This collection of essays is dedicated to reviewing, exploring, and reporting state-of-the-art virtual world and marketing issues in the broadest sense. It provides a readable, non-technical publication which offers a comprehensive presentation of marketing issues, trends, data, and likely developments in the virtual world. Readers will learn about analysis of the virtual ego, services, the concept of ethics, and virtual experiential marketing, among other pressing topics.

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The Virtual World and Marketing
The Virtual World and Marketing

Edited by
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A virtual world (virtual reality), terminologically, refers to an electronic environment that visually mimics physical spaces where people can interact with virtual actors and virtual objects. The virtual world is an artificial environment, a computer-based online community that individuals design and share a custom-built, simulated world. The virtual world is a kind of digital reality—a way of using technology to create environments designed for expressly human interaction. The virtual world realities can be designed precisely for human interaction for very specific reasons to create experiences not otherwise possible. Then it can be said that VW can do and serve you everything that is impossible in the real world.

The virtual world has a vital importance today that it had been mentioned as the “next big thing” over the past few decades. The world is reshaping the effect of virtual developments. The development is seen in not only technological areas, but also in the economic and social environment. First, it was thought that virtual world with the games would create a new economy. The growth of online games was faster than predicted. Many economists thought that virtual economy would not be the real economy; it would be a fake economy besides the real one. Economic interactions in the virtual world have easily matched in the business environment. VW has become widespread in education, health and many industrial application technologies in recent years, and everybody has noticed that virtual world is an important indicator of the real world when they saw how it connected to the real economy.

This book’s main scope is to get deep insights of virtual world and marketing association or synergy. The virtual world is the centre of all kinds of businesses like marketing. Here, the twelve papers are presented to capture a different view of virtual world and its relationship with marketing.

“Analysis of Virtual Ego in The Virtual World” explains virtual ego concept, development, and clarifies the virtual ego and online persona.

“Services in The Virtual World” points out the importance of the virtual services, and clarifies virtual services in different application domains to create future innovations in this area.
“Avatars as The Virtual World’s Personality” defines avatars as virtual world personalities and evaluates personality traits of online shoppers then explains the relationship between avatars and self-concept.

“The Concept of Ethics in Virtual World: How Innocent is Virtual Markets, Or Else, is There Ethical Violations?” points out the ethical problems that consumers face with such as privacy and confidence when doing shopping in the virtual environment.

“Potentials of IoT As a Marketing Tool: Opportunities vs. Challenges” explores the potential implications of IoT in marketing, and clarifies the substantial benefits, as well as risks of IoT for both companies and customers.

“Brand Communication in Social Media Marketing” clarifies the principle of brand communication in the social media marketing and evaluates brand communications in social media platforms.

“Value Co-Creation in Omni-Channel Retailing: Reframing the Service-Dominant Logic Perspective” explains the theoretical understanding of the omni-channel retailing from SDL (Service-dominant logic) via digital technologies.

“Virtual Experiential Marketing in The Virtual World,” gives information about virtual experiential marketing, and explains its dimensions and applications.

“The Development of Virtual Reality Market” includes information on the current structure of the VR market and predictions for its future.

“A New Strategy in Marketing Products and Services: Semantic Web (Web 3.0)” explains the historical developments of the Web, semantic web technology and its relationship with marketing.

“The Dark Side of Online Consumer Behaviour” aims to improve readers’ understanding of the dark side of online consumer behaviour and gives a general overview of online compulsive, impulsive, addictive buying, and online gambling addiction.

“How to Capture the Virtual World’s Online Brand Loyalists” explains what e-commerce businesses should do to create customer loyalty, and points out the ways to attract the online consumers.

We do hope this book will be a contribution to the knowledge of marketing students, researchers and practitioners of marketers and business people at large.

The Editor
CHAPTER ONE

ANALYSIS OF VIRTUAL EGO
IN THE VIRTUAL WORLD

AYSEL ERCİŞ and BAHAR TÜRKM

Introduction

The ever-growing development of information and communication technologies has made the internet an indispensable part of everyday life. The internet, which responds to the need of mankind to access, use and share information, preaches a huge virtual world. Interactive structure allows individuals to self-define and socialize, and all social activities of the individual in the real world are carried to the virtual world. The lack of time-space limitation in the virtual world and the fact that individuals have a certain degree of freedom increase participation. The ever-changing nature of life's flow and the issues that are being addressed are sometimes the elements that make the virtual world attractive (Kim et al., 2012).

These developments form the basis for radical changes in all areas of life. In particular, the way individuals communicate with the environment and the world is changing, and virtual communication channels are at the center of this change. This change is deeply influencing the life styles, habits, socialization processes and relationships of the individual as well as being effective in every area of life (Gross, 2009).

In order to satisfy certain emotions that the individual feels lacking, he or she is heading to the virtual world, searching for new environments in this world where he will not feel lonely and will strengthen his relationships. The important point here is; that individuals can impersonate different identities in a virtual environment/online and outside/offline. The virtual world, which has a very dynamic structure in which individuals indirectly recognize each other, allows for such identity changes. One of the common expectations and concepts that are interpreted as the result of this interaction, which is formed as a result of communication established with other constructs in the current process, is 'ego'. The ego is a concept
Chapter One

that is influenced by changing conditions, reshaping and non-stationary, and defines who the person is. The ego that is rebuilt in the process of socialization of the individual is affected by the position and role of the person in the society (Rhee, 2009).

Since virtual environments offer individuals the opportunity to become content producers; Thanks to new phenomena created such as Virtual reality, virtual social places, and virtual groups, identities can become an extension of the virtual world (Castells, 2007). This situation reveals the concept of 'virtual ego' which has a great influence on the individual. Because the individual spends a lot of time and energy in interacting with people in the virtual environment, even if they are physically alone on front of the computer. In the process of interaction, individuals knowingly or unknowingly create an online identity or virtual environment for themselves (Naseh, 2016). Through this, the individuals who are socialized in the virtual world will be able to live the functions of the ego; beginning to feel, think and imagine (Rhee, 2009). Individuals living in this reality they have created interact with each other; they can shape many things from the virtual world to how they should perceive their surroundings and how to create an identity to be accepted it in the virtual world (Satchell and Foth, 2008). Individuals attempting to influence the perception of themselves are trying to control the perceptions of their identities by developing different tactics of identity presentation (Barsness et al., 2005).

On the other hand, there are criticisms about the virtual world. It is suggested that the virtual world causes massive standardization, weakens emotions and impoverishes the human soul. It is the other criticism that the individual is isolate and alienate. As a result, the virtual world reduces the relationship to the immediate surroundings while providing convenience for the individual by distancing them away (Kumar et al., 2010). Despite all these contradictions, the virtual world and acquisitions in this world can shape the real behavior of individuals. Therefore, these concepts help us to understand the meaning of the world we live in.

Virtual ego involving concepts

Internet users use many online concepts with different meanings. For this reason, as the activities performed in the virtual world become more varied, the meaning and interpretations of these terms also differ. There are some concepts related to the "virtual ego" developing in the virtual world. These concepts facilitate the understanding and interpretation of the
virtual ego (Cartwright, 1994). The first two are 'online identity' and 'online addiction'.

Online identity is information that individuals define for themselves in the virtual environment (Marshall and Tompsett, 2005) or for online privacy (Milne et al., 2004). In the context of a virtual community, online identity is expressed as a social identity that identifies the individual's distinctive features (Benson et al., 2017; Tajfel and Turner, 2004). Apart from these, it is possible to perceive it as a response given to the question of how to define and who he is in communicating in the virtual world (Van Kokswijk, 2008). Therefore, the concept of online identity can be interpreted in different ways depending on the situation and its use.

Individuals can create temporary online identities for themselves in virtual environments, and these identities can emerge on one day and then disappear suddenly (Naseh, 2016). Sometimes it integrates with the online identity that the individual creates and reflects it in his identity outside the virtual environment (Georgieva, 2011). In this way, it is possible to say that individuals can integrate virtual and real life (Van Kokswijk, 2008). Suler (2000) research has shown that identities created in the virtual environment can be reflected differently in individuals' lives. Some of these scenarios are to tell the real life to the people who communicate in the virtual environment, to talk about their virtual life to their friends in real life, to physically meet with friends in virtual environment and to individualize in virtual environment. The versatility of the identity of the creator makes it easy for individuals to change their identities and behaviors in different virtual environments (Hogg et al., 1995, Tyler and Blader, 2003).

If online is addictive; the time spent by the individual in the online environment is the problematic use of online applications by not controlling it in a way that negatively affects daily life or by developing behavioral addiction (Young, 2004). In the case of online addiction, the individual spends more time on the online environment, the time outside the environment loses importance for the individual, and even when this environment is deprived, emotional reactions such as tension, nervousness and restlessness emerge and business, social and family life may deteriorate (Young, 2004; Kuss and Griffiths, 2011).

When talking about online addiction, it should not be forgotten how much time individuals spend in online environments with such identities (Chou et al., 2005). Especially in the age of information where the internet is a necessity, it is possible to define each individual as dependent upon considering the time spent in the virtual world (Whang et al., 2003). Studies show that as time spent on online counseling increases,
dependence increases (Chou et al., 2000). In addition, it is stated that, if there is no concern about online addiction, it may even be therapeutic for individuals who have misformed social networking personalities (Campbell et al., 2006; Hardie and Tee, 2007).

Two other concepts related to virtual ego are ‘Cyber-bullying’ and ‘Cyber Space’. Cyberbullying is a repetitive and time-consuming aggressive action or behavior in individuals or groups of individuals who cannot fully defend themselves in the virtual environment (Smith et al., 2008). In other words, the systematic misuse of the power generated by the use of information and communication technologies (Slonje et al., 2013). The existence of three criteria, namely intention, repetition and power imbalance, is mentioned in the case of the cyberbullying (Slonje et al., 2012; Vandebosch and Van Cleemput, 2008). It is necessary for the individual to exhibit harmful intentions in behaviors displayed in the virtual environment. In other words, although unwanted behavior occurs, if the individual does not intend to hurt others, this cyber is not perceived as bullying. Besides, it is possible that behavior has a repetitive pattern in order to win the character of bullying. It is necessary to carry out and repeat the process of using the written language of a barbarian and to cover a long period of time (Corcoran et al., 2015). Individuals can be exposed to many different people's hardships. For this reason, individuals who spend most of their time in virtual circles today are exposed to a lot of cyberbullying from physical bullying (Ortega et al., 2009; Patchin and Hinduja, 2010; Pieschl et al., 2013). The power imbalance is due to the fact that the source of the typhus is not known exactly who is in the virtual world. Anonymous writings are the simplest of these (Vandebosch and Van Cleemput, 2008; Pieschl et al., 2013).

It is seen that ‘cyber space’ concept, which does not exactly meet the word meaning, is often used together with virtual environment and virtual world expressions (Cartwright, 1994). Cyber-wording, which expresses the form of communication, has also started to be used for the internet-created environment over time (Van Kokswijk, 2007). Even if both the concepts of virtual world and cyber world used for the Internet are accepted as true; it is necessary to distinguish between cyberspace in terms of the way the internet is communicated and cyberspace in terms of the environment it creates (Jones, 1997). Besides, it seems that the concepts of cyber space and virtual world are used instead of each other. But virtual world is almost the same as something, but it comes to the meaning of false. Therefore, the virtual world reflects an area that is very similar to the real world we live in, but not real (Adams, 1997; Crampton, 2010).
Virtual ego, online identity and online persona

Online identity is expressed as the social identity that internet users create in the virtual world (De Cremer and Van Vugt, 1999). Although the concepts of online identity and social identity are used synonymously, online identity is considered as a special kind of social identity in the field of information and communication technologies (Lewis and Fabos, 2005). It is also seen that the social identity theory is used to describe the behavior of users (Davison, 2012). Social identity and online identity can vary in some dimensions within the virtual world. While social identity is concerned with divergence, online identity is concerned with individualization as well as divergence (Grimaldo et al., 2010; Davison, 2012).

Social identity consists of three elements, separation, identification and comparison (Zeugner-Roth et al., 2015). These elements are managed separately and individually. Online identity comes out in three different meanings; Self-conscious awareness of inner perceptions, and self-awareness (Harrison and Thomas, 2009). The fact that online identity has multiple meanings is due to the different identification of each meaning. The first identity means that the individual uses the virtual world as a tool that separates himself from the others. Second, the identity of the individual is unknown to anyone (Belzen, 2010). This identity is also called self (Schwartz et al., 2000). The last identity expresses self-consciousness in the social context, thus covering both the first and second meaning (Abrams and Brown, 1989).

The human soul is conscious and unconscious. The ego defines one's conscious mind structure. Also ego; Expresses a conscious state that contains functions of intuition, sense, thought and feeling and is unknown to others (Rhee, 2009). The concept of ego became popular especially at the beginning of 1990s. However, studies on the concept can be seen in previous researches (Loevinger and Wessler, 1970; Rhee, 2009). The concept of ego, which is a subject of much work nowadays, is usually investigated in connection with impulse control, self-concept, character development, cognitive anxiety and interpersonal interaction (Rhee et al., 2010).

The 'character/persona', as suggested by Carl G. Jung (1953), refers to the character or mask on which the player is cast for this role, in the case of a role played on the basis of the act. At the same time, it describes the attitude of the individual depending on the needs of daily life (Barbour et al., 2014). Persona means reconciliation between the individual and the society as to how a person should appear or should be. In the virtual world,
the individual uses the character to represent the user profile (Toth and Subramaniam, 2003). In other words, the persona is the character or personality that the individual presents to others (Toth et al., 2011).

In the real world, an individual's identity has both ego and persona elements. The persona reflects a phenomenon that mediates between the individual ego and other people. While people define other individuals only through their characters; Persona deals with the ego and character phenomena that reveal the true identity of the individual. It is possible to summarize in Figure 1-1 how the concepts of "virtual ego" and "online persona" have a flow in the virtual world and in the real world.

Figure 1-1. Virtual Ego and Online Persona
Adapted from Rhee (2009)

In order to define online identity besides all these, it is not enough to address only ego and persona concepts. The first reason for this is that it is difficult to handle the concept of ego in the same direction as online identity. Because the individual's offline identity evolves through self-consciousness (Hongladarom, 2011). Also in the real world the ego starts to develop from birth (Hartmann, 1956); the virtual ego finds its beginnings in the process of character / persona creation and develops through the use of your identity. Contrary to all the online identity;
Analysis of Virtual Ego in the Virtual World

Analysis of Virtual Ego in the Virtual World

(Wolfendale, 2007; Nowak and Rauh, 2005), such as the creation of a virtual identity or avatar (a graphical image that someone chooses to represent himself in the virtual environment).

Another reason is that in the real world the character / persona is connected to the relationship between ego and environment; it is much more virtual ego-dependent than online persona (Rhee et al., 2010; Lingam and Aripin, 2016). Because in the real world character / persona is shaped to find a balance between individuality and the expectations of others. So the characters are connected to the real world and real society. On the contrary, if the individual believes that real identity is not realized in the online environment, he may not develop a separate character / persona for the online communities in which he / she is included (Ridings and Gefen, 2004). This shows that online persona may not be connected to online societies. The third reason is that while the individual has a high self-awareness in the real world, his awareness of online identity can be at different levels (Wesch, 2009).

It is possible to express in this light that virtual ego is a special type of true ego and that it is separated from it. The virtual ego exists only in online environment and does not show itself in the real world. Similarly, online persona describes a mask that an individual wears while interacting only with a specific group of people in an online environment.

**Development of virtual ego**

Virtual ego is a comprehensive concept that helps people in the virtual world know about power, development and change, along with online persona. It is seen that the concept of virtual ego has been synthesized in many different disciplines and has been subject to research (Fox and Roberts, 1999; Jones, 2000; Leszczyna, 2005).

Some research shows that the absence of social presence in online communities increases the frequency of hostile interaction behaviors such as malicious submission, incitement, and angry response (Burnett and Buerkle, 2000). The sense of social presence or social existence in short are defined as, the feeling of being with other people in a social environment (McLellan, 1999) the individual feels himself / herself in a social sense (Leh, 2001) or the degree of self-representation in the virtual environment (Garrison et al., 2001).

It is much easier to explain how the virtual ego improves hostile behaviors when there is no sense of social existence (Bystrom et al., 1999; Robertson and Despa, 2002). What is important here is how social perception perceives virtual ego and online person. In the real world, an
individual with a fuzzy ego can have a much stronger virtual ego in the virtual world (Milgram and Colquhoun, 1999). In addition, the virtual ego, which assumes the mediator role of behavior patterns, facilitates the understanding of hostile behaviors and contradictory structures in online communities (Lange, 2005; Lingam and Aripin, 2016).

Another issue is 'avatars' (Nowak and Rauh, 2005), which we have described above as a virtual identity or a graphical image chosen by a person to represent himself in the virtual environment. In the real world, avatar-user linkage is not established by other people and users make high spending to build avatars (Talamo and Ligorio, 2001). At this point, the virtual ego comes into play again. The function of being linked to the reality of the ego balances the individual's inner world with the external reality (Weisberg et al., 2013). If the individual lacks this function of virtual ego, it has a problem in separating reality from the fantasy world (Sharon and Woolley, 2004). Likewise, the individual cannot distinguish between his internal constructs and virtual reality (Sharon and Woolley, 2004; Sadock et al., 2009). However, very few people have to make this distinction. The resemblance of Virtual ego to internal edits makes the individual inclined to create a second person/alter ego in the online environment (Lofgren and Fefferman, 2007).

As can be understood from this information, the 'virtual ego' is formed in the mind of the person. However, as seen above, it is not possible for the "virtual ego" to exist independently of the true ego (Arnaboldi et al., 2012). Furthermore, the virtual ego is a subset of the true ego and is associated with online identity. At the same time, the true ego begins to develop from the birth of the individual and develops within the cognitive process (Georgieva, 2011). The virtual ego, on the other hand, begins with the creation of online identities and is only present within the virtual world. Therefore, the evolution and functions of the virtual ego differ from the true ego (La Gala et al., 2012). In addition, the individual uses it to create real egos, online identities, or avatars (Nowak and Rauh, 2005). The greater the developmental and functional gap between the virtual ego and the reality, the more plausible the virtual ego becomes (Cartwright, 1994; Kokswijk, 2008).

It is not possible to completely separate the real ego with the identity created by virtual ego. Because virtual experiences and virtual behaviors arise from the integration of virtual egos with real ego elements (Kokswijk, 2008). Moreover, the development of virtual egos is supported not only by the trust, autonomy, entrepreneurship and competence possessed in the real world, but also by online trust, online autonomy, online initiative and online capabilities (Shanahan and Pychyl, 2007). The
online elements are developing through the creation of the online identity of the individual. Hence, each individual's own identity of the decomposer online supports the development of a virtual ego (Rhee et al., 2012).

**Conclusion**

While revolutionizing the way people interact, the internet has initially been used for information gathering and dissemination, but nowadays it has become a platform for individuals to express their emotions and thoughts, to set up virtual friend networks. Web-based applications on this platform have been influential in changing the way users perceive the internet and the virtual environment and how they are used (Aladwani and Palvia, 2002).

Until the Internet is a fundamental part of our everyday life, the social structure of our family and colleagues has become a phenomenon provided by the online environment (Feng et al., 2004). Individuals who create new identities in the virtual world have begun to create their own personal space and shape their virtual environments besides searching for the most suitable environment for their creatures. Individuals are using these environments to socialize with others, share their ideas and try to have fun (Keenan and Shiri, 2009).

The main object is to increase the number of members of many applications used in the virtual world (Ciffolilli, 2003). To this end, individuals are trying to provide an environment where they feel they belong. Often, individuals form new identities to align themselves with their membership, manage their profiles with extreme caution, and try to reach other communication groups (De Cremer and Van Vugt, 1999; Ren et al., 2007). Thus, the time individuals spend on the internet and how much they enjoy varies depending on their meeting with the appropriate environment. In this process, the ego offers the possibility to adapt to the outside world in order to continue the life of the individual. The ego is, at the core of human consciousness and psychology, undoubtedly an all-encompassing phenomenon (Hartmann, 1964). However, the ego is characterized by its function and these functions vary from person to person. In this context, individuals who live almost two separate lives offline and online and need to distinguish between offline and online life (Naseh, 2016).

Virtual ego is a comprehensive concept that not only helps to understand this difference but also provides a new perspective to understand and explain online behavior (Kokswijk, 2008). Virtual ego shapes the identity development of individuals in online communities.
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established by interconnected members of lifestyles sharing emotion and similarity. The virtual ego allows the individual to identify himself/herself as a different person from the others, and at the same time helps the individual to establish a connection with the people and groups he/she is communicating with. In addition, by eliminating space, time and physical limitations through the internet, it enables the understanding of the desired identity and experience life and the sharing process.

Another situation that reveals the importance of Virtual ego is that networks created in the online environment help individuals build identity, just as it is in the real world. For this reason, virtual environments have an extremely powerful effect on the individual's virtual ego development. It is also true in the virtual world as well as in the true world that identity theoreticians say that your identity is plural, not singular (Stryker and Burke, 2000). Because the question of who I am in the virtual environment, as well as who I should be must be the answer to the question. In this respect, the behaviors that are important in the development of the virtual ego are relevant to the position and roles of the individual in the online social structure. Hence, if the individual places himself in the virtual community and assumes appropriate role relations with others with that role, it means that various identities are adopted (Wellman et al., 2002). The individual is able to organize his online and offline identities in different ways. That is, the individual can create a balance or hierarchy between the real world and the virtual world. However, due to the role-balance approach, the individual roles should be balanced in a way that equally loyal. If you cannot achieve this, that is, if you cannot establish a balance between real and virtual roles, there will be conflicts between the roles and the individual will be away from the healthy mood (Graham 2000). In summary, the virtual ego reveals that the individual possesses in the flow of interaction in the virtual world.

Given the breadth of the user base in the virtual environment, few individuals with real life behaviors autonomous and more conscientious, yet immature and impulsive in the online environment, can develop positive behaviors by controlling online trends (Benson et al., 2017; Herring et al., 2004).

On the other hand, building a large user network, developing and maintaining this network is the main goal of online businesses and online communities. What is critical is that the same enterprises or communities can be damaged by only a few unfriendly behaviors (Sillence, 2005). For this reason, it is possible to see that virtual aggressions, which are not fully developed yet, are hostile and destructive in the virtual world. In this context, virtual ego and online persona can form the basis for future work.
in order to develop understanding of the dynamics of web based social networks, and to facilitate growth and stability.

It is also useful to identify psychological variables that affect the behavior of online users. But as businesses adopt psychological theories and online strategies, applicability must also be taken into account. Many web investors or developers start their businesses with the assumption that the perceptions, thoughts, and online behavior of individuals are similar to those in the real world. However, if the individual becomes a different person when he/she enters the virtual world, the theories should be changed as well as business strategies. For this reason, the development of the virtual identities of individuals who can think and act differently than they are in the real world is important. Even more important is to understand and interpret the virtual ego that affects this development.

References


CHAPTER TWO

SERVICES IN VIRTUAL WORLD

FAZİLET BURCU CANDAN

Introduction

At the beginning, there are some important concepts about the virtual environment which let people communicate with virtual space and with other users in the space via replicated objects which are called avatars. Those avatars create different kinds of interactions, such as commercial activity, communication, sports, lecturing activity or online class activity and financial or business services in the virtual world. According to Dodson (2009), the virtual world is a computer-based simulated environment populated by many users who present personal avatars (University of Exeter, 2010). With the help of avatars, creation of rich activities in the virtual services world will build sustainable services in the economic environment. Economic interactions in the virtual world are not easily matched in the environment; the economic interactions are the methods of business platforms in the business environment, which are fundamental parts of the virtual world. More recently, evolutions and revolutions in mobile technology and markets and its usage have forced the people to rethink how to create more services in the virtual world.

With the dynamic and innovative nature of virtual services, people easily gain and process big data in the service sector. In particular, the early users and the new users of the virtual services accomplish more tasks and assistances. Regarding Dodson, simultaneously and independently, the exploration of the virtual world, participating in its activities and communicating with others creates more interaction between different parties or entities (Dodson, 2010). Also, assistances in the virtual services come with an individualized advisor avatar, which follows in a similar way to the real world. Virtual world services increase the communication activities between customers and manufacturers. According to Goel and Prokopec, a virtual world for brand awareness and the collection of customer preference information come with the virtual world information
The virtual world concept enormously comes from computers. Modern virtual world services are created in the online environment and emerged mostly independently of the research projects. The services in the virtual environment are related to the level of use of these virtual advisors within the virtual world, considering the users and avatars within the teamwork. According to Khazzanchi and Zigurs, the coordination of virtual project teams must be prepared geographically, temporally, and within cultural boundaries in order to gain ways to communicate effectively (Khazzanchi and Zigurs, 2005). In response to virtual world developments, telecommunication services are no longer the monopoly while providing communication services in the virtual world. Those services providers increase the interactivity of individuals in the society. Accordingly, an idea of technology usage capabilities affects the social and technical method of virtual teams in a way that has the potential to minimize discontinuities impacting virtual project teams (Chudoba, Wynn, Lu & Watson-Manheim, 2005). Without a network of service providers making a universal network of Internet to provide the services of Skype, Google, YouTube, etc., those virtual services, who generally earn revenue based on advertising, have enormously affected the service providing consideration of telecommunication companies. Additionally, in this paper, the discussion about virtual services clarifies the approach in different application domains to create future innovations in this area.

Furthermore, the extension of these virtual world services comes with systematically addressing the issue of providing clear virtual advice with the users and avatars and how these different virtual advisors evaluate the current well-being of the virtual world services. While virtual services hence are evolving rapidly, they are no longer limited to monopoly to a single person or company that integrates email addresses or instant messaging addresses etc. According to Goel and Prokopec, with the creation of the rich and vivid social interactions within the virtual world, virtual world business organizations grow more and more (Goel and Prokopec, 2009). The invention of social media and social networks such as Facebook, Twitter, and Instagram etc. are important factors of knowledge transformation between persons and parties. Along with fast communication in those social media services, content services of the virtual world have become more important, and their creators are getting more responses from the users or evaluators.

Consequently, the current status evaluation of the virtual world services has provided highly profitable business within the past 10 years. Internet banking and online shopping etc. services have been converted to mobile services in the virtual services world, but there will need to be
more information in the future about virtual services. According to Dawson, there are few existing studies systematically addressing the issue of providing virtual advisors in virtual world services (Dawson, 2010). Due to the novelty of the virtual services, practitioners who have been setting up their virtual spaces have fewer spaces while designing new spaces for their new virtual services, so their unclear interaction creates lower interaction between the user and the avatar; therefore, better practices in various application domains have to be created in the future.

**Literature Review**

**The history of the virtual world**

The first virtual world service is the Internet, which came with chatrooms, instant messaging services and email services. The world telecommunication service has substantial experience of virtual world service design and development. The world telecommunication concept was based on the early generation of service providers in the 1970s. During the 1970s, the telecommunication industry was using the public switched telephone network (PSTN), which had a substantial effect on the telecommunication service sector's design and development. In the 1980s, the industry was working to decrease the costs of communication. In order to decrease the costs of communication, the Intelligent Network (IN) was developed. In the mid 1980s, cell phones became widely available, and the services became virtual in the telecommunication industry. The history of cell phones covers mobile communication devices which connect wirelessly to the public switched telephone network. While the transmission of speech by radio has a long history, the first models that were wireless, mobile, and also capable of connecting to the standard telephone network are much more recently. The first such devices were barely portable compared to today's compact hand-held devices, and their use was clumsy. During the development time of cell phones, the focus turned to developing more portable technology and better interconnections systems; as such, enormous changes have taken place in both the networking of wireless communication and the prevalence of its use. With smartphones, services in the virtual world are becoming common globally, and a growing proportion of Internet access is now done via mobile broadband. After smart phones became widely available to use, virtual world services have been more mobile than ever before; in today’s world, consumers easily access different varieties of virtual services in the world.
Virtualization of services in the world

Service virtualization is a software developing method, which is a system of computer language driven by computer-based applications architecture. Kaplan and Haenlein (2009) say that the virtual world is a replicated platform which creates interactive environments between avatars and actual users; as a result, avatars create dependent components. With the behaviour of the dependent components "virtualized," testing and development have been examined without accessing the actual live components. The service virtualization method is followed by vendors, industry analysts, and sector publications as being different than mocking. Service virtualization acquires the behaviour of software components to remove dependency constraints on development and testing teams. Those constraints occur in a complex system of interdependent environments when a component is connected to the computer adaptive application. According to Curtis, the virtual world is not just goal-oriented; it does not have beginning or end, no score and no notion of gaining a final purpose or success (Curtis, 1996). This cycle will continue for a long time since technology and science are major factors of developments in societies.

Service virtualization emulates only the behaviour of the specific dependent parts that developers or virtual service testers need to control and self-check in order to successfully complete their end-to-end transactions. Rather than virtualizing entire systems, service virtualizes only specific slices of dependent behaviour critical to the execution of development and testing tasks. This provides just enough application logic so that the developers or testers get what they need without having to wait for the actual service to be completed and readily available. People have had the opportunity to do some activities without losing extra time, and their body power or effort. According to Kaplan and Haenlein (2009), the virtual world environment allows users unlimited range of presentation with the usage of their avatars. For example, instead of using an accountant, a virtualized network avatar helps to create a very large database, perform all related test data combination management, as well as set up the database for every test session; the preparer watches how the virtual service application interacts with the database, and then a counterpart emulates the related database behaviour.

- Some services in the virtual world:
  - Internet banking/ Mobile banking
  - Online information accessing
  - Online service obtaining
- Online/ Mobile Shopping
- Online commerce
- Newspapers, journals etc.
- Advertising

Virtual world services are massively computer-based simulated environments which are populated by many users who create a personal avatar, and simultaneously and independently invent the virtual world, participate in its activities and communicate with other parties. Avatars are textual in the virtual world services; two or three-dimensional graphical representations or live video avatars with auditory and touch sensations are the other kind of virtual world. Generally, virtual worlds allow for more users while making transactions in the environment. The user accesses a computer-simulated world which presents the conceptual framework to the user, who in turn manipulates things of the modeled virtual world and creates an experience with a degree of presence. These types of modeled worlds and their rules may combine knowledge from different kinds of things.

**Economy in the services of the virtual world**

Robinson, E.H. (2014) says that money is the one of the most essential parts of services in the virtual world; maintenance of effective currency in the virtual world service includes Bitcoin, virtual gold, or virtual money. Therefore, the real economy is effectively controlled by computers. The virtual economy is the emergent part of the interaction between parties in the virtual world. While the designers have a perfect deal of control over the economy by the controlled mechanics of trade, it is nonetheless the actions of players that explain and show the economic conditions of the virtual world. Rothbard (2008, 1983) says that an ideal potential monetary good should already be in ‘very large use for its own sake’ and in a strong demand (Robinson, E.H. (2014). Widespread use of virtual services in the economy increases the reliability of statistical calculations as a result of the reliable calculations that players of the real economy take under control of the scarcity of real and virtual resources such as time or currency etc. The parties have a limited time in the virtual world, as in the real world, which they must divide between tasks such as collecting resources, practicing trade skills, or engaging in less productive fun play. Virtualizing the services in the monetary world becomes highly deployable in the economical time-controlling infrastructure. According to Robinson, E.H. (2014), the digital ‘gold’ aims to serve as a strong money
currency by the world’s designers. The options they make in their interactions with the virtual world, along with the mechanics of trade and wealth acquisition, dictate the relative values of items in the economy. The virtual world economy is typically controlled by in-game needs such as equipment, food, or trade goods. Virtual economies like that of Second Life, however, are almost entirely player-produced with very little link to in-game needs. While the relevance of virtual world economics to physical world economics has been questioned, it has been shown that the users of virtual worlds respond to economic stimuli (such as the law of supply and demand) in the same way that people do in the physical world. The value of objects in the virtual economy is usually related to their usefulness and the difficulty of obtaining them.

Virtual services in the medical industry

People who are disabled or chronically invalided people of any age benefit enormously from experiencing the mental and emotional freedom gained by temporarily leaving their disabilities behind. Virtual services in the medical industry are very beneficial, creating access to healthy activities such as walking, running, dancing, sailing, fishing, swimming, surfing, flying, skiing, gardening, exploring and other physical activities which their illnesses or disabilities prevent them from doing in real life. They may also be able to socialize, form friendships and relationships much more easily and avoid the stigma and other obstacles which would normally be attached to their disabilities. This is much more constructive, emotionally satisfying and mentally fulfilling than passive pastimes such as watching TV, playing computer games, reading or participating in more conventional types of internet use.

Players of virtual services world

Services in the virtual worlds are a way that players become more familiar and comfortable with actions they may in real-life feel reluctant or embarrassed to do. For example, in World of Warcraft, for game players in the virtual world the ability to choose when and how to "emote" is quite simply controlled by the player. Emotions are quite simply felt on a simple computer screen by playing a game or listening to music or watching a movie. A familiarization with said or similar "emotes" or social skills (such as encouragement, gratitude, problem-solving, and even kissing) in the virtual world via avatar makes the assimilation to similar forms of expression, socialization, interaction in real life smoother. Interaction with
humans through avatars in the virtual world has the potential to seriously expand the mechanics of one's interaction with real-life interactions.

**Virtual services in business world**

Goel and Prokopec say that the virtual world creates fast transactions because the economy benefits from the virtual channels of the business world over the physical channels derived from transaction cost economics (Goel and Prokopec, 2006). Low cost means and high profitability creates an extension of business activities and investments in the business world. Virtual services in the business world allow companies to create an extension of trusted business activities and business-related service expectations. Trust is an important factor in the virtual world; customers need to have better understanding of the concept and increase the safety of virtual commerce. According to Gefen and Straub, trust is a way to simplify the advisory process and help the users to gain a better understanding of the advice and the process of the services (Gefen and Straub, 2003; Komiak and Benbasat 2006). Commercialization of the virtual business world has created more opportunities in additional business applications, such as e-commerce, e-banking and e-trade. As real businesses compete in the real world, they also compete in the virtual world. As there has been an increase in the buying and selling of products via online shopping (e-commerce), this twinned with the rise in the popularity of the Internet, has encouraged businesses to adjust to accommodate the new marketing activities in the virtual business world. For example, tourism is a pioneering business in business-to-consumer commerce. According to Berger, when it is compared to regular online-travel websites, virtual-world travel advisory systems have more potential to obtain a better sense of social interaction with the travel agent (Berger et al. 2007). Virtual services increase the volume of tourism and the payment transactions in the sector.

Many organizations, companies and people now integrate virtual worlds as a new form of advertising. There are many benefits to using these ways of commercialization. An example of this would be “eBay” creating an online shopping business within Second Life. This allows the users to browse the latest innovative and highly advanced products. Buyers do not actually purchase a product but having these “virtual stores” is a way of accessing a different climate and customer demographic. The use of advertising within the virtual world is a relatively new idea and also, there are not too many competitors; as such, this idea has more business opportunities because virtual worlds are a relatively new
technology. With the introduction of the prospect of commercial success within a virtual world, companies have an opportunity to reduce cost and time constraints by keeping this "in-house." An obvious advantage is that it will reduce any costs and restrictions that could come into play in the real world.

Using virtual worlds gives companies the opportunity to feel customer reaction and receive simultaneous feedback. Feedback is crucial to the development of a project as it will inform the creators of exactly what users want. Using virtual worlds as a tool allows companies to test user reaction and give them feedback on products. This is beneficial as it will give the companies an insight as to what the market and customers want from new products, which gives them a competitive edge.

Another way of using virtual worlds in business is where parties of business activities create a high value gathering place. Business development runs very fast and becomes stronger than the traditional way of business process. Many businesses are now involved in business-to-business (B2B) commercial activity and create a specific area within a virtual world to carry out their business. Along with using specific areas and strategies, within this space of virtual business world, all relevant information is held and all of this relevant information becomes easy to access in the future. This is very helpful for many players. Players conduct business with companies on the other side of the world, so there are no geographical limitations; it increases company productivity and accessibility to the business world on any side of the world. Knowing that there is an area where help is on hand aids the employees. Services in the virtual world are a place where people go and seek help, exchange new ideas or advertise a new product and create any idea from their imagination between business parties. Identification of additional business applications, including simulations, collaboration, role-playing, mentoring, and data-visualization come with the advantages of virtual services in business world.

According to the trade media company Virtual Worlds Management, commercial investments in the "virtual worlds" sector were in excess of $425 million in the fourth quarter of 2007, and totalled $184 million in the first quarter of 2008. However, the selection process for defining a "virtual worlds" company in this context has been challenged by one industry blog.

A number of virtual worlds have incorporated systems for sale of goods through virtual interfaces and using virtual currencies, for example, the increasing value of the previous years is Bit Coin. Also, transferring purchasing values via online credit card transactions or electronic fund transfers or wire transfers are crucial parts of virtual services in the
business world. Currency transfers of in-world credits typically are not bound by laws governing commerce. Such transactions may lack the oversight and protections associated with real-world commerce, whereas there might be potential for fraudulent transactions. One example is that of fraudulent use of credit card by hackers for storing private financial information of users or parties of the virtual business transaction users.

Providers of online virtual areas have more than one way to govern virtual business environments. Second Life for instance was designed with the expectation being on the residents to establish their own community rules for appropriate behaviour whereas some virtual world services enforce clear rules for behaviour that they put in their terms and conditions. In some instances, virtual services don’t need to create rules of conduct because actions have already been created and their ways of conduct have to be known before. However, if needed to, rule breakers might be punished with fines being payable through their virtual account ownership.

The profitable services in the virtual world

By the end of 2017, business gurus have compiled the four most profitable jobs of the virtual world for consumers and producers and made it ready to present to you. Every new year, as it is known, virtual services have a new hope and a new beginning. Some approach the rhetoric of the New Year with memorized attitudes such as "dry noise, only a single number changing." However, there is something important we do not know. This is a change in the world of business, especially every year. As with the invention of mobile application marketing, the winds of change do not blow by the general line; there will be some changes in every new year. Numbers, statistics, both in the state and in the private sector, decline and change. In its sub-text, radical changes depending on the currency, vision-related changes and the re-shaping of the supply of needs play an important role. Just like an individual, we think of the business opportunities and the internal dynamics of the companies that provide us with the field. In the new year, one feels self-conscious and may eat less and lose weight; changing as a result of such influences is not just a change in figure but a change in vision. Just like this, companies make such decisions. Decisions taken by companies also change the broad base scale of each new year because companies are headed by group of managers, assistant managers, consultants, or in short, people. The new year decisions that change from man to man change the main elements in the market with the decisions of the companies.
New opportunities in virtual world services

Opening a service website
There are two ways to open a service website in the virtual world. The first question is the only question to start and end in the virtual world of direct information provision. We also call it a kind of consulting service to virtual hosting sites. Answering one of the questions on a given subject, giving expertise or information in an area where it is necessary, is the realization of this answer in a virtual platform. Another service concept is services that reach the real world from the direct virtual world. For example, to find a way to deal with a company that cleans the house from such an internet site, to communicate through that site, and to handle money transactions in the virtual world again.

Opening a ticket sales website
People are simply disgusted with the concept of ticket sales. In particular, people want to get air tickets in a way that they can purchase and cancel them without effort, perhaps while smoking a cigarette. As a matter of fact, ticket sales sites provide this comfort. Opening ticket sales sites in all areas of transportation is profitable. Customers, passengers and buyers will be happy as they buy the tickets they want at cheaper prices in the places they want. You do not have to make sales. During the most profitable jobs in 2017, the second most important idea is getting a ticket sales site.

Opening a movie website
People are constantly active, looking for a mass to spend hours on their site for days and days! So, one option is to open a series site. It is possible to earn thousands of pounds a month under one's own roof without leaving the series fanatics in the world unattended. If one has high-quality still images, it is good to archive them in this way. To earn money in a different way in 2017, opening a movie series website is profitable for entrepreneurs.

Opening a single product e-commerce site
Opening a single-product e-commerce site that is secure and receptive to a single product will be another of the rising virtual world influences in 2017. While people's store perceptions and shopping habits are no longer
changing completely, opening an e-commerce site will be smart business for both entrepreneur and buyers, then 3rd parties.

**Conclusion**

Faced with the complexity of virtual services, the industry is gradually developing and new concepts are being added to master this complexity. In the 1990s, there was not too much complexity in virtual world services due to low knowledge of creation and usage and the slow-changing life span of knowledge. A view of virtual services representation is based on the profitability and accessibility of knowledge. Service virtualization in the virtual services world is very important because such parties occur in complex, interdependent environments when a component connected to the application under test is not easily completed, still evolving, controlled by a third-party or partner available for testing only in limited capacity or at inconvenient times, difficult to provide or configure in a test environment or needed for simultaneous access by different teams with varied test data setup and other requirements.

**References**


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CHAPTER THREE

AVATARS AS THE VIRTUAL WORLD’S PERSONALITY

SEVTAP ÜNAL, TEVFİK DALGİÇ
AND EZGİ AKAR

Introduction

The virtual worlds have gained vital importance in the economic, social, and behavioral sciences (Bainbridge, 2007). Terminologically, a virtual world refers to an electronic environment that visually mimics physical spaces where people can interact with virtual actors and virtual objects (Bainbridge, 2007). Nowadays, many people communicate with each other simultaneously within virtual worlds to do business, socialize or have fun. Sun (2016) mentions that virtual reality had been shown as the “next big thing” over the past few decades. There are currently 685 virtual reality start-ups having an average value of $4.5 million according to the AngelList (a start-up tracking site).

The tech M&A advisory firm Digi-Capital claims that the virtual world market will be worth $30 billion by 2020. KZero firm has also declared that 171 million people would be using virtual worlds and 28 million inhabitants would be willing to pay for virtual world hardware and software by 2018 across the world. Additionally, they have estimated that there will be 4.8 million early adopters of virtual worlds in this year. In parallel with these advancements, virtual worlds have grown rapidly in the business community, and they have become a part of the economic system by providing valuable prospects for marketers (Bloomfield, 2009).

In virtual worlds, people create their avatars to represent themselves by deciding on their shapes and forms. An avatar can be called a “virtual ego” and can be defined as “user embodiment in a collaborative virtual environment” (Virtual Reality Society). Consumers also use avatars. Although it is an old phenomenon where consumers tend to identify
themselves with some objects, using avatars is a new concept. According to Aaker (1997; 1999), consumers connect with brands that represent human-like anthropomorphizing, personification, or user imagery. In this sense, consumers use avatars to enhance their real-self and gain an ideal self-concept in their purchasing behavior (Peterson, 2006: 80).

This chapter evaluates personality traits of online shoppers, avatars as a virtual world personality, and the relationship between avatars and self-concept.

**Personality traits of online shoppers**

Personality identifies us in public. It is an indicator that differentiates us from others. For example, we say that “he is outgoing and kind” or “she is determined” when talking about someone. It shows that we utilize the personality of a person to describe him or her. Because personality consists of cognitions (thoughts), affects (emotions), and behaviours, it gives a direction and a form to the person’s life.

Personality is the “set of emotional qualities, ways of behaving, that makes a person different from other people” according to Merriam dictionary. The American Psychological Association defines it as “individual differences in characteristic patterns of thinking, feeling and behaving” (APA). Furthermore, Allport (1961: 28), an American psychologist, defines the personality as “a dynamic organization, inside the person, of psychophysical systems that create the person’s characteristic patterns of behaviour, thoughts, and feelings.”

In the late of 1990s, researchers pointed out that online consumer personality traits have been an important determinant for marketers. However, it was ignored by both marketers and academics until the late 90s. Peterson, Balasubramanian, and Bronenberg (1997) analyze the online consumers’ personality traits and their roles in consumers’ online purchase intention, and they state that consideration of offline and online consumers in the same markets is a big failure. In a similar study, Hui, Tan, and Goh (2006) investigate participants’ motives, personality traits, and information disclosure behaviour and their relationships during an online transaction. The personality traits, related online motives, and their relationships (negative or positive) are shown in Table 3-1. The findings show that there is a relationship between motives and personality traits, and consumers who have those personality traits are more motivated to disclosure information on the Internet (Hui et al., 2006: 415-441).
### Table 3-1. Online Consumers’ Personality Traits and Online Motives

<table>
<thead>
<tr>
<th>Personality Traits</th>
<th>Motives Towards Online Transaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity</td>
<td>Time-saving (+)</td>
</tr>
<tr>
<td>Modesty</td>
<td>Self-enhancement (-)</td>
</tr>
<tr>
<td>Friendliness</td>
<td>Social adjustment (+)</td>
</tr>
<tr>
<td>Cheerfulness</td>
<td>Pleasure (+)</td>
</tr>
<tr>
<td>Adventurousness</td>
<td>Novelty (+)</td>
</tr>
<tr>
<td>Sympathy</td>
<td>Altruism (+)</td>
</tr>
</tbody>
</table>

Adapted from Hui et al. (2006: 430)

### Self-concept in the virtual world

The concept of the self, which indicates how an individual perceives himself or herself, is accepted as a more explanatory trait than as a personality trait. Therefore, self-concept is a useful tool for marketers and researchers by providing them with consumer insights and psychological consumer behavior understanding and allowing them to investigate relationships and interactions between consumers and purchased products, and making the association of an individual’s buying behavior with his or her self-concept meaningful (Lee, 2002).

The self indicates that a person evaluates himself or herself as an object based on his or her attitudes, feelings, and perceptions (Grubb & Grathwohl, 1967). In the literature, there are various definitions of the self. Rosenberg (1989: 34) defines it as “the totality of the individual’s thoughts and feelings concerning (the) self as an object.” Schreuder (2014: 167) says that the self-concept is the answer to the question of “Who am I?” and he defines it as the individual’s view of himself or herself considering such aspects as his or her performances, preferences, success, gender roles, possessions (tangible-nontangible), and identity. Moreover, William James, who was the pioneer focusing on the self-concept in 1890, defines the self as “the sum of the things like family, home, clothes, friends, dignity, bank accounts and business that one can say that these belong to me” (Todd, 2001).

Previous studies consider the actual self as only one dimensional (Grubb & Stern, 1971; Grubb & Hupp, 1968; Birdwell, 1968). On the other hand, William James states that the self is a multidimensional concept consisting of dimensions such as a “material self,” “social self,” and “spiritual self” (Higgins, 1987). After that, this point of view inspires Markus and Nurius (1986), and they develop the “possible-self theory.” The possible self-theory consists of some concepts including what the
individual wants to be, what he or she is expected to be, and what he or she is afraid to be. The multidimensional structure of the self points out that it is not a fixed or static concept, but it has a constantly changing structure. According to the literature, we can conclude that the self-concept mainly consists of four dimensions: (1) the actual self-concept defines how an individual sees himself/herself; (2) the ideal self-concept expresses how an individual wants to see himself/herself; (3) the social self-concept explains how an individual is seen by others; and (4) the ideal self-concept outlines how an individual wants to be perceived by others (Kressmann et al., 2006). Afterwards, researchers accept the view that a single individual may have multiple selves, and they conduct studies within this context (e.g. Landon, 1974; Gentry & Doering, 1979; Hong & Zinkhan, 1995; Ericksen & Sirgy, 1992; Madrigal, 1995; Graeff, 1996; Sirgy & Su, 2000; Ekinci & Riley, 2003; Kressmann et al., 2006; Beerli et al., 2007; Kwak & Kang, 2009; Hosany & Martin, 2012).

The multidimensional and changing self also affects the behaviors of consumers (Mittal, 2006). Levy (1959) states that consumers are affected by the purchased products or brands regarding their functional and symbolic benefits. Although different approaches have emerged to study the relationship between the self-concept and consumers’ behaviors, the most prominent one is the cognitive approach (Grubb & Grathwohl, 1967; Sirgy, 1982). In this approach, researchers focus on how individuals choose and interpret the information that they obtain while they are comparing themselves with the external environment (Sirgy & Samli, 1985). In a study, it is stated that the individuals consume symbolically to protect and improve their selves. This type of individual wants the products and brands to be congruent with their selves and to be accepted as such by the external environment. In this way, individuals both improve and protect their selves (Grubb & Grathwohl, 1967; Grubb & Hupp, 1968; Grubb & Stern, 1971).

The self-image congruence model is developed by Sirgy (1982), and Sirgy and Samli (1985). They combine the product or brand image and self-image. In this model, the aim is to explain the degree of congruence between the self-concept and product concepts. Accordingly, the higher the level of congruence, the higher would be the intention to purchase. Many studies have tested this model. For example, Landon (1974) suggests that the relationship between the self-concept and product preferences may vary depending on different forms of the self (actual, ideal) and product categories. Accordingly, consumers may prefer products which do not reveal their real identities. Therefore, there might not be a relationship between the actual self and product preferences.
However, consumers can reflect their ideal selves through product preferences to achieve a desired life. In this case, a positive relationship may be revealed between the ideal self and product preferences. In this context, Malhotra (1988) suggