppers claim that they purchase from online supermarket monthly more than once or more frequently while 53% state that they purchase yearly more than once. The most frequent shoppers who claim they shop weekly once or more than once constitute only 10% of the overall online supermarket shoppers.

Table 6. Online supermarket shopping characteristics

Have you ever shopped from online supermarket?	Yes	No		
	245	213		
	53%	46%		
Online supermarket shopping frequency	Yearly more than once	Monthly more than once	Weekly more than once	Weekly once
	133	88	8	16
	54%	36%	3%	7%

Table 7 lists the product categories purchased from online supermarket. Cleaning is the most popular category with 82% of the online supermarket shoppers claiming at least one purchase followed by Snacks and Soft Drink with 73% and 69% respectively. The least purchased categories are the Meat-Fish, Baby and Pet with 29%, 28% and 24%.

Table 7. Online purchased supermarket categories

Product Category	Frequency	%
Cleaning	202	82%
Snacks	180	73%
Soft Drinks	170	69%
Dairy	163	67%
Fresh Food	131	53%
Cosmetics	123	50%
Meat-Fish	72	29%
Baby	69	28%
Pet	59	24%

Service performance value has five scales; web site design, reliability, responsiveness, trust and personalization scales. Reliability has been measured under two dimensions as system quality and information quality. Furthermore, system quality is divided into security and accessibility scales, while information quality is divided into information variety and currency scales.

Table 8 shows the mean values of the respondents' agreement level on the importance of several web site design features. According to the responses, potential and actual online supermarket shoppers expect at most that the web site or mobile app should have product and brand name search capability with the mean score of 4.58 over 5 and with the lowest standard deviation of 0.60. Flexibility in payment and delivery date options are also pointed out as important with the mean score of 4.54 and 4.27. Intuitive and simple design also seems important since easy to grasp menu structure has the mean score of 4.50 and the second lowest standard deviation of 0.64. Another important signal here is advanced features like personalized promotions and product recommendations have relatively lower mean scores of 3.74 and 3.14 relatively.

Table 8. Mean Values of Web Site Design

Items	Mean (Over 5)	Std. Dev.
Searching by product and brand name	4.58	0.60
Offering flexible payment options like cash, credit cards and cash on delivery	4.54	0.76
Easy to grasp menu structure	4.50	0.64
Consisting of detailed information about products	4.43	0.75
Offering different delivery dates and times options	4.27	0.89
Searching products by prices	4.11	0.97
Consisting of informative visuals and videos	4.05	1.03
Having live chat agents that respond customer requests and problems.	3.97	1.03
Purchasing without signing up	3.76	1.14
Displaying personalized promotions and campaigns	3.74	1.16
Commenting about products	3.69	1.17
Searching products by customer rating	3.50	1.14
Recommending products that I may like	3.14	1.14

Table 9 displays the mean values of the respondents' agreement level on the importance of system security scale that is under the service performance value, reliability and system quality dimensions. Respondents think that security perception in online supermarket is quite important with an overall mean score of 4.90. Security feeling in checkout process is scored as the highest important with the mean score of 4.95, followed by the overall security feeling in every transaction with the mean score of 4.92. Lastly, protection of personal information scores 4.83 in average. Standard deviations range between 0.36 and 0.52.

Table 9. Mean Values of Security

Items	Mean (Over 5)	Std. Dev.
Internet shopping system does not cause discomfort in the checkout & payment process	4.95	0.37
Internet shopping system generally offers safe transactions	4.92	0.36
Internet shopping system provides good protection of personal information	4.83	0.52

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Table 10 displays the mean values of the respondents' agreement level on the importance of system accessibility scale, which is under the service performance value, reliability and system quality dimensions. Top three items have closer scores with the quick connection to online supermarket ranked the top with the mean score of 4.54 and the lowest standard deviation of 0.58. Rapid reaction to menu clicks comes as the second with the mean score of 4.48 and easiness to browse online supermarket ranks the third with the mean score of 4.46. Having a simple URL address diverges from the rest of items with the mean score of 3.78, which may be attributed to the wide spread use of search engines or mobile apps, which are readily available on mobile device screens with their names.

Table 10. Mean Values of Accessibility

Items	Mean (Over 5)	Std. Dev.
Internet shopping site offers relatively quick connection	4.54	0.58
Internet shopping site reacts immediately to menu clicks	4.48	0.65
Internet shopping site is easy to browse	4.46	0.62
Internet shopping site has a simple URL address	3.78	1.03

Table 11 displays the mean values of the respondents' agreement level on the importance of information variety scale, which is under the service performance value, reliability and information quality dimensions. In terms of information variety, respondents attach the highest importance to the abundance of information regarding product functions and quality with the mean score of 4.36 and with the lowest standard deviation of 0.72. Other items' scores are relatively lower but close to each other. Reading user reviews of products have a mean score of 3.74, followed by the price comparison with other supermarkets with the mean score of 3.73 and offering useful information related to shopping with the mean score of 3.57.

Table 11. Mean Values of Information Variety

Items	Mean (Over 5)	Std. Dev.
Internet shopping site provides abundant information regarding product functions and quality	4.36	0.72
Internet shopping site offers active user reviews and evaluations of its product	3.74	1.05
Internet shopping site tends to provide features that allow price comparisons with other sites	3.73	1.10
Internet shopping site offers useful information related to shopping	3.57	1.01

Table 12 lists the mean values of the respondents' agreement level on the importance of information currency scale, which is under the service performance value, reliability and information quality dimensions. Online supermarket providing the latest product information and frequently updating information are the highest important items with the mean scores of 4.27 and 4.05 relatively. However, sending the latest news via e-mail to customers seems not very appealing to the respondents with the mean score of 2.67.

Table 12. Mean Values of Information Currency

Items	Mean (Over 5)	Std. Dev.
Internet shopping site provides the latest product information	4.27	0.73
Internet shopping site frequently updates site information	4.05	0.90
Internet shopping site sends the latest news via e-mail to its customers	2.67	1.13

Table 13 shows the mean values of the respondents' agreement level on the importance of responsiveness scale, which is under the service performance value. Respondents think that responsiveness of online supermarket is quite important with an overall mean score of 4.65 and with standard deviation of 0.60. Perceived willingness to help customers is the highest rated item with the score of 4.70.

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Perceived latency in responding customer requests is the second highest rated item with the mean score of 4.65, followed by perceived service speed with the mean score of 4.59. Standard deviations range from 0.53 to 0.60.

Table 13. Mean Values of Responsiveness

Items	Mean (Over 5)	Std. Dev.
I believe the online supermarket is always willing to help customers	4.70	0.53
I believe the online supermarket is never too busy to respond to customer requests	4.65	0.56
I think the online supermarket gives prompt service	4.59	0.60

Table 14 shows the mean values of the respondents' agreement level on the importance of trust scale, which is under the service performance value. Respondents think that trust to online supermarket is quite important with an overall mean score of 4.52 and with standard deviation of 0.51. All items have closer mean scores. Instilling confidence in customers is the highest rated item with the mean score of 4.57, followed by not having experienced a problem with the online supermarket with the mean score of 4.55 and believing the online supermarket's trustworthiness with the mean score of 4.50. Finally, brand or online and offline supermarket image match is scored as 4.47. Standard deviations are between 0.65 and 0.70.

Table 14. Mean Values of Trust

Items	Mean (Over 5)	Std. Dev.
The online supermarket instils confidence in customers	4.57	0.65
Not having experienced a problem with the online supermarket in past purchases	4.55	0.65
I believe the online supermarket is trustworthy	4.50	0.71
The Website's image matches that of this retailer	4.47	0.70

Table 15 shows the mean values of the respondents' agreement level on the importance of personalization scale, which is under the service performance value. Respondents think that personalization level of online supermarket is moderately important with an overall mean score of 2.90 and with standard deviation of 1.01, which is in comply with the responses given in the web site design scale in Table 8. Providing personal homepage and recommendation of products by customers' preferences are scored as 3.09 and 3.07 respectively. Targeted e-mails to customers diverges from the rest of the items with a mean score of 2.53. Standard deviations range between 1.15 and 1.19.

Table 15. Mean Values of Personalization

Items	Mean (Over 5)	Std. Dev.
The online supermarket provides customers free personal homepage	3.09	1.15
The online supermarket provides the recommendation of books by customers' preferences	3.07	1.17
The online supermarket provides the targeting e-mail to customers	2.53	1.19

Service performance value dimension is followed by the emotional value dimension under which there are two scales as enjoyment and visual appeal.

Table 16 shows the mean values of the respondents' agreement level on the importance of enjoyment scale, which is under the emotional value. Respondents think that the enjoyment they get on online supermarket is moderately important with an overall mean score of 3.34 and with standard deviation of 0.93. Enabling customers to discover new products is the highest rated item with the mean score of 3.60. Shopping from online supermarket just for its own sake is the second highest item with the mean score of 3.42. Shopping for the pure enjoyment from online

supermarket diverges a bit from the rest of items with the mean score of 3.01.

Standard deviations range from 0.98 to 1.19.

Table 16. Mean Values of Enjoyment

Items	Mean (Over 5)	Std. Dev.
The online supermarket helps me to discover products that I've never known	3.60	0.98
I enjoy shopping from XYZ's Internet site for its own sake, not just for the items I may have purchased	3.42	1.15
I shop from XYZ's Internet site for the pure enjoyment of it	3.01	1.19

Table 17 shows the mean values of the respondents' agreement level on the importance of visual appeal scale, which is under the emotional value dimension. All items have mean scores lower than four. The way online supermarket looks is the highest important item with the mean score of 3.95, followed by if online supermarket is aesthetically appealing with the mean score of 3.77 and finally displaying products attractively has a score of 3.55. Standard deviation is between 0.84 and 0.97.

Table 17. Mean Values of Visual Appeal

Items	Mean (Over 5)	Std. Dev.
I like the way XYZ's Internet site looks	3.95	0.84
XYZ's Internet site is aesthetically appealing	3.77	0.89
The way XYZ displays its products is attractive	3.55	0.97

Monetary value is another dimension following the service performance value and emotional value. Table 18 lists the mean values of the respondents' agreement level on the importance of monetary value dimension on online

supermarket shopping. Having consistent and accurate pricing policies and fair

pricing policies are the highest two ranking items with the mean scores of 4.60 and

4.44 respectively. Having cheaper prices than the competitors and offline market

both gain the mean score of 4.29 but standard deviations differs as 0.81 and 0.89

respectively. Having the same prices as in the offline market attracts the mean score

of 3.93.

Table 18. Mean Values of Monetary Value

Items	Mean (Over 5)	Std. Dev.
The Website provides me with consistent and accurate pricing policies	4.60	0.59
The pricing policies on the Website are fair	4.44	0.70
The pricing policy on the Website are more beneficial for me than that of competitors	4.29	0.81
The Website provides me prices cheaper than the market prices	4.29	0.89
The Website provides me prices same as the market prices	3.93	1.03

Monetary value scale is followed by the convenience value scale in Table 19,

which has only three items all of which have mean scores higher than four. Online

supermarket, which is easier to purchase than calling on the phone or visiting the

store has the highest importance according to the respondents with the mean score of

4.48 and with the lowest standard deviation of 0.68. Online supermarket, which

enables customers to collect information easier than the other alternatives has the

mean score of 4.32. Perceiving the online supermarket as an alternative to calling

customer service or visiting the store has the mean score of 4.26. Standard deviations

range from 0.68 to 0.89.

Table 19. Mean Values of Convenience Value

Items	Mean (Over 5)	Std. Dev.
This Website is easier to purchase than calling on the phone or visiting in-store for service	4.48	0.68
It is easier to use this Website for information rather than other channels (e.g. visit the store, phone, or catalogue)	4.32	0.84
This Website is an alternative to calling customer service or visiting the retailer	4.26	0.89

Behavioral perception dimension follows monetary value dimension. It consists of two scales; perceived behavioral control is summarized in Table 20 and subjective norm in Table 21.

Table 20 displays the mean values of the respondents' agreement level on the perceived behavioral control scale, which is under the behavioral perception dimension. Two highest scored items are both higher than 4.50. Perceived ability to shop from online supermarket and perceiving online supermarket shopping as super easy have the mean scores of 4.64, 4.55 and the standard deviations of 0.59, 0.70 respectively, which means that the respondents think that they are capable of purchasing from online supermarket. Perceived ability to deal with the problems on online supermarket has the mean score of 4.04 and the standard deviation of 0.93.

Table 20. Mean Values of Perceived Behavioral Control

Items	Mean (Over 5)	Std. Dev.
I am competent enough to shop from online supermarket	4.64	0.59
Shopping from an online supermarket is a super easy task for me	4.55	0.70
I can easily handle if I ever have an problem while shopping from an online supermarket	4.04	0.93

Table 21 displays the mean values of the respondents' agreement level on the importance of subjective norm scale that has three items and under the behavioral perception dimension. Respondents think that the subjective norm regarding the online supermarket shopping is moderately important with an overall mean score of 3.29 and with standard deviation of 1.12. The most important item rated by the respondents is hearing satisfactory experiences regarding online supermarket shopping from the entourage with the mean score of 3.79 and the standard deviation of 1.14. Positive opinions from the trustworthy people item has the mean score of 3.43. Encouragement of the entourage ranks third with the mean score of 3.12 and increasing popularity of online supermarket shopping among friends has the mean score of 3.01.

Table 21. Mean Values of Subjective Norm

Items	Mean (Over 5)	Std. Dev.
My entourage who has shopped from online supermarket often state that they are quite pleased with the experience	3.79	1.14
People's opinion whom I consider trustworthy think that online supermarket shopping is reasonable	3.43	1.23
My entourage encourages me to shop from online supermarket	3.12	1.26
Online supermarket shopping is getting more and more popular among my friends	3.01	1.28

Table 22 displays the mean values of the respondents' agreement level on the online channel purchase intention scale. All items have scores slightly higher than three, which means that the respondents moderately have purchase intention from online supermarket. Agreement level of respondents who think their online supermarket purchases and purchased product range and quantity will increase have the same mean score of 3.49. Respondents' agreement level on online supermarket

shopping will become a daily routine in near future has the mean score of 3.36.

Permanently switching to online supermarket shopping in the future has the lowest

score but not that divergent from the rest with the mean score of 3.29.

Table 22. Mean Values of Online Channel Purchase Intention

Items	Mean (Over 5)	Std. Dev.
I think I will be increasing online supermarket shopping in the future.	3.49	1.00
I think the product range and quantity I shopped on online supermarket will get larger in near future	3.49	1.05
I think online supermarket shopping will be a vital part of my daily shopping routine in near future	3.36	1.11
I think I will permanently shift to online supermarket in the future	3.29	1.12

Table 23 lists the mean values of respondents' scoring of all scales. The

highest three important scales have scores more than 4.50 on average. Security is the

highest important factor regarding the online supermarket shopping with the mean

score of 4.90 and the lowest standard deviation of 0.36, followed by the

responsiveness of the online supermarket with the mean score of 4.65 and the

perceived trust regarding the online supermarket with the mean score of 4.52. On the

other hand, the least important factors are listed as the personalization, subjective

norm and enjoyment with the mean scores of 2.90, 3.34 and 3.34 respectively.

Perceived behavioral control, convenience value, accessibility, monetary value and

web site design have mean scores higher than four as information variety and

currency, visual appeal and online channel purchase intention have mean scores

lower than four.

Table 23. Mean Values of All Scales

Scales	Mean (Over 5)	Std. Dev.
Security	4.90	0.36
Responsiveness	4.65	0.50
Trust	4.52	0.51
Perceived Behavioral Control	4.41	0.62
Convenience Value	4.35	0.68
Accessibility	4.31	0.56
Monetary Value	4.31	0.58
Web Site Design	4.02	0.49
Information Variety	3.85	0.69
Visual Appeal	3.76	0.79
Information Currency	3.67	0.68
Online Channel Purchase Intention	3.41	0.96
Enjoyment	3.34	0.93
Subjective Norm	3.34	1.03
Personalization	2.90	1.01

5.2 Reliability of scales

Internal consistency of scales based on the respondents' answers are discussed in this part. Cronbach's alpha is calculated to test the reliability of each scale. 0.70 is taken as the threshold for inter-item consistency.

Table 24 displays the reliability scores of service performance value dimension, which consists of eight scales. Web site design, security and accessibility have Cronbach's alpha scores of 0.749, 0.802 and 0.746 respectively. However, accessibility's Cronbach's alpha score increases to 0.813 without the item about having a simple name and URL to remember hence, it is deleted. Information variety and currency scales have Cronbach's alphas of 0.666 and 0.552 respectively, which are less than 0.70. In order to improve the reliability of information scales, both variety and currency are merged into one as information quality, which increased the

Cronbach's alpha score to 0.746. The rest of the scales, which are responsiveness, trust and personalization, all have acceptable Cronbach's alpha scores, which are higher than 0.70.

Table 24. Reliability of Service Performance Value

Scales	Number of Items	Cronbach's Alpha
Web Site Design	13	0.749
Security	3	0.802
Accessibility	4	0.746
Information Variety	4	0.666
Information Currency	3	0.552
Responsiveness	3	0.856
Trust	4	0.752
Personalization	3	0.821

Table 25 lists the reliability scores of the only two scales of emotional value dimension both of which have sufficient Cronbach's alpha scores higher than 0.70.

Table 25. Reliability of Emotional Value

Scales	Number of Items	Cronbach's Alpha
Enjoyment	3	0.787
Visual Appeal	3	0.841

Table 26 displays the monetary value reliability score, which is 0.75. However, it increases to 0.826 without the item measuring how important it is if online supermarket prices are the same as the store prices. Therefore, respective item is deleted.

Table 26. Reliability of Monetary Value

Scales	Number of Items	Cronbach's Alpha
Monetary Value	5	0.750

Table 27 clearly shows that convenience value's all three items have sufficient inter-item consistency, which is the Cronbach's alpha score of 0.783.

Table 27. Reliability of Convenience Value

Scales	Number of Items	Cronbach's Alpha
Convenience Value	3	0.783

Table 28 lists the reliability scores of behavioral perception dimension's two scales both of which have acceptable Cronbach's alpha scores higher than 0.70.

Table 28. Reliability of Behavioral Perception

Scales	Number of Items	Cronbach's Alpha
Perceived Behavioral Control	3	0.757
Social Norm	4	0.860

Table 29 clearly displays that online channel purchase intention scales has the highest acceptable reliability among 16 scales with a Cronbach's alpha score of 0.922.

Table 29. Reliability of Online Channel Purchase Intention

Scales	Number of Items	Cronbach's Alpha
Online Channel Purchase Intention	4	0.922

5.3 Multiple regression analyses

Multiple linear regression analyses are carried out in order to figure out the impacts of perceived value and behavioral perception variables on variance change of online channel purchase intention, while logistic regression analyses are conducted to determine the very same effects on likelihood of online channel purchase decision. Separate analyses are run for web site design and other perceived value variables as predictors not to cause any multicollinearity problem since web site design consists of items, which covers other variables like personalization, information quality and perceived behavioral control. Later, the mediating effects of behavioral perception variables; subjective norm and perceived behavioral control are examined between other perceived value attributes and online channel purchase intention on PROCESS macro of SPSS Statistics (Hayes, 2018).

5.3.1 Multiple regression with perceived value and behavioral perception on online channel purchase intention

Table 30 shows the model summary of the multiple regression with perceived value and behavioral perception on online channel purchase intention for supermarket shopping. Twelve predictors are entered into the analysis including service performance, emotional, monetary, convenience values and behavioral perception variables. Model has the R square score of 0.25 implying that 25% of the variation in online channel purchase intention for supermarket shopping are explained by the perceived value and behavioral perception variables.

Table 30. Model Summary of the Multiple Regression with Perceived Value and Behavioral Perception on Online Channel Purchase Intention

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.500	0.250	0.229	0.84541

a. Dependent Variable: Online Channel Purchase Intention
b. Predictors: (Constant), Social Norms, Security, Perceived Behavioral Control, Enjoyment, Convenience Value, Monetary Value, Responsiveness, Personalization, Accessibility, Visual Appeal, Trust, Information Quality

Table 31 lists the ANOVA table that shows predictive capacity of the model is sufficient with an F score of 12.337 and significance level of 0.000 less than the critical value of 0.05. Therefore, it can be concluded that the online channel purchase intention for supermarket shopping can be predicted by the perceived value and behavioral perception variables.

Table 31. ANOVA Table of the Multiple Regression with Perceived Value and Behavioral Perception on Online Channel Purchase Intention

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	105.814	12	8.818	12.337	0.000
	Residual	318.051	445	0.715		
	Total	423.865	457			

a. Dependent Variable: Online Channel Purchase Intention
b. Predictors: (Constant), Social Norms, Security, Perceived Behavioral Control, Enjoyment, Convenience Value, Monetary Value, Responsiveness, Personalization, Accessibility, Visual Appeal, Trust, Information Quality

Table 32 summarizes the coefficients and significance levels of the perceived value and behavioral perception that predict the online channel purchase intention for supermarket shopping. Information quality and personalization are significant from service performance value scale with the coefficients of -0.215 and 0.212 and significance levels of 0.018 and 0.000 respectively. Emotional value variables enjoyment and visual appeal are found out insignificant as monetary and

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convenience value variables are significant with coefficients of -0.197 and 0.287 and significance levels of 0.010 and 0.000 respectively. Moreover, behavioral perception variables perceived behavioral control and subjective norm are both statistically significant with coefficients of 0.550 and 0.190 and significance levels of 0.000.

Table 32. Coefficients in the Multiple Regression with Perceived Values on Online Channel Purchase Intention

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.524	0.604		0.867	0.386
	Security	-0.065	0.128	-0.024	-0.505	0.614
	Accessibility	0.066	0.097	0.036	0.677	0.499
	Information Quality	-0.217	0.091	-0.136	-2.368	0.018
	Responsiveness	-0.115	0.109	-0.059	-1.060	0.290
	Trust	0.072	0.107	0.038	0.674	0.501
	Personalization	0.202	0.051	0.211	3.978	0.000
	Enjoyment	0.051	0.058	0.049	0.878	0.380
	Visual Appeal	-0.071	0.066	-0.058	-1.076	0.283
	Monetary Value	-0.197	0.076	-0.125	-2.582	0.010
	Convenience Value	0.287	0.067	0.201	4.273	0.000
	Perceived Behavioral Control	0.550	0.070	0.352	7.821	0.000
	Social Norms	0.190	0.043	0.203	4.467	0.000

a. Dependent Variable: Online Channel Purchase Intention

Table 33 summarizes the hypotheses of perceived value and behavioral perception impacting on online channel purchase intention for supermarket shopping. Only six variables have statistically significant coefficients while the others do not. Hypothesis 1c and Hypothesis 1f are supported from service performance variables

as information quality significantly impacts online channel purchase intention

negatively while personalization impacts positively. Furthermore, Hypothesis 5 and

Hypothesis 7 are supported because, monetary value has a significant negative

impact on online channel purchase intention while convenience value influences

intention positively. Moreover, 9a and 9b are supported meaning that behavioral

perception variables are both significant and positively affect online channel

purchase intention for supermarket shopping. However, service performance value

attributes like security, accessibility, responsiveness and trust are found as

insignificant in addition to emotional value attributes. Hence, the respective

hypotheses are rejected.

Table 33. Hypotheses Testing Summary of Perceived Value and Behavioral
Perception Impact on Online Channel Purchase Intention

No	Hypotheses	Result
1a	There is a significant influence of security on online channel purchase intention.	Rejected
1b	There is a significant influence of accessibility on online channel purchase intention.	Rejected
1c	There is a significant influence of information quality on online channel purchase intention.	Supported
1d	There is a significant influence of responsiveness on online channel purchase intention.	Rejected
1e	There is a significant influence of trust on online channel purchase intention.	Rejected
1f	There is a significant influence of personalization on online channel purchase intention.	Supported
3a	There is a significant influence of enjoyment on online channel purchase intention.	Rejected
3b	There is a significant influence of visual appeal on online channel purchase intention.	Rejected
5	There is a significant influence of monetary value on online channel purchase intention.	Supported
7	There is a significant influence of convenience value on online channel purchase intention.	Supported
9a	There is a significant influence of perceived behavioral control on online channel purchase intention.	Supported
9b	There is a significant influence of subjective norm on online channel purchase intention.	Supported

5.3.2 Logistic regression with perceived value and behavioral perception on online channel purchase intention

Logistic regression analyses are conducted in order to detect the impact of perceived values and behavioral perception on online channel purchase decision for supermarket shopping. As a first step, actual purchasers are decoded as 1 and the respondents have not ever purchased as 0. Table 34 displays classification of the baseline model, which consist only a constant without any predictors. It can be seen that the baseline model predicts every respondent as an actual purchaser, which results in 53.5% prediction accuracy overall.

Table 34. Classification Table of the Baseline Logistic Regression Model on Online Channel Purchase Decision

	Observed		Predicted		
			Have you ever shopped from online supermarket?		Percentage Correct
			Yes	No	
Step 0	Have you ever shopped from online supermarket?	Yes	245	0	100.0
		No	213	0	0.0
	Overall Percentage				53.5

a. Constant is included in the model.
b. The cut value is .500

Secondly, a logistic regression model is run with perceived value and behavioral perception variables in order to see the difference from the baseline model. Table 35 shows the goodness of fit scores such that Cox & Snell R Square is 0.184 while Nagelkerke R Square is 0.246, which denotes that the model explains the variance change in online channel purchase decision between 18.4% and 24.6%.

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Table 35. Model Summary of the Logistic Regression with Perceived Value and Behavioral Perception on Online Channel Purchase Decision

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	539.436	0.184	0.246

a. Estimation terminated at iteration number 5 because parameter estimates changed by less than .001.

Additionally Hosmer and Lemeshow goodness of fit test is carried out in order to see the whether the logistics regression is statistically significant. Table 36 shows that the model is a good fit with significant level 0.224, which is larger than the critical value 0.05.

Table 36. Hosmer and Lemeshow Test of the Logistic Regression with Perceived Value and Behavioral Perception on Online Channel Purchase Decision

Step	Chi-square	df	Sig.
1	10.621	8	0.224

Classification table of the logistic regression with perceived value and behavioral perception predictors can be seen in Table 37, which implies that the prediction accuracy rose to 67.2% from 53.5% of the baseline model. Hence, it can easily be asserted that the predictors can be used in predicting online channel purchase decisions of the respondents.

Table 37. Classification Table of the Logistic Regression with Perceived Value and Behavioral Perception on Online Channel Purchase Decision

Observed			Predicted		
			Have you ever shopped from online supermarket?		Percentage Correct
			Yes	No	
Step 1	Have you ever shopped from online supermarket?	Yes	183	62	74.7
		No	88	125	58.7
	Overall Percentage				67.2

a. The cut value is .500

Table 38 lists the coefficients and significance levels of perceived values on online channel purchase decision. Similar to the multiple regression analysis six features out of twelve are found out as statistically significant. Additionally, four of them are common variables. Information quality, personalization, monetary value and perceived behavioral control are common and statistically significant features with significance levels less than the critical value of 0.05. Security and responsiveness are significant in logistic model with significance levels of 0.004 and 0.000 respectively. However, they are not significant in multiple linear regression model, which is to predict online channel purchase intention. Furthermore, subjective norm, which is significant in multiple linear regression model, which is not significant in logistic regression model with significance level of 0.081.

Odds ratios are another vital metrics to interpret the feature importance logistic regression analysis and listed under Exp(B) column in Table 38. The highest effective variable is responsiveness with the odds ratio of 2.920, which implies that one point increase in responsiveness would increase the odds of actual purchase by 2.920 times. Responsiveness is followed by perceived behavioral control with the odds ratio of 2.723 denoting that one point increase in perceived behavioral control would increment the odds of actual purchase by 2.723 times. Personalization is the third highest important variable with the odds ratio of 1.729. Similar to responsiveness and perceived behavioral control, it increases the odds of actual purchase by 1.729 times. Other significant variables security, information quality and monetary value are negatively impact the online channel purchase decision for supermarket shopping. One point increase in all variables would result in a fall of the odds of actual purchase by 69.8%, 50.4% and 36%.

Table 38. Coefficients in the Logistic Regression with Perceived Values on Online Channel Purchase Decision

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1	Security	-1.199	0.412	8.456	1	0.004	0.302
	Accessibility	0.123	0.260	0.223	1	0.637	1.131
	Information Quality	-0.701	0.257	7.456	1	0.006	0.496
	Responsiveness	1.072	0.301	12.633	1	0.000	2.920
	Trust	0.192	0.286	0.451	1	0.502	1.212
	Personalization	0.548	0.140	15.224	1	0.000	1.729
	Enjoyment	-0.242	0.155	2.429	1	0.119	0.785
	Visual Appeal	-0.301	0.179	2.838	1	0.092	0.740
	Monetary Value	-0.447	0.213	4.412	1	0.036	0.640
	Convenience Value	0.017	0.181	0.009	1	0.926	1.017
	Perceived Behavioral Control	1.002	0.198	25.633	1	0.000	2.723
	Subjective Norm	-0.198	0.113	3.051	1	0.081	0.820
	Constant	0.784	1.726	0.206	1	0.650	2.191

a. Variable(s) entered on step 1: Security, Accessibility, Information Quality, Responsiveness, Trust, Personalization, Enjoyment, Visual Appeal, Monetary Value, Convenience Value, Perceived Behavioral Control, Subjective Norm.

Table 39 summarizes the hypotheses test results denoting that the impacts of security in Hypothesis 2a and information quality in Hypothesis 2c are supported since they have a significant negative impact. Furthermore, responsiveness in Hypothesis 2d and personalization in Hypothesis 2f, which have significant positive impacts on online purchase decisions are supported while the impacts of accessibility in 2b and trust in 2e are rejected. Emotional values enjoyment and visual appeal are both rejected in 4a and 4b respectively. The impact of monetary value in Hypothesis 6 is supported since it has a significant negative impact while convenience value is rejected in Hypothesis 8. Perceived behavioral control in Hypothesis 10a is supported as subjective norm in 10b is rejected from behavioral perception variables.

Table 39. Hypotheses Testing Summary of Perceived Values' Impact on Online Channel Purchase Decision

No	Hypotheses	Result
2a	There is a significant influence of security on online channel purchase decision.	Supported
2b	There is a significant influence of accessibility on online channel purchase decision.	Rejected
2c	There is a significant influence of information quality on online channel purchase decision.	Supported
2d	There is a significant influence of responsiveness on online channel purchase decision.	Supported
2e	There is a significant influence of trust on online channel purchase decision.	Rejected
2f	There is a significant influence of personalization on online channel purchase decision.	Supported
4a	There is a significant influence of enjoyment on online channel purchase decision.	Rejected
4b	There is a significant influence of visual appeal on online channel purchase decision.	Rejected
6	There is a significant influence of monetary value on online channel purchase decision.	Supported
8	There is a significant influence of convenience value on online channel purchase decision.	Rejected
10a	There is a significant influence of perceived behavioral control on online channel purchase decision.	Supported
10b	There is a significant influence of subjective norm on online channel purchase decision.	Rejected

5.3.3 Multiple regression for web site design features on online channel purchase intention

Table 40 summarizes the regression model for web site design features explaining the variance change of online channel purchase intention for supermarket shopping. R square value is 0.142, which means that 14.2% of the total variation in online channel purchasing intention is explained by the web site design features.

Table 40. Model Summary of the Multiple Regression with Web Site Design
Features on Online Channel Purchase Intention

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.377	0.142	0.117	0.906

a. Dependent Variable: Online Channel Purchase Intention
b. Predictors: (Constant),
Displaying personalized promotions and campaigns,
Purchasing without signing up,
Easy to grasp menu structure,
Searching products by customer rating,
Having live chat agents that respond customer requests and problems,
Consisting of informative visuals and videos,
Offering flexible payment options like cash, credit cards and cash on delivery,
Offering different delivery dates and times options,
Searching products by prices,
Recommending products that I may like,
Searching by product and brand name,
Commenting about products,
Consisting of detailed information about products

Table 41 displays the ANOVA results of the regression, which implies that

the regression is significant in predicting online channel purchase intention with web

site design features with the F value of 5.65 and significance level of 0.000, which is

less than the critical value of 0.05.

Table 41. ANOVA Table for the Multiple Regression with Web Site Design Features
on Online Channel Purchase Intention

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	60.204	13	4.631	5.654	0.000
	Residual	363.661	444	0.819		
	Total	423.865	457			

a. Dependent Variable: Online Channel Purchase Intention
b. Predictors: Same variables listed in Table 40

Table 42 lists the coefficients and significance levels of web site design

features, which shows only three out of thirteen items are significant in predicting

online channel purchase intention for supermarket shopping. Personalized product

recommendations is significant with a significance level of 0.000 and coefficient of

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0.193. Flexible payment options are not significant with a significance level of 0.668 while flexible delivery options is significant with a significance level of 0.002 and coefficient of 0.174 while purchasing without signing up is significant with a significance level of 0.001 but a negative predictor with a coefficient of -0.131.

Table 42. Coefficients of the Multiple Regression with Web Site Design Features on Online Channel Purchase Intention

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.978	0.437		6.813	0.000
	Easy to grasp menu structure	0.022	0.080	0.015	0.275	0.783
	Searching by product and brand name	-0.076	0.090	-0.047	-0.850	0.396
	Commenting about products	-0.026	0.047	-0.031	-0.557	0.578
	Searching products by prices	0.016	0.052	0.016	0.316	0.752
	Searching products by customer rating	-0.032	0.047	-0.038	-0.685	0.494
	Recommending products that I may like	0.193	0.044	0.229	4.410	0.000
	Purchasing without signing up	-0.131	0.038	-0.155	-3.417	0.001
	Consisting of detailed information about products	-0.039	0.077	-0.030	-0.502	0.616
	Consisting of informative visuals and videos	-0.027	0.054	-0.028	-0.495	0.621
	Offering flexible payment options like cash, credit cards and cash on delivery	-0.027	0.063	-0.021	-0.430	0.668
	Having live chat agents that respond customer requests and problems.	0.025	0.046	0.027	0.544	0.587
	Offering different delivery dates and times options	0.174	0.055	0.161	3.159	0.002
	Displaying personalized promotions and campaigns	0.074	0.045	0.089	1.654	0.099

a. Dependent Variable: Online Channel Purchase Intention

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5.3.4 Logistic regression for web site design features on online channel purchase decision

Logistic regression analyses are conducted in order to detect the impact of web site design features on online channel purchase decision for supermarket shopping. As a first step, actual purchasers are decoded as 1 and the respondents have not ever purchased as 0. The baseline model do not differ from calculated in Table 34. Therefore, classification of the baseline model, which consist only a constant without web site design features is similar and every respondent is classified as actual purchaser, which results in 53.5% prediction accuracy overall.

Another logistic regression model is run with web site design features in order to see the difference from the baseline model. Table 43 shows the goodness of fit scores of the logistic regression model with web site design features as predictors. Cox & Snell R Square score is 14.7% while Nagelkerke R Square is 19.6%, which denotes that the model explains the variance change in online channel purchase decision between 14.7% and 19.6%.

Table 43. Model Summary of the Logistic Regression with Web Site Design Features on Online Channel Purchase Decision

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	560.113[a]	0.147	0.196

a. Estimation terminated at iteration number 4 because parameter estimates changed by less than .001.

Additionally Hosmer and Lemeshow goodness of fit test is carried out in order to see the whether the logistics regression is statistically significant. Table 44 shows that the model is a good fit with significant level 0.439, which is larger than the critical value 0.05.

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Table 44. Hosmer and Lemeshow Test of the Logistic Regression with Web Site Design Features on Online Channel Purchase Decision

Step	Chi-square	Df	Sig.
1	7.944	8	0.439

Classification table of the logistic regression with web site design features can be seen in Table 45, which implies that the prediction accuracy rose to 65.7% from 53.5% in the baseline model. Hence, it can easily be asserted that the web site design features could be used in predicting online channel purchase decisions of the respondents.

Table 45. Classification Table of the Logistic Regression with Web Site Design Features on Online Channel Purchase Decision

Observed			Predicted		
			Have you ever shopped from online supermarket?		Percentage Correct
			Yes	No	
Step 1	Have you ever shopped from online supermarket?	Yes	169	76	69.0
		No	81	132	62.0
	Overall Percentage				65.7

a. The cut value is .500

Table 46 lists the coefficients and significance levels of web site design features on online channel purchase decision. Similar to the multiple regression analysis with web site design features only three features out of thirteen are found out as statistically significant and two of them are common. Flexible delivery options and purchasing without signing up features are common and statistically significant features with significance levels of 0.000. Personalized product recommendations is not significant with significance level 0.251, which was significant in predicting online channel purchase intention. Moreover, commenting about products feature is

found significant with a significance level of 0.03 in the logistic regression analysis, which was not significant in the multiple regression analysis to predict the purchase intention for online supermarket.

Odds ratio is another vital metric to interpret the feature importance in logistic regression analysis and denoted with Exp(B) column in Table 46. Flexible delivery options feature has an odd ratio of 1.825, which means that one point increase in flexible delivery option would increase the odds of actual purchase by 1.825 times. On the contrary of flexible delivery options, purchasing without signing up and commenting about products features seem negatively impacting actual purchase decisions, in particular, one point increase in both items would decrease the odds by 34% and 23% respectively.

Table 46. Coefficients in the Logistic Regression with Web Site Design Features on Online Channel Purchase decision

Model - Step 1	B	S.E.	Wald	df	Sig.	Exp(B)
Easy to grasp menu structure	-0.126	0.195	0.414	1	0.520	0.882
Searching by product and brand name	-0.015	0.221	0.005	1	0.946	0.985
Commenting about products	-0.252	0.115	4.813	1	0.028	0.777
Searching products by prices	-0.106	0.129	0.675	1	0.411	0.899
Searching products by customer rating	-0.028	0.113	0.062	1	0.803	0.972
Recommending products that I may like	0.122	0.106	1.316	1	0.251	1.130
Purchasing without signing up	-0.413	0.099	17.492	1	0.000	0.662
Consisting of detailed information about products	-0.228	0.196	1.353	1	0.245	0.796
Consisting of informative visuals and videos	-0.108	0.132	0.662	1	0.416	0.898
Offering flexible payment options like cash, credit cards and cash on delivery	0.231	0.155	2.231	1	0.135	1.260
Having live chat agents that respond customer requests and problems	-0.128	0.115	1.228	1	0.268	0.880
Offering different delivery dates and times options	0.601	0.140	18.468	1	0.000	1.825
Displaying personalized promotions and campaigns	0.038	0.109	0.120	1	0.730	1.038
Constant	1.638	1.061	2.381	1	0.123	5.144

5.4 Multiple regression analyses for mediation effects

Multiple linear and logistic regression analyses are conducted in order to find the direct impacts of perceived value, behavioral perception and web site design features on online channel purchase intention and decision for supermarket shopping. Behavioral perception variables are stood out for their direct effect on online channel purchase intention. Next, the mediation effects of behavioral perception variables are discussed between other perceived value variables and online channel purchase intention.

5.4.1 Behavioral perception mediation between security and online channel purchase intention

Table 47 summarizes the impact of security on subjective norm and perceived behavioral control, which are the mediating variable candidates. Results show that security is a statistically significant predictor of perceived behavioral control with the coefficient of 0.347 and the significance level of 0.000, whereas it is an insignificant predictor of subjective norm with the significance level of 0.167, which is more than the critical value of 0.05.

Table 47. Effect of Security on Behavioral Perception Variables

Independent Variable	Mediating Variable	coeff	se	t	p
Security	Subjective Norm	0.186	0.134	1.385	0.167
Security	Perceived Behavioral Control	0.347	0.079	4.410	0.000

Table 48 lists the results for mediating variables that are subjective norm and perceived behavioral control with security are explaining online channel purchase intention as the dependent variable. Both of the mediating variables are statistically

significant predictors of online channel purchase intention with the significance level of 0.000 and coefficients of 0.216 and 0.572 for subjective norm and perceived behavioral control respectively.

Table 48. Effects of Behavioral Perception Variables with Security on Online Channel Purchase Intention

Mediating Variable	Dependent Variable	coeff	se	t	p
Subjective Norm	Online Channel Purchase Intention	0.216	0.040	5.366	0.000
Perceived Behavioral Control	Online Channel Purchase Intention	0.572	0.069	8.341	0.000

Table 49 summarizes the total, direct and indirect effects of security on online channel purchase intention. Although, the total and direct effects are insignificant, the indirect effect is significant with the LLCI of 0.014 and ULCI of 0.472. Baron and Kenny (1986) denotes this situation as no mediation since the total effect is insignificant. However, Preacher and Hayes (2004, 2008) suggest that a significance in the Sobel test or more superior Bootstrap test suffice to spot the significance in an indirect effect. Since security has a significant indirect effect on online purchase intention, it can be concluded that there is mediation. However, the type of the mediation is defined by MacKinnon et al. (2007) as inconsistent mediation because, the direct and indirect effects have opposite signs.

Table 49. Total, Direct and Indirect Effects of Security on Online Channel Purchase Intention

	Effect	se	t	p
Total Effect	0.1187	0.1255	0.9465	0.3444
Direct Effect	Effect	se	t	p
	-0.120	0.118	-1.018	0.309
Indirect Effect	Effect	BootSE	BootLLCI	BootULCI
	0.238	0.126	0.014	0.472

Table 50 has the summary of the bootstrap tests of mediating variable candidates. Results show that perceived behavioral control has a statistically significant indirect effect with the LLCI of 0.0116 and ULCI of 0.3973. However, subjective norm do not have a significant indirect effect with the LLCI of -0.0318 and 0.1014.

Table 50. Indirect Effects through Behavioral Perception Variables with Security on Online Channel Purchase Intention

Mediating Variable	Effect	BootSE	BootLLCI	BootULCI
Subjective Norm	0.0401	0.0331	-0.0318	0.1014
Perceived Behavioral Control	0.1983	0.1028	0.0116	0.3973

5.4.2 Behavioral perception mediation between accessibility and online channel purchase intention

Table 51 summarizes the impact of accessibility on subjective norm and perceived behavioral control, which are the mediating variable candidates. Results show that accessibility is a statistically significant predictor of both subjective norm and perceived behavioral control with the coefficients of 0.342 and 0.272 respectively. It is significant for both with the significance level of 0.000 that is less than the critical value of 0.05.

Table 51. Effect of Accessibility on Behavioral Perception Variables

Independent Variable	Mediating Variable	coeff	se	t	p
Accessibility	Subjective Norm	0.342	0.091	3.766	0.000
Accessibility	Perceived Behavioral Control	0.272	0.054	5.069	0.000

Table 52 lists the results for mediating variables that are subjective norm and perceived behavioral control with accessibility are explaining online channel

purchase intention as the dependent variable. Both of the mediating variables are statistically significant predictors of online channel purchase intention with the significance level of 0.000 and coefficients of 0.209 and 0.550 for subjective norm and perceived behavioral control respectively.

Table 52. Effects of Behavioral Perception Variables with Accessibility on Online Channel Purchase Intention

Mediating Variable	Dependent Variable	coeff	se	t	p
Subjective Norm	Online Channel Purchase Intention	0.209	0.041	5.112	0.000
Perceived Behavioral Control	Online Channel Purchase Intention	0.550	0.069	7.941	0.000

Table 53 summarizes the total, direct and indirect effects of accessibility on online channel purchase intention. Total effect is still significant while the direct effect of accessibility turns out to be an insignificant predictor after controlled through the behavioral perception variables with the significance level of 0.676. However, the indirect effect is statistically significant with the LLCI of 0.114 and ULCI of 0.331, which points out a full mediation.

Table 53. Total, Direct and Indirect Effects of Accessibility on Online Channel Purchase Intention

Total Effect	Effect	se	t	p
	0.256	0.085	2.994	0.003
Direct Effect	Effect	se	t	p
	0.035	0.083	0.418	0.676
Indirect Effect	Effect	BootSE	BootLLCI	BootULCI
	0.221	0.057	0.114	0.331

Table 54 has the summary of the bootstrap tests of mediating variable candidates. Results show that subjective norm has a statistically significant indirect effect with the LLCI of 0.027 and ULCI of 0.1244. Moreover, perceived behavioral

control has a statistically significant indirect effect with the LLCI of 0.058 and ULCI of 0.2457. Therefore, both variables fully mediate the relationship between accessibility and online channel purchase intention for supermarket shopping.

Table 54. Indirect Effects through Behavioral Perception Variables with Accessibility on Online Channel Purchase Intention

Mediating Variable	Effect	BootSE	BootLLCI	BootULCI
Subjective Norm	0.0715	0.0251	0.027	0.1244
Perceived Behavioral Control	0.1495	0.0481	0.058	0.2457

5.4.3 Behavioral perception mediation between information quality and online channel purchase intention

Table 55 summarizes the impact of information quality on subjective norm and perceived behavioral control, which are the mediating variable candidates. Results show that information quality is a statistically significant predictor for only subjective norm with the coefficient of 0.469 and significance level of 0.000.

Table 55. Effect of Information Quality on Behavioral Perception Variables

Independent Variable	Mediating Variable	coeff	se	t	p
Information Quality	Subjective Norm	0.469	0.077	6.131	0.000
Information Quality	Perceived Behavioral Control	0.046	0.048	0.959	0.338

Table 56 lists the results for mediating variables that are subjective norm and perceived behavioral control with information quality are explaining online channel purchase intention as the dependent variable. Both of the mediating variables are statistically significant predictors of online channel purchase intention with the significance level of 0.000 and coefficients of 0.216 and 0.550 for subjective norm and perceived behavioral control respectively.

Table 56. Effects of Behavioral Perception Variables with Information Quality on Online Channel Purchase Intention

Mediating Variable	Dependent Variable	coeff	se	t	p
Subjective Norm	Online Channel Purchase Intention	0.216	0.042	5.165	0.000
Perceived Behavioral Control	Online Channel Purchase Intention	0.559	0.067	8.303	0.000

Table 57 summarizes the total, direct and indirect effects of information quality on online channel purchase intention. The total and direct effects of information quality turn out to be insignificant after controlled through the behavioral perception variables with the significance levels of 0.154 and 0.770 respectively. On the other hand, the indirect effect is significant with LLCI of 0.032 and ULCI of 0.230, which shows there is a mediation. However, the type of mediation is inconsistent mediation since the direct and indirect effects have opposite signs.

Table 57. Total, Direct and Indirect Effects of Information Quality on Online Channel Purchase Intention

	Effect	se	t	p
Total Effect	0.106	0.074	1.427	0.154
	Effect	se	t	p
Direct Effect	-0.021	0.071	-0.293	0.770
	Effect	BootSE	BootLLCI	BootULCI
Indirect Effect	0.127	0.051	0.032	0.230

Table 58 has the summary of the bootstrap tests of mediating variable candidates. Results show that subjective norm has a statistically significant indirect effect with the LLCI of 0.051 and ULCI of 0.162. On the other hand, perceived behavioral control do not have a statistically significant indirect effect with the LLCI of -0.051 and ULCI of 0.107.

Table 58. Indirect Effects through Behavioral Perception Variables with Information Quality on Online Channel Purchase Intention

Mediating Variable	Effect	BootSE	BootLLCI	BootULCI
Subjective Norm	0.101	0.029	0.051	0.162
Perceived Behavioral Control	0.026	0.040	-0.051	0.107

5.4.4 Behavioral perception mediation between responsiveness and online channel purchase intention

Table 59 summarizes the impact of responsiveness on subjective norm and perceived behavioral control, which are the mediating variable candidates. Results show that responsiveness is a statistically significant predictor of both subjective norm and perceived behavioral control with the coefficients of 0.298 and 0.329 and significance levels of 0.002 and 0.000 respectively.

Table 59. Effect of Responsiveness on Behavioral Perception Variables

Independent Variable	Mediating Variable	coeff	se	t	p
Responsiveness	Subjective Norm	0.298	0.096	3.099	0.002
Responsiveness	Perceived Behavioral Control	0.329	0.056	5.871	0.000

Table 60 lists the results for mediating variables that are subjective norm and perceived behavioral control with responsiveness are explaining online channel purchase intention as the dependent variable. Both of the mediating variables are statistically significant predictors of online channel purchase intention with the significance level of 0.000 and the coefficients of 0.217 and 0.571 for subjective norm and perceived behavioral control respectively.

Table 60. Effects of Behavioral Perception Variables with Responsiveness on Online Channel Purchase Intention

Mediating Variable	Dependent Variable	coeff	se	t	p
Subjective Norm	Online Channel Purchase Intention	0.217	0.041	5.337	0.000
Perceived Behavioral Control	Online Channel Purchase Intention	0.571	0.070	8.167	0.000

Table 61 summarizes the total, direct and indirect effects of responsiveness on online channel purchase intention. Total effect is significant while the direct effect of responsiveness turns out to be an insignificant after controlled through the behavioral perception variables with the significance level of 0.494. However, the indirect effect is significant with LLCI of 0.130 and ULCI of 0.387, which shows there is a mediation. However, the type of mediation is inconsistent mediation since the direct and indirect effects have opposite signs.

Table 61. Total, Direct and Indirect Effects of Responsiveness on Online Channel Purchase Intention

Total Effect	Effect	se	t	p
	0.193	0.090	2.130	0.034
Direct Effect	Effect	se	t	p
	-0.060	0.087	-0.685	0.494
Indirect Effect	Effect	BootSE	BootLLCI	BootULCI
	0.252	0.066	0.130	0.387

Table 62 has the summary of the bootstrap tests of mediating variable candidates. Results show that subjective norm has a statistically significant indirect effect with the LLCI of 0.017 and ULCI of 0.123. Moreover, perceived behavioral control has a statistically significant indirect effect with the LLCI of 0.083 and ULCI of 0.298.

Table 62. Indirect Effects through Behavioral Perception Variables with Responsiveness on Online Channel Purchase Intention

Mediating Variable	Effect	BootSE	BootLLCI	BootULCI
Subjective Norm	0.065	0.027	0.017	0.123
Perceived Behavioral Control	0.188	0.056	0.083	0.298

5.4.5 Behavioral perception mediation between trust and online channel purchase intention

Table 63 summarizes the impact of trust on subjective norm and perceived behavioral control that are the mediating variable candidates. Results show that trust is a statistically significant predictor of both subjective norm and perceived behavioral control with the coefficients of 0.342 and 0.168 and significance levels of 0.000 and 0.003 respectively.

Table 63. Effect of Trust on Behavioral Perception Variables

Independent Variable	Mediating Variable	coeff	se	t	p
Trust	Subjective Norm	0.342	0.093	3.695	0.000
Trust	Perceived Behavioral Control	0.168	0.056	3.018	0.003

Table 64 lists the results for mediating variables that are subjective norm and perceived behavioral control with trust are explaining online channel purchase intention as the dependent variable. Both of the mediating variables are statistically significant predictors of online channel purchase intention with the significance level of 0.000 and coefficients of 0.213 and 0.558 for subjective norm and perceived behavioral control.

Table 64. Effects of Behavioral Perception Variables with Trust on Online Channel Purchase Intention

Mediating Variable	Dependent Variable	coeff	se	t	p
Subjective Norm	Online Channel Purchase Intention	0.213	0.041	5.220	0.000
Perceived Behavioral Control	Online Channel Purchase Intention	0.558	0.068	8.213	0.000

Table 65 summarizes the total, direct and indirect effects of trust on online channel purchase intention. The total and direct of effects of trust turn out to be insignificant after controlled through the behavioral perception variables with the significance levels of 0.068 and 0.940. On the other hand, the indirect effect is significant with the LLCI of 0.045 and ULCI of 0.294, which shows there is a mediation. However, the type of mediation is inconsistent mediation since the direct and indirect effects have opposite signs.

Table 65. Total, Direct and Indirect Effects of Trust on Online Channel Purchase Intention

Total Effect	Effect	se	t	p
	0.160	0.088	1.832	0.068
Direct Effect	Effect	se	t	p
	-0.006	0.083	-0.076	0.940
Indirect Effect	Effect	BootSE	BootLLCI	BootULCI
	0.167	0.065	0.045	0.294

Table 66 has the summary of the bootstrap tests of mediating variable candidates. Results show that only subjective norm has a statistically significant indirect effect with the LLCI of 0.026 and ULCI of 0.130. However, perceived behavioral control do not have a statistically significant indirect effect with the LLCI of -0.010 and ULCI of 0.205.

Table 66. Indirect Effects through Behavioral Perception Variables with Trust on Online Channel Purchase Intention

Mediating Variable	Effect	BootSE	BootLLCI	BootULCI
Subjective Norm	0.073	0.027	0.026	0.130
Perceived Behavioral Control	0.094	0.055	-0.010	0.205

5.4.6 Behavioral perception mediation between personalization and online channel purchase intention

Table 67 summarizes the impact of personalization on subjective norm and perceived behavioral control, which are the mediating variable candidates. Results show that personalization is a statistically significant predictor of subjective norm with the coefficient of 0.304 and significance level of 0.000, whereas it is an insignificant predictor of perceived behavioral control with the significance level of 0.670, which is more than the critical value of 0.05.

Table 67. Effect of Personalization on Behavioral Perception Variables

Independent Variable	Mediating Variable	coeff	se	t	p
Personalization	Subjective Norm	0.304	0.046	6.640	0.000
Personalization	Perceived Behavioral Control	-0.012	0.029	-0.426	0.670

Table 68 lists the results for mediating variables that are subjective norm and perceived behavioral control with personalization are explaining online channel purchase intention as the dependent variable. Both of the mediating variables are statistically significant predictors of online channel purchase intention with the significance level of 0.000 and coefficients of 0.164 and 0.557 for subjective norm and perceived behavioral control respectively.

Table 68. Effects of Behavioral Perception Variables with Personalization on Online Channel Purchase Intention

Mediating Variable	Dependent Variable	coeff	se	t	p
Subjective Norm	Online Channel Purchase Intention	0.164	0.041	3.959	0.000
Perceived Behavioral Control	Online Channel Purchase Intention	0.557	0.066	8.443	0.000

Table 69 summarizes the total, direct and indirect effects of personalization on online channel purchase intention. The total and direct effects of personalization are still statistically significant after controlled through behavioral perception variables with the significance level of 0.000. However, the indirect effect is not significant with LLCI of -0.004 and ULCI of 0.089, which shows there is no combined mediation effect.

Table 69. Total, Direct and Indirect Effects of Personalization on Online Channel Purchase Intention

Total Effect	Effect	se	t	p
	0.212	0.044	4.845	0.000
Direct Effect	Effect	se	t	p
	0.169	0.042	4.003	0.000
Indirect Effect	Effect	BootSE	BootLLCI	BootULCI
	0.043	0.024	-0.004	0.089

Table 70 has the summary of the bootstrap tests of mediating variable candidates. Results show that only subjective norm has a statistically significant indirect effect with the LLCI of 0.021 and ULCI of 0.084, whereas perceived behavioral control do not have a statistically significant indirect effect with the LLCI of -0.043 and ULCI of 0.029. Hence, subjective norm partially mediates the relationship between personalization and online channel purchase intention. However, there is no combined mediation effect with perceived behavioral control.

Table 70. Indirect Effects through Behavioral Perception Variables with Personalization on Online Channel Purchase Intention

Mediating Variable	Effect	BootSE	BootLLCI	BootULCI
Subjective Norm	0.050	0.016	0.021	0.084
Perceived Behavioral Control	-0.007	0.018	-0.043	0.029

5.4.7 Behavioral perception mediation between enjoyment and online channel purchase intention

Table 71 summarizes the impact of enjoyment on subjective norm and perceived behavioral control, which are the mediating variable candidates. Results show that enjoyment is a statistically significant predictor of subjective norm with the coefficient of 0.312 and significance level of 0.000, whereas it is an insignificant predictor of perceived behavioral control with the significance level of 0.096, which is more than the critical value of 0.05.

Table 71. Effect of Enjoyment on Behavioral Perception Variables

Independent Variable	Mediating Variable	coeff	se	t	p
Enjoyment	Subjective Norm	0.312	0.050	6.261	0.000
Enjoyment	Perceived Behavioral Control	-0.052	0.031	-1.670	0.096

Table 72 lists the results for mediating variables that are subjective norm and perceived behavioral control with enjoyment are explaining online channel purchase intention as the dependent variable. Both of the mediating variables are statistically significant predictors of online channel purchase intention with the significance level of 0.000 and coefficients of 0.193 and 0.564 for subjective norm and perceived behavioral control respectively.

Table 72. Effects of Behavioral Perception Variables with Enjoyment on Online Channel Purchase Intention

Mediating Variable	Dependent Variable	coeff	se	t	p
Subjective Norm	Online Channel Purchase Intention	0.193	0.042	4.623	0.000
Perceived Behavioral Control	Online Channel Purchase Intention	0.564	0.067	8.418	0.000

Table 73 summarizes the total, direct and indirect effects of enjoyment on online channel purchase intention. Total effect is significant while the direct effect of enjoyment turns out to be insignificant after controlled through the behavioral perception variables with the significance level of 0.084. Moreover, the indirect effect is not significant with LLCI of -0.024 and ULCI of 0.086, which shows there is no combined mediation effect at all.

Table 73. Total, Direct and Indirect Effects of Enjoyment on Online Channel Purchase Intention

Total Effect	Effect	se	t	p
	0.111	0.048	2.297	0.022
Direct Effect	Effect	se	t	p
	0.080	0.046	1.731	0.084
Indirect Effect	Effect	BootSE	BootLLCI	BootULCI
	0.031	0.028	-0.024	0.086

Table 74 has the summary of the bootstrap tests of mediating variable candidates. Results show that only subjective norm has a statistically significant indirect effect with the LLCI of 0.027 and ULCI of 0.098, whereas perceived behavioral control do not have a statistically significant indirect effect with the LLCI of -0.073 and ULCI of 0.013. Therefore, subjective norm solely and fully mediates the relationship between enjoyment and online channel purchase intention.

Table 74. Indirect Effects through Behavioral Perception Variables with Enjoyment on Online Channel Purchase Intention

Mediating Variable	Effect	BootSE	BootLLCI	BootULCI
Subjective Norm	0.060	0.018	0.027	0.098
Perceived Behavioral Control	-0.029	0.021	-0.073	0.013

5.4.8 Behavioral perception mediation between visual appeal and online channel purchase intention

Table 75 summarizes the impact of visual appeal on subjective norm and perceived behavioral control, which are the mediating variable candidates. Results show that visual appeal is a statistically significant predictor of subjective norm with the coefficient of 0.416 and the significance level of 0.000, whereas it is an insignificant predictor of perceived behavioral control with the significance level of 0.214, which is more than the critical value of 0.05.

Table 75. Effect of Visual Appeal on Behavioral Perception Variables

Independent Variable	Mediating Variable	coeff	se	t	p
Visual Appeal	Subjective Norm	0.416	0.058	7.161	0.000
Visual Appeal	Perceived Behavioral Control	0.046	0.037	1.245	0.214

Table 76 lists the results for mediating variables that are subjective norm and perceived behavioral control with visual appeal are explaining the dependent variable online channel purchase intention. Both of the mediating variables are statistically significant predictors of online channel purchase intention with the significance level of 0.000 and coefficients of 0.211 and 0.557 for subjective norm and perceived behavioral control respectively.

Table 76. Effects of Behavioral Perception Variables with Visual Appeal on Online Channel Purchase Intention

Mediating Variable	Dependent Variable	coeff	se	t	p
Subjective Norm	Online Channel Purchase Intention	0.211	0.042	4.965	0.000
Perceived Behavioral Control	Online Channel Purchase Intention	0.557	0.067	8.259	0.000

Table 77 summarizes the total, direct and indirect effects of visual appeal on online channel purchase intention. Total effect is significant while the direct effect of visual appeal turns out to be an insignificant after controlled through the behavioral perception variables with the significance level of 0.888. However, the indirect effect is statistically significant with the LLCI of 0.043 and ULCI of 0.193, which points out a full combined mediation effect.

Table 77. Total, Direct and Indirect Effects of Visual Appeal on Online Channel Purchase Intention

Total Effect	Effect	se	t	p
	0.121	0.057	2.118	0.035
Direct Effect	Effect	se	t	p
	0.008	0.056	0.140	0.888
Indirect Effect	Effect	BootSE	BootLLCI	BootULCI
	0.113	0.038	0.043	0.193

Table 78 has the summary of the bootstrap tests of mediating variable candidates. Results show that only subjective norm has a statistically significant indirect effect with the LLCI of 0.043 and ULCI of 0.140, whereas perceived behavioral control do not have a statistically significant indirect effect with the LLCI of -0.027 and ULCI of 0.082. Hence, subjective norm fully mediates the relationship between visual appeal and online channel purchase intention.

Table 78. Indirect Effects through Behavioral Perception Variables with Visual Appeal on Online Channel Purchase Intention

Mediating Variable	Effect	BootSE	BootLLCI	BootULCI
Subjective Norm	0.088	0.025	0.043	0.140
Perceived Behavioral Control	0.025	0.028	-0.027	0.082

5.4.9 Behavioral perception mediation between monetary value and online channel purchase intention

Table 79 summarizes the impact of monetary value on subjective norm and perceived behavioral control, which are the mediating variable candidates. Results show that monetary value is a statistically significant predictor of both subjective norm and perceived behavioral control with the coefficients of 0.400 and 0.166 respectively. They both have the significance level of 0.000, which is less than the critical value of 0.05.

Table 79. Effect of Monetary Value on Behavioral Perception Variables

Independent Variable	Mediating Variable	coeff	se	t	p
Monetary Value	Subjective Norm	0.400	0.077	5.213	0.000
Monetary Value	Perceived Behavioral Control	0.166	0.047	3.571	0.000

Table 80 lists the results for mediating variables that are subjective norm and perceived behavioral control with monetary value are explaining online channel purchase intention as the dependent variable. Both of the mediating variables are statistically significant predictors of online channel purchase intention with the significance level of 0.000 and coefficients of 0.235 and 0.585 for subjective norm and perceived behavioral control respectively.

Table 80. Effects of Behavioral Perception Variables with Monetary Value on Online Channel Purchase Intention

Mediating Variable	Dependent Variable	coeff	se	t	p
Subjective Norm	Online Channel Purchase Intention	0.235	0.041	5.701	0.000
Perceived Behavioral Control	Online Channel Purchase Intention	0.585	0.068	8.606	0.000

Table 81 summarizes the total, direct and indirect effects of monetary value on online channel purchase intention. Total effect has become insignificant while the direct effect of monetary value is still significant after controlled through behavioral perception variables with the significance level of 0.030. Moreover, the indirect effect is significant with LLCI of 0.078 and ULCI of 0.304, which shows that there is a mediation. However, the type of mediation is inconsistent mediation since the direct and indirect effects have opposite signs.

Table 81. Total, Direct and Indirect Effects of Monetary Value on Online Channel Purchase Intention

	Effect	se	t	p
Total Effect	0.038	0.074	0.511	0.610
Direct Effect	Effect	se	t	p
	-0.154	0.070	-2.183	0.030
Indirect Effect	Effect	BootSE	BootLLCI	BootULCI
	0.192	0.059	0.078	0.304

Table 82 has the summary of the bootstrap tests of mediating variable candidates. Results show that subjective norm has a statistically significant indirect effect with the LLCI of 0.028 and ULCI of 0.043. In addition to that perceived behavioral control has a statistically significant indirect effect with the LLCI of 0.003 and ULCI of 0.193.

Table 82. Indirect Effects through Behavioral Perception Variables with Monetary Value on Online Channel Purchase Intention

Mediating Variable	Effect	BootSE	BootLLCI	BootULCI
Subjective Norm	0.094	0.028	0.043	0.153
Perceived Behavioral Control	0.097	0.049	0.003	0.193

5.4.10 Behavioral perception mediation between convenience value and online channel purchase intention

Table 83 summarizes the impact of convenience value on subjective norm and perceived behavioral control, which are the mediating variable candidates. Results show that convenience value is a statistically significant predictor of both subjective norm and perceived behavioral control with the coefficients of 0.229 and 0.219 and significance levels of 0.001 and 0.000 respectively.

Table 83. Effect of Convenience Value on Behavioral Perception Variables

Independent Variable	Mediating Variable	coeff	se	t	p
Convenience Value	Subjective Norm	0.229	0.071	3.243	0.001
Convenience Value	Perceived Behavioral Control	0.219	0.042	5.282	0.000

Table 84 lists the results for mediating variables that are subjective norm and perceived behavioral control with convenience value are explaining online channel purchase intention as the dependent variable. Both of the mediating variables are statistically significant predictors of online channel purchase intention with the significance level of 0.000 and coefficients of 0.188 and 0.495 for subjective norm and perceived behavioral control respectively.

Table 84. Effects of Behavioral Perception Variables with Convenience Value on Online Channel Purchase Intention

Mediating Variable	Dependent Variable	coeff	se	t	p
Subjective Norm	Online Channel Purchase Intention	0.188	0.040	4.669	0.000
Perceived Behavioral Control	Online Channel Purchase Intention	0.495	0.068	7.228	0.000

Table 85 summarizes the total, direct and indirect effects of convenience value on online channel purchase intention. Total effect and direct effect of convenience value are still significant after controlled through the behavioral perception variables with the significance level of 0.000. Moreover, the indirect effect is significant with LLCI of 0.080 and ULCI of 0.229, which shows there is a mediation. The type of mediation is partial mediation.

Table 85. Total, Direct and Indirect Effects of Convenience Value on Online Channel Purchase Intention

Total Effect	Effect	se	t	p
	0.378	0.064	5.871	0.000
Direct Effect	Effect	se	t	p
	0.227	0.063	3.601	0.000
Indirect Effect	Effect	BootSE	BootLLCI	BootULCI
	0.151	0.038	0.080	0.229

Table 86 has the summary of the bootstrap tests of mediating variable candidates. Results show that subjective norm has a statistically significant indirect effect with the LLCI of 0.011 and ULCI of 0.085. Perceived behavioral control also has a statistically significant indirect effect with the LLCI of 0.049 and ULCI of 0.174. Therefore, both of the behavioral perception variables partially mediates the relationship between convenience value and online channel purchase intention.

Table 86. Indirect Effects through Behavioral Perception Variables with Convenience Value on Online Channel Purchase Intention

Mediating Variable	Effect	BootSE	BootLLCI	BootULCI
Subjective Norm	0.043	0.019	0.011	0.085
Perceived Behavioral Control	0.108	0.032	0.049	0.174

Table 87 lists the summary of the mediation analysis, which shows that subjective norm fully mediates the impacts of enjoyment, visual appeal and accessibility attributes on online channel purchase intention while partially mediates the impacts of personalization and convenience value on online channel purchase intention. Perceived behavioral control only fully mediates the impact of accessibility on online channel purchase intention.

Table 87. Summary of Mediation Analysis

Independent Variable	Mediating Variable	Dependent Variable	Type of Mediation
Accessibility	Subjective Norm	Online Channel Purchase Intention	Full Mediation
Accessibility	Perceived Behavioral Control	Online Channel Purchase Intention	Full Mediation
Personalization	Subjective Norm	Online Channel Purchase Intention	Partial Mediation
Enjoyment	Subjective Norm	Online Channel Purchase Intention	Full Mediation
Visual Appeal	Subjective Norm	Online Channel Purchase Intention	Full Mediation
Convenience Value	Subjective Norm	Online Channel Purchase Intention	Partial Mediation
Convenience Value	Perceived Behavioral Control	Online Channel Purchase Intention	Partial Mediation

5.5 ANOVA and t-test analyses

ANOVA and t-test analyses are conducted in order to detect the significant mean differences in online channel purchase intention scores by demographic and online shopping characteristics. One-way ANOVA is used for variables having more than two categories, as t-test is used for the ones with two categories. Results of these analyses are used to verify the eleventh group of hypotheses.

Both analyses require the same three assumptions to hold, which are the independence of observations, normality and homogeneity of variances. All observations belong to the different respondents. Thus, the independence of observations holds for all analyses. Normality assumption also holds since at least 30 observations is collected or combined per group. Finally, homogeneity of variances is tested with the Levene's test. If the Levene's test rejects the null hypothesis claiming that all groups have the same dependent variable variance, then the Kruskal-Wallis test is employed in order to verify that the mean differences are statistically significant.

Table 88 layouts the summary of the one-way ANOVA analysis to test the mean differences of online channel purchase intention for different online shopping frequencies. Shoppers who shop online weekly and daily once are joined to the group weekly more than once. Online shopping frequency groups have statistically significant equal variances of online channel purchase intention with the Levene's statistic of 2.886 and significance level of 0.057. In other words, one-way ANOVA test can be applied in order to verify whether the mean differences are significant. Analysis proves that there are significant differences in the mean scores of online channel purchase intention in terms of online shopping frequency. It is also quite

intuitive that the higher the online shopping frequency, the higher the mean online

channel purchase intention for supermarket shopping.

Table 88. ANOVA Test for Online Shopping Frequency Regarding Online Channel
Purchase Intention

Online Shopping Frequency	n	Mean (over 5)	Levene's Test for Equality of Variances		ANOVA	
			Levene's Statistic	Sig.	F	Sig.
Weekly more than once	107	3.72				
Monthly more than once	233	3.48	2.886	0.057	18.742	0.000
Yearly more than once	118	2.99				

Table 89 summarizes the independent samples t-test analysis of the mean

differences of online channel purchase intention with respect to the online

supermarket shopping frequencies. Online supermarket shoppers who shop more

often than the monthly more than once are joined to the group of monthly more than

once. Therefore, the distinct category number is reduced to two categories. Online

supermarket shopping frequency groups have statistically significant equal variances

of online channel purchase intention with the F score of 0.557 and significance level

of 0.456. In other words, independent samples t-test can be applied. The t-test proves

that there is a significant difference in the mean scores of online channel purchase

intention in terms of online supermarket shopping frequency. Similar to the online

shopping frequency analysis, the higher the online supermarket shopping frequency,

the higher the mean online channel purchase intention for supermarket shopping.

Table 89. Independent Samples t-test for Online Supermarket Shopping Frequency Regarding Online Channel Purchase Intention

Online Supermarket Shopping Frequency	n	Mean (over 5)	Levene's Test for Equality of Variances		t-test for Equality of Variances	
			F	Sig.	t	Sig.
Monthly more than once	112	4.00	0.557	0.456	-4.680	0.000
Yearly more than once	133	3.46				

Table 90 shows the one-way ANOVA analysis of the mean differences of online channel purchase intention with respect to monthly income. Different monthly income groups have statistically significant equal variances of online channel purchase intention with the Levene's statistic of 0.368 and significance level of 0.831. Hence, one-way ANOVA test can be applied. ANOVA analysis suggests that the mean differences are not significant in terms of different monthly income levels with the F score of 0.650 and significance level of 0.627.

Table 90. ANOVA Test for Monthly Income Regarding Online Channel Purchase Intention

Monthly Income	n	Mean (over 5)	Levene's Test for Equality of Variances		ANOVA	
			Levene's Statistic	Sig.	F	Sig.
Less than 1500 TL	43	3.21	0.368	0.831	0.650	0.627
1500 - 2999 TL	71	3.41				
3000 - 4999 TL	140	3.39				
5000 - 9000 TL	136	3.45				
More than 9000 TL	68	3.49				

Table 91 lists the summary of the one-way ANOVA analysis to test the mean differences of online channel purchase intention for different online shopping expenditure limits. Online shoppers who have the maximum spending limit less than 1000 TL grouped into one group. Also, spending limits between 1000 TL and 5000

TL grouped into one. Online spending groups have statistically significant equal variances of online channel purchase intention with the Levene's statistic of 2.795 and significance level of 0.062. Hence, one-way ANOVA test can be applied. One-way ANOVA depicts that there are significant differences in the mean scores of online channel purchase intention with respect to online shopping expenditure limit. The higher the online shopping spending limit per purchase, the higher the mean online channel purchase intention for supermarket shopping.

Table 91. ANOVA Test for Online Shopping Spending Limit for One Purchase Regarding Online Channel Purchase Intention

Online Shopping Spending Limit for One Purchase	n	Mean (over 5)	Levene's Test for Equality of Variances		ANOVA	
			Levene's Statistic	Sig.	F	Sig.
Less than 1000 TL	178	3.15				
1000 - 5000 TL	169	3.50	2.795	0.062	12.238	0.000
More than 5000 TL	111	3.69				

Table 92 summarizes the one-way ANOVA analysis of the mean differences of online channel purchase intention with respect to education level. Since the high school graduates and undergraduate students are less than 30 respondents separately, they are grouped into one. Different educational groups have statistically significant equal variances of online channel purchase intention with the Levene's statistic of 1.302 and significance level of 0.273. Hence, one-way ANOVA test can be applied. ANOVA analysis concludes that the mean differences are not significant in terms of different education groups with the F score of 0.990 and significance level of 0.397.

Table 92. ANOVA Test for Education Level Regarding Online Channel Purchase Intention

Education Level	n	Mean (over 5)	Levene's Test for Equality of Variances		ANOVA	
			Levene's Statistic	Sig.	F	Sig.
High School Degree or Undergraduate Student	42	3.40	1.302	0.273	0.990	0.397
Undergraduate Degree	209	3.49				
Master's or PhD Student	103	3.34				
Master's or PhD Degree	104	3.32				

Table 93 lists the results of one-way ANOVA analysis of the mean differences of online channel purchase intention with respect to age. Since the respondents older than 55 years and 46-54 years are less than 30 respondents separately, they are joined to the 36-45 years old respondents. Different age groups have statistically significant equal variances of online channel purchase intention with the Levene's statistic of 1.541 and significance level of 0.215. Hence, one-way ANOVA test can be applied. ANOVA analysis suggests the mean differences are not significant in terms of different age groups with the F score of 1.468 and significance level of 0.231.

Table 93. ANOVA Test for Age Regarding Online Channel Purchase Intention

Age	n	Mean (over 5)	Levene's Test for Equality of Variances		ANOVA	
			Levene's Statistic	Sig.	F	Sig.
18 - 25	57	3.25	1.541	0.215	1.468	0.231
26 - 35	293	3.46				
36 and more	108	3.35				

Table 94 summarizes the independent samples t-test analysis of the mean differences of online channel purchase intention with respect to gender. Genders

have statistically significant equal variances of online channel purchase intention with the F score of 0.155 and significance level of 0.694. Hence, the t-test can be applied. Analysis shows that the mean difference is not significant in terms of gender with the t score of -0.982 and significance level of 0.327.

Table 94. Independent Samples t-test for Gender Regarding Online Channel Purchase Intention

Gender	n	Mean (over 5)	Levene's Test for Equality of Variances		t-test for Equality of Variances	
			F	Sig.	t	Sig.
Female	236	3.37	0.155	0.694	-0.982	0.327
Male	222	3.45				

Table 95 summarizes the independent samples t-test analysis of the mean differences of online channel purchase intention with respect to marital status. Marital status groups have statistically significant equal variances of online channel purchase intention with the F score of 0.133 and significance level of 0.716. Hence, the t-test can be applied. Analysis concludes the mean difference is not significant in terms of marital status with the t score of 0.308 and significance level of 0.758.

Table 95. Independent Samples t-test for Marital Status Regarding Online Channel Purchase Intention

Marital Status	n	Mean (over 5)	Levene's Test for Equality of Variances		t-test for Equality of Variances	
			F	Sig.	t	Sig.
Married	206	3.42	0.133	0.716	0.308	0.758
Single	252	3.40				

Table 96 depicts the summary of ANOVA and t-test analyses. Hypotheses regarding the mean intention differences for online shopping frequencies both in general and specific to the supermarket shopping are supported in 11a and 11b. In

addition, hypothesis of different maximum online spending limits is also turned out

to be supported one in 11d while the rest of the hypotheses are rejected.

Table 96. Summary of ANOVA and t-test Analyses

No	Hypotheses	Result
11a	There is a significant difference among different online shopping frequency groups regarding online channel purchase intention.	Supported
11b	There is a significant difference among different online supermarket shopping frequency groups regarding online channel purchase intention.	Supported
11c	There is a significant difference among different monthly income groups regarding online channel purchase intention.	Rejected
11d	There is a significant difference among different online shopping spending limit groups regarding online channel purchase intention.	Supported
11e	There is a significant difference among different education level groups regarding online channel purchase intention.	Rejected
11f	There is a significant difference among different age groups regarding online channel purchase intention.	Rejected
11g	There is a significant difference among different gender groups regarding online channel purchase intention.	Rejected
11h	There is a significant difference among different marital status groups regarding online channel purchase intention.	Rejected

Lastly, Table 97 displays the mean differences of all variables by actual

online supermarket shopping behavior. In terms of security, accessibility, trust,

personalization and convenience value there are no significant differences between

actual purchasers and non-purchasers. However, there are significant differences in

terms of web site design features, information quality, responsiveness, emotional

value, monetary value, behavioral perception and online channel purchase intention.

Table 97. Mean Differences of All Scales by Actual Online Supermarket Shopping Behavior

Variable	Have you ever shopped from online supermarket?	n	Mean (over 5)	Levene's Test for Equality of Variances		t-test for Equality of Variances	
				F	Sig.	t	Sig.
Web Site Design	Yes	245	3.97	0.130	0.719	-2.208	0.028
	No	213	4.07				
Security	Yes	245	4.87	8.442	0.004	-1.655	0.099
	No	213	4.93				
Accessibility	Yes	245	4.51	1.483	0.224	0.914	0.361
	No	213	4.47				
Information Quality	Yes	245	3.70	2.107	0.147	-2.528	0.012
	No	213	3.85				
Responsiveness	Yes	245	4.71	6.531	0.011	3.022	0.003
	No	213	4.57				
Trust	Yes	245	4.53	0.069	0.793	0.277	0.782
	No	213	4.52				
Personalization	Yes	245	2.93	0.411	0.522	0.818	0.414
	No	213	2.86				
Enjoyment	Yes	245	3.23	0.906	0.342	-2.935	0.004
	No	213	3.48				
Visual Appeal	Yes	245	3.67	0.910	0.341	-2.453	0.015
	No	213	3.85				
Monetary Value	Yes	245	4.34	12.448	0.000	-2.620	0.009
	No	213	4.48				
Convenience Value	Yes	245	4.37	0.010	0.919	0.463	0.643
	No	213	4.34				
Perceived Behavioral Control	Yes	245	4.56	6.777	0.010	5.864	0.000
	No	213	4.23				
Social Norms	Yes	245	3.22	10.618	0.001	-2.750	0.006
	No	213	3.48				
Online Channel Purchase Intention	Yes	245	3.71	2.261	0.133	7.486	0.000
	No	213	3.07				

CHAPTER 6

CONCLUSIONS AND IMPLICATIONS

Online shopping is an integral part of our lives today and the product range could be purchased on the Internet is getting wider every day. Therefore, it is not limited to only durable goods like clothes, shoes or technology products but also non-durable goods like grocery or fresh food could also be purchased online today. This phenomenon also attracted so much attention in the academia and studied in many dimensions. There is an extensive literature on online consumer attraction, purchase and loyalty subjects for many different online environments including online supermarket shopping.

This thesis layout a broad analysis of actual and prospective consumer behavior towards online supermarket shopping in Turkey. The main objective is to adapt, build and test the previously developed online shopping constructs in the online supermarket shopping context.

Literature review reveals that online supermarket shopping is not that different than any other online shopping activity in terms of motivation. It is generally initiated by convenience seeking customers who would like to save time and money. (Morganosky and Cude, 2000). Furthermore, it might be triggered by any condition makes it difficult to travel to a store. However, it does not guarantee a loyal relationship because, it may stop as the blockers are removed (Hand et al., 2009). However, it differs from any other online shopping purchase due to non-durable nature of products and frequency of shopping, which requires different management of all chain processes (Mortimer et al., 2016). Another common finding is that even if the service is satisfactory, online supermarket shopping is generally

pointed out as less enjoyable compared to other internet activities or other forms of online shopping. Therefore, it is denoted as complementary rather than substitutive for grocery and food market (Moreira et al., 2013; Hand et al., 2009).

Based on the literature review, a theoretical framework is formed depending upon the POCVAL model developed by Carlson et al. (2015), which details the online channel purchase intention with several perceived value attributes. It has been extended with several other attributes to detail the effects of service performance, emotional and behavioral values. Later, a survey referring to the theoretical framework has been prepared to test the model quantitatively. The survey has been spread and collected through the Internet. 458 complete responses have been collected. The collected data have been transferred and analyzed on SPSS Statistics version 23.

Descriptive findings suggest that there are slightly more females than males with 52% and respondents at ages between 18 and 35 constitute 76% of the overall responses. Majority is single, college educated and have monthly income between 3000-9000 TL. Almost half of them spend more than 20 hours on the Internet weekly and purchase online monthly more than once. Top three purchased categories are books, apparel and technology. Again, the half of respondents claim that they could spend more than 1000 TL at once on the Internet while it is more than 5000 TL for 24% of the overall. Online supermarket shoppers account for 53% of the total sample 54% of whom shop from online supermarket yearly more than once. The most purchased categories are cleaning, snacks and soft drinks. Scales are also explored within the descriptive analyses. The highest importance attributed scale is security overall with the mean of 4.90 over 5 points and the lowest standard deviation of 0.36. Security is followed by responsiveness and trust. Hence, the top three is comprised

of service performance value attributes. Perceived control behavior and convenience value come as the fourth and fifth. Emotional value attributes have means lower than 4 points while the last three attributes are enjoyment, subjective norm and personalization with mean scores of 3.34, 3.34 and 2.9 respectively. In other words, service performance value variables rank the top and bottom at the same time, similar to behavioral perception variables while the convenience and monetary values center the ranking and emotional attributes have less importance than others in average.

Multiple regression analysis for online channel purchase intention demonstrates that information quality and personalization from service performance, perceived behavioral control and subjective norm from behavioral perception, monetary and convenience values are significant predictors of online channel purchase intention. The impacts of attributes are negative only for information quality and monetary value, which means that the higher the sensitivity attributed to those, the lower the intention to shop from online supermarket. For other positively impacting attributes, perceived behavioral control has the strongest influence on online channel purchase intention followed by convenience value, personalization and subjective norm, which imply that the higher importance attributed to those variables, the higher intention to purchase on online supermarket. Logistic regression is applied with the same attributes in the multiple regression analysis on online channel purchase decision. Results show that security, information quality, responsiveness, personalization from service performance value, perceived behavioral control from behavioral perception and monetary value are significant predictors of online channel purchase decision. Three of those attributes, security, information quality and monetary value negatively influence the purchase decision

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with security having the strongest impact, which mean that the higher sensitivity to those attributes the lower the odds of purchase decisions on online supermarket. The other three attributes have positive influence on online channel purchase decision. Responsiveness and perceived behavioral control are close in terms of impact measures and followed by personalization, which indicates that the higher the importance or capability attributed to those variables the higher the odds of online channel purchase decisions. Web site design features are separated from the rest of attributes and analyzed with both multiple and logistic regressions. Multiple regression with web site design features on online channel purchase intention results in that personalization features; product recommendations and offering flexible delivery options were positive significant predictors while enabling purchases without signing up negatively affects the online channel purchase intention, which are in line with the first multiple regression analysis displayed that personalization is a significant and positive predictor. Logistic regression with web site design features concluded that only offering flexible delivery options is a positive significant predictor while commenting about products and purchase without signing up are negative affecting significant predictors of online channel purchase decisions.

Multiple regressions for mediating effects of behavioral perception variables are analyzed between perceived values and online channel purchase intention. Behavioral perception attributes fully mediate the relationship of accessibility with online channel purchase intention, which means accessibility to an online supermarket does not lead to purchase intention without subjective norm and perceived behavioral perception. Secondly, they partially mediate the relationship between convenience value and online channel purchase intention. In other words, convenience value is still but less effective in case of no behavioral perception

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regarding the online supermarket shopping. Subjective norm, which is mainly related what others think of an action, fully mediates the effect of emotional value attributes on online channel purchase intention while partially mediates the personalization impact on online channel purchase intention. That is to say, enjoyment and visual appeal of an online supermarket is not enough for purchase intention without positive feedback of others on online supermarket. In addition to that, personalization is less influential without social encouragement.

ANOVA and t-test analyses are conducted in order to detect significant differences in online channel purchase intention across different demographic profiles and online shopping segments. As the online shopping frequency rises, online supermarket shopping intention increases as well. Similarly, the higher the online supermarket shopping frequency, the higher the online supermarket shopping intention. Again quite intuitively, online super market shopping intention increments in line with the online spending limit. Nevertheless, there is no significant intention difference according to age, gender, marital status, education level and monthly income.

There are many useful inferences derived from this research. Behavioral perception, service performance and convenience value stand out with their effects on online purchase intention and decision. Especially, behavioral perception attributes seems to have utter importance with both direct and mediating effects on other attributes. Perceived behavioral control which can be affiliated with simple and intuitive design of web stores that makes customers feel at home is crucial for convincing them to take action. Subjective norm, which may be interpreted as social encouragement has both direct and indirect significant effects to online channel purchase intention. In other words, word of mouth effect is crucial also for online

supermarkets. Although security, responsiveness and trust are top rated attributes in terms of importance, none of them has any effect on online shopping purchase intention while security is negative, responsiveness is positive predictor of online channel purchase decision. It can be interpreted as service performance value starts to matter more as the interaction gets more intense. Moreover, as the security concerns increase, it is a direct discouragement to purchase. Information quality is another attribute, which has negative relationship on both online channel purchase intention and decision. This also can be explained as supermarket products do not generally require that much of explanation. Nevertheless, there are some product categories, which are non-durable in their nature like fresh grocery, diary, meet and fish for which complete and correct information may be required. The absence of satisfying information could be a blocker for the intention and actual purchase decision. Personalization is another attribute, which is a quite popular theme in all online shopping settings, also prevalent in the online supermarket shopping environment. Personalized features seem to have significant impact on both online channel purchase intention and decision in the analyses carried out with both perceived values and web site design features,. Monetary value is another variable impacting both purchase intention and decision negatively. It can be explained as the price sensitivity increments, the higher search costs become more feasible and all alternatives options are considered. Convenience is considered as one of the most important triggers of online shopping, which also suits into the online supermarket shopping setting. It is found out that convenience value is a significant predictor of online channel purchase intention. Nevertheless, it does not have any significant impact on actual purchase decision. Finally, emotional values have not shown any significant influence on neither intention nor purchase decision. However, it does not

necessarily mean that they should not be invested. On the contrary, there is a lot to be exploited by marketers in the emotional dimension of online supermarket experiences. The ones who are able to create seamless and fun experiences for the customers will surely have comparative advantage to other players in the market.

The study has some limitations. First, the data are collected only from consumers in the Turkish market. Hence, the impact of mentioned factors has not been studied for other cultures and countries. Therefore, the degree of impacts may change regarding the context. Secondly, additional factors from or out of the literature can be added or devised other than listed in this study. Although the data are collected with convenience sampling from a variety of socio-economic and demographic groups may not be representative. Thus, other sampling methods may increase the representativeness of the sample. Thirdly, answers to questions of the survey does not guarantee that those are actual behaviors, meaning that answers only may imply relative importance and intention, may not reflect the actual behavior.

Further research should focus on investigating online channel purchase behavior in other cultural settings. In order to conduct cross-cultural studies, samples can be chosen from different countries and cultures. Moreover, the scope of the studies could be more focused to some demographic or socioeconomic segments like actual online supermarket shoppers, working professionals, married or single moms etc. Another suggestion is that researchers should conduct other research methods than surveys such as hands-on experiments and focus groups to test the impacts of the studied factors on actual purchase behavior rather than intention. Finally, emotional aspects of online supermarket shopping await further investigation.

APPENDIX A

QUESTIONNAIRE (ENGLISH)

Dear Participant,

This research is intended to study the consumer behavior regarding the online supermarket shopping. Data is collected for solely academic purposes to be studied within the master's thesis of Seçkin Karabağ who is a graduate student in the Department of Management Information Systems at Bogazici University. The research is supervised by Assoc. Prof. Dr. Hande Türker. There are no prerequisites for participating to the questionnaire except being an Internet user. You will not be asked for your personal and contact information. Your answers will be kept private.

We thank you for your valuable time and support.

You may contact with Seçkin Karabağ (seckin.karabag@boun.edu.tr) for your questions and opinions on the questionnaire.

Online supermarket is used for any web site or mobile app could be used to order supermarket products throughout the questionnaire.

All rights are reserved. Without the consent of researchers, questions cannot be fully or partially used.

1. How many hours do you spend on the Internet weekly except business purposes?

< 10   _____   10 – 20   _____   > 20   _____

2. How often do you shop online?

Daily once   _____   Weekly once   _____

Weekly more than once   _____   Monthly more than once   _____

Yearly more than once   _____

3. What are the categories below you have ever purchased on the Internet? (You may choose multiple answers.)

Apparel   _____   Technology   _____

Food   _____   Health   _____

Shoes   _____   Supermarket   _____

Home Goods _____   Home Appliances _____

Book   _____   Digital Services   _____

Hobby   _____

4. What is the maximum amount that you could spend on the Internet?

< 100 TL	_____	100 - 499 TL	_____
500 - 999 TL	_____	1000 - 2499 TL	_____
2500 - 4999 TL	_____	> 5000 TL	_____

5. Have you ever shopped from an online supermarket?

Yes _____   No _____

6. Which categories below you have shopped from online supermarket? (You may choose multiple answers)

Fresh Food	_____	Meat-Fish	_____	Diary	_____
Snacks	_____	Soft Drinks	_____	Cleaning	_____
Cosmetics	_____	Baby	_____	Pet	_____
Other	_____				

7. How often do you shop from online supermarket?

Yearly more than once	_____	Monthly more than once	_____
Weekly more than once	_____	Weekly once	_____

8. Web site design features that online supermarkets could have are listed below.

Please state the importance of them in your purchase decisions.

Web Site Design Scale in the English Questionnaire

Web Site Design	Not Important	Slightly Important	Moderately Important	Important	Very Important
Easy to grasp menu structure					
Searching by product and brand name					
Commenting about products					
Searching products by prices					
Searching products by customer rating					
Recommending products that I may like					
Purchasing without signing up					
Consisting of detailed information about products					
Consisting of informative visuals and videos					
Offering flexible payment opitons like cash, credit cards and cash on delivery					
Having live chat agents that respond customer requests and problems.					
Offering different delivery dates and times options					
Displaying personalized promotions and campaigns					

9. Please state the importance of security items listed below for online supermarket

shopping.

Security Scale in the English Questionnaire

Security	Not Important	Slightly Important	Moderately Important	Important	Very Important
Internet shopping system provides good protection of personal information					
Internet shopping system does not cause discomfort in the checkout & payment process					
Internet shopping system generally offers safe transactions					

10. Please state the importance of accessibility items listed below for online supermarket shopping.

Accessibility Scale in the English Questionnaire

Accessibility	Not Important	Slightly Important	Moderately Important	Important	Very Important
Internet shopping site offers relatively quick connection					
Internet shopping site has a simple URL address					
Internet shopping site is easy to browse					
Internet shopping site reacts immediately to menu clicks					

11. Please state the importance of information variety items listed below for online supermarket shopping.

Information Variety Scale in the English Questionnaire

Information Variety	Not Important	Slightly Important	Moderately Important	Important	Very Important
Internet shopping site provides abundant information regarding product functions and quality					
Internet shopping site offers useful information related to shopping					
Internet shopping site offers active user reviews and evaluations of its product					
Internet shopping site tends to provide features that allow price comparisons with other sites					

12. Please state the importance of information currency items listed below for online supermarket shopping.

Information Currency Scale in the English Questionnaire

Information Currency	Not Important	Slightly Important	Moderately Important	Important	Very Important
Internet shopping site provides the latest product information					
Internet shopping site sends the latest news via e-mail to its customers					
Internet shopping site frequently updates site information					

13. Please state the importance of service quality items listed below for online

supermarket shopping.

Responsiveness Scale in the English Questionnaire

Responsiveness	Not Important	Slightly Important	Moderately Important	Important	Very Important
I think the online supermarket gives prompt service					
I believe the online supermarket is always willing to help customers					
I believe the online supermarket is never too busy to respond to customer requests					

14. Please state the importance of trust items listed below for online supermarket

shopping.

Trust Scale in the English Questionnaire

Trust	Not Important	Slightly Important	Moderately Important	Important	Very Important
I believe the online supermarket is trustworthy					
The online supermarket instils confidence in customers					
Not having experienced a problem with the online supermarket in past purchases					
The Website's image matches that of this retailer					

15. Please state the importance of personalization items listed below for online

supermarket shopping.

Personalization Scale in the English Questionnaire

Personalization	Not Important	Slightly Important	Moderately Important	Important	Very Important
The online supermarket provides the targeting e-mail to customers					
The online supermarket provides the recommendation of books by customers' preferences					
The online supermarket provides customers free personal homepage					

16. Please state the importance of items listed below for online supermarket shopping.

Enjoyment Scale in the English Questionnaire

Enjoyment	Not Important	Slightly Important	Moderately Important	Important	Very Important
I enjoy shopping from XYZ's Internet site for its own sake, not just for the items I may have purchased					
I shop from XYZ's Internet site for the pure enjoyment of it					
The online supermarket helps me to discover products that I've never known					

17. Please state the importance of visual appeal items listed below for online supermarket shopping.

Visual Appeal Scale in the English Questionnaire

Visual Appeal	Not Important	Slightly Important	Moderately Important	Important	Very Important
The way XYZ displays its products is attractive					
XYZ's Internet site is aesthetically appealing					
I like the way XYZ's Internet site looks					

18. Please state the importance of pricing policies listed below for online supermarket shopping.

Monetary Value Scale in the English Questionnaire

Monetary Value	Not Important	Slightly Important	Moderately Important	Important	Very Important
The pricing policies on the Website are fair					
The Website provides me with consistent and accurate pricing policies					
The Website provides me prices same as the market prices					
The pricing policy on the Website are more beneficial for me than that of competitors					
The Website provides me prices cheaper than the market prices					

19. Please state the importance of situations listed below in making online supermarket shopping more advantageous.

Convenience Value Scale in the English Questionnaire

Convenience Value	Not Important	Slightly Important	Moderately Important	Important	Very Important
This Website is easier to use than calling on the phone or visiting in-store for service					
It is easier to use this Website for information/purchasing rather than other channels (e.g. visit the store, phone, or catalogue)					
This Website is an alternative to calling customer service or visiting the retailer					

20. Please state your agreement level for the situations listed below.

Perceived Behavioral Control Scale in the English Questionnaire

Perceived Behavioral Control	Strongly Disagree	Disagree	Moderately Important	Agree	Strongly Agree
Shopping from an online supermarket is a super easy task for me.					
I can easily handle if I ever have an problem while shopping from an online süpermarket.					
I am competent enough to shop from online supermarket.					

21. Which of the situations listed below make you feel closer to shop from online supermarket?

Subjective Norm Scale in the English Questionnaire

Subjective Norm	Not Important	Slightly Important	Moderately Important	Important	Very Important
People's opinion whom I consider trustworthy think that online supermarket shopping is reasonable					
My entourage encourages me to shop from online supermarket					
My entourage who has shopped from online supermarket often state that they are quite pleased with the experience					
Online supermarket shopping is getting more and more popular among my friends					

22. Please state your agreement level for the situations listed below for the near future.

Online Channel Purchase Intention Scale in the English Questionnaire

Online Channel Purchase Intention	Strongly Disagree	Disagree	Moderately Important	Agree	Strongly Agree
I think I will be increasing online supermarket shopping in the future.					
I think online süpermarket shopping will be a vital part of my daily shopping routine in near future.					
I think the product range and quantity I shopped on online süpermarket will get larger in near future.					
I think I will permenantly shift to online süpermarket in the future.					

23. Gender:

Female   _____   Male   _____

24. Age:

< 18   _____   18 – 25   _____

26 – 35   _____   36 – 45   _____

46 – 55   _____   > 55   _____

25. Marital Status:

Married   _____   Single   _____

26. Education:

Primary – Secondary School Graduate   _____

High School Graduate   _____

Undergraduate Student   _____

Undergraduate   _____

Graduate / PhD Student   _____

Graduate / PhD   _____

27. Monthly income:

< 1500 TL	_____	1500 - 2999 TL	_____
3000 - 4999 TL	_____	5000 - 9000 TL	_____
> 9000 TL	_____		

APPENDIX B

QUESTIONNAIRE (TURKISH)

Değerli Katılımcı,

Bu araştırma tüketicilerin sanal ortamda süpermarket alışverişine yaklaşımlarını ölçmek ve değerlendirmek amacıyla yapılmaktadır. Çalışma akademik bir araştırma olup Boğaziçi Üniversitesi Yönetim Bilişim Sistemleri Bölümü Yüksek Lisans Programı öğrencisi Seçkin Karabağ'ın Doç. Dr. Hande Türker danışmanlığında yürüttüğü yüksek lisans tezi kapsamında gerçekleştirilmektedir. Çalışmaya katılabilmek için internet kullanıcısı olmak dışında herhangi bir ön şart yoktur. Ankette kimlik ve iletişim bilgileriniz istenmeyecek ve yanıtlarınız gizli tutulacaktır. Değerli zamanınız ve desteğiniz için çok teşekkür ederiz.

Anketle ilgili soru ve görüşleriniz için Seçkin Karabağ (seckin.karabag@boun.edu.tr) ile iletişime geçebilirsiniz.

Sanal süpermarket; anket boyunca internet üzerinde süpermarket alışverişi yapılabilen web sitesi veya mobil uygulama anlamında kullanılmıştır.

BU ANKETİN HER HAKKI SAKLIDIR. Araştırmacıların izni olmadan tamamı veya bir kısmı kullanılamaz.

1. İş dışı amaçlarla haftada ortalama kaç saat internet kullanırsınız?

< 10   _____   10 – 20   _____   > 20   _____

2. İnternette ortalama alışveriş yapma sıklığınız nedir?

Günde bir defa   _____   Haftada bir defa   _____

Haftada bir kaç defa   _____   Ayda bir kaç defa   _____

Yılda bir kaç defa   _____

3. İnternette bugüne kadar aşağıdaki ürün kategorilerinden hangilerini satın aldınız?

(Birden fazla seçeneği işaretleyebilirsiniz.)

Giyim   _____   Teknoloji   _____

Yemek   _____   Sağlık   _____

Ayakkabı   _____   Süpermarket   _____

Ev Eşyası   _____   Beyaz Eşya   _____

Kitap   _____   Dijital hizmet _____

Hobi ürünleri _____

4. Internette yapmayı düşüneceğiniz en üst alışveriş limiti hangi aralıktadır?

< 100 TL _____   100 - 499 TL _____

500 - 999 TL _____   1000 - 2499 TL _____

2500 - 4999 TL _____   > 5000 TL _____

5. Hiç internet üzerinden süpermarket alışverişi yaptınız mı?

Evet _____   Hayır _____

6. İnternet üzerinden hangi süpermarket ürünlerini satın aldınız? (Birden fazla seçeneği işaretleyebilirsiniz.)

Meyve – Sebze _____   Et – Balık _____

Süt – Kahvaltılık _____   Gıda – Şekerleme _____

İçecek _____   Deterjan – Temizlik _____

Kozmetik _____   Bebek _____

Evcil Hayvan _____   Diğer _____

7. İnternet üzerinden ortalama hangi sıklıkla süpermarket alışverişi yaparsınız?

Yılda birkaç defa   _____   Ayda birkaç defa   _____

Haftada birkaç defa   _____   Haftada bir defa   _____

8. Aşağıda sanal bir süpermarketin web site tasarımında yer verebileceği özellikler listelenmiştir. Bu özelliklerden alışveriş kararınızı etkileme düzeylerini belirtiniz.

Web Site Design Scale in the Turkish Questionnaire

Web Site Tasarımı	Çok Önemsiz	Önemsiz	Karasızım	Önemli	Çok Önemli
Kolay anlaşılır bir menü sisteminin olması					
Ürün veya marka adına göre arama yapılabilmesi					
Ürünler hakkında yorum yapılabilmesi					
Ürün fiyatına göre arama yapılabilmesi					
Müşteri puanına göre arama yapılabilmesi					
İlgimi çekebilecek ürünlerin bana özel olarak önerilmesi					
Üye olmadan sipariş verilebilmesi					
Ürünlerle ilgili detaylı bilgiler içermesi					
Ürünlerle ilgili bilgilendirici görsel ve videolar içermesi					
Nakit, kredi kartı ve kapıda ödeme gibi farklı ödeme türlerinde ödeme yapılabilmesi					
Müşteri soru ve sorunlarını anında yanıtlayan canlı destek ("chat") hizmeti olması					
Farklı teslimat tarihleri/süreleri seçilebilmesi					
Bana özel promosyon ve kampanyalar göstermesi					

9. Aşağıda listelenen güvenlik konularının sanal süpermarket alışverişi için önem düzeyini belirtiniz.

Security Scale in the Turkish Questionnaire

Güvenlik	Çok Önemsiz	Önemsiz	Karasızım	Önemli	Çok Önemli
Kişisel verilerimin (isim, soyisim, iletişim vb.) iyi korunması					
Ödeme adımında kredi kartı bilgilerimin iyi korunması					
Baştan sona güvenli bir alışveriş ortamı sağlanması					

10. Aşağıda listelenen erişebilirlik konularının sanal süpermarket alışverişi için önem düzeyini belirtiniz.

Accessibility Scale in the Turkish Questionnaire

Erişebilirlik	Çok Önemsiz	Önemsiz	Karasızım	Önemli	Çok Önemli
Web site ve uygulamalarının hızlı bir şekilde açılması					
Kolay hatırlanan bir isim ve web adresi olması					
Sayfalar arasında kolayca gezilebiliyor olması					
Sayfaların müşteri tıklamalarına hızlı tepki vermesi					

11. Aşağıda listelenen bilgi çeşitliliği konularının sanal süpermarket alışverişi için önem düzeyini belirtiniz.

Information Variety Scale in the Turkish Questionnaire

Bilgi Çeşitliliği	Çok Önemsiz	Önemsiz	Karasızım	Önemli	Çok Önemli
Ürün özellikleri ve kalitesine dair detaylı bilgilerin bulunması					
Alışverişe dair yönlendirici ipuçları verilmesi					
Ürünlere dair kullanıcı puan ve yorumlarının bulunması					
Fiyatların diğer sanal süpermarketlerle karşılaştırabilme özelliği olması					

12. Aşağıda listelenen bilgi güncelliği konularının sanal süpermarket alışverişi için önem düzeyini belirtiniz.

Information Currency Scale in the Turkish Questionnaire

Bilgi Güncelliği	Çok Önemsiz	Önemsiz	Karasızım	Önemli	Çok Önemli
Ürünlere dair en yeni bilgilerin olması					
Değişiklik ve yenilikleri e-posta ile haber vermesi					
Site ve uygulamalardaki bilgilerin sıklıkla güncellemesi					

13. Aşağıda listelenen hizmet kalitesi konularının sanal süpermarket alışverişi için önem düzeyini belirtiniz.

Responsiveness Scale in the Turkish Questionnaire

Hizmet Kalitesi	Çok Önemsiz	Önemsiz	Karasızım	Önemli	Çok Önemli
Etkin ve hızlı hizmet verilmesi					
Müşteri sorunlarına etkin çözümler üretilmesi					
Müşteri taleplerine hızla karşılık verilmesi					

14. Aşağıda listelenen güvenilirlik konularının sanal süpermarket alışverişi için önem düzeyini belirtiniz.

Trust Scale in the Turkish Questionnaire

Güvenilirlik	Çok Önemsiz	Önemsiz	Karasızım	Önemli	Çok Önemli
Sanal süpermarketin güvenilir bir marka olarak bilinmesi					
Sanal süpermarketin ürünlerine garanti vermesi					
Sanal süpermarkette geçmiş alışverişlerde problem yaşanmamış olması					
Sanal süpermarketin web sitesindeki marka imajının gerçek ortamdaki marka imajı ile uyumlu olması					

15. Aşağıda listelenen kişiselleştirme örneklerinin sanal süpermarket alışverişi için önem düzeyini belirtiniz.

Personalization Scale in the Turkish Questionnaire

Kişiselleştirme	Çok Önemsiz	Önemsiz	Karasızım	Önemli	Çok Önemli
Sanal süpermarketin bana özel ürün ve kampanyalarla ilgili e-posta göndermesi					
Sanal süpermarketin tercihlerime göre ürünler önermesi					
Sanal süpermarketin bana özel, kişisel bir müşteri sayfası göstermesi					

16. Aşağıda listelenen durumların sanal süpermarket alışverişi için önem düzeyini

belirtiniz.

Enjoyment Scale in the Turkish Questionnaire

Eğlence	Çok Önemsiz	Önemsiz	Karasızım	Önemli	Çok Önemli
Sanal süpermarketin eğlenceli uygulamalar içermesi (sürpriz hediyeler, alışveriş puanları kazandırması vb.)					
Sanal süpermarketin keyifli vakit geçirilen bir yer olması					
Daha önce görmediğim/bilmediğim ürünler keşfetmemi sağlaması					

17. Aşağıda listelenen web site görselliği ile ilgili konuların sanal süpermarket

alışverişi için önem düzeyini belirtiniz.

Visual Appeal Scale in the Turkish Questionnaire

Görsel Kalite	Çok Önemsiz	Önemsiz	Karasızım	Önemli	Çok Önemli
Sanal süpermarketin ürünlerini sergileme şeklinin ilgi çekici olması					
Sanal süpermarketin görsel olarak cazip olması					
Sanal süpermarketin web site tasarımının estetik olması					

18. Aşağıda listelenen fiyat politikalarının sanal süpermarket alışverişi için önemini

belirtiniz.

Monetary Value Scale in the Turkish Questionnaire

Fiyat Politikası	Çok Önemsiz	Önemsiz	Karasızım	Önemli	Çok Önemli
Sanal süpermarketin uygun fiyatlı olması					
Sanal süpermarketin ürün fiyatlarında çelişkiler olmaması					
Sanal süpermarket fiyatlarının market/mağaza fiyatlarıyla aynı olması					
Sanal süpermarketin, rakip sanal süpermarketlerden daha uygun fiyatlı olması					
Sanal süpermarketin, market/mağaza fiyatlarından daha ucuz olması					

19. Aşağıdaki durumların sanal süpermarket alışverişini daha avantajlı kılmadaki önem düzeylerini belirtiniz.

Convenience Value Scale in the Turkish Questionnaire

Elverişlilik	Çok Önemsiz	Önemsiz	Karasızım	Önemli	Çok Önemli
Sanal süpermarketten sipariş vermenin diğerlerine (telefon, mağaza ziyareti) göre daha kolay olması					
Sanal süpermarketten bilgi almanın diğerlerine (telefon, mağaza ziyareti) göre daha kolay olması					
Sanal süpermarketten müşteri hizmetlerine ulaşmanın diğerlerine (telefon, mağaza ziyareti) göre daha kolay olması					

20. Aşağıdaki durumların size uygunluk derecesini işaretleyiniz.

Perceived Behavioral Control Scale in the Turkish Questionnaire

Algılanan Davranışsal Kontrol	Kesinlikle Katılmıyorum	Katılmıyorum	Ne Katılıyorum Ne Katılmıyorum	Katılıyorum	Kesinlikle Katılıyorum
Sanal süpermarketten alışveriş kolaylıkla becerebileceğim bir iştir					
Sanal süpermarket alışverişinde sorun yaşarsam kendim kolayca çözebilirim					
Sanal süpermarketten alışveriş yapmak için gerekli yetkinliğe sahibim					

21. Aşağıdaki durumların hangileri sizi sanal süpermarketten alışveriş yapmaya yakın hissettirir?

Subjective Norm Scale in the Turkish Questionnaire

Özel Norm	Çok Önemsiz	Önemsiz	Karasızım	Önemli	Çok Önemli
Fikirlerine güvendiğim kişilerin sanal süpermarket alışverişinin iyi bir fikir olduğunu düşünmesi					
Yakın çevremin sanal süpermarket alışverişi konusunda beni teşvik etmesi					
Sanal süpermarket alışverişi yapanların memnuniyetlerinden bahsetmesi					
Sanal süpermarket alışverişinin hızla popülerleşmesi					

22. Yakın geleceğe dair aşağıdaki durumlar size ne kadar uymaktadır?

Online Channel Purchase Intention Scale in the Turkish Questionnaire

Sanal Süpermarket Alışveriş Eğilimi	Kesinlikle Katılmıyorum	Katılmıyorum	Ne Katılıyorum Ne Katılmıyorum	Katılıyorum	Kesinlikle Katılıoyorum
Sanal süpermarket kullanımımı arttırmayı düşünüyorum					
Sanal süpermarket siparişlerinin market alışverişimin önemli bir kısmını kapsayacağını düşünüyorum					
Sanal süpermarketten aldığım ürün çeşidi ve miktarının artacağını düşünüyorum					
İleride alışverişimi ağırlıklı olarak sanal süpermarketten yapacağımı düşünüyorum					

23. Cinsiyetiniz:

Kadın _____   Erkek _____

24. Yaşınız:

< 18 _____   18 – 25 _____

26 – 35 _____   36 – 45 _____

46 – 55 _____   > 55 _____

25. Medeni durumunuz:

Evli _____   Bekar _____

26. Eğitim durumunuz:

İlk - Orta Öğretim Mezunu   _____   Lise Mezunu   _____

Üniversite Öğrencisi   _____   Üniversite Mezunu   _____

Y. Lisans / Doktora Öğrencisi _____   Y. Lisans / Doktora Mezunu _____

27. Aylık kişisel geliriniz:

< 1500 TL   _____   1500 - 2999 TL   _____

3000 - 4999 TL   _____   5000 - 9000 TL   _____

> 9000 TL   _____

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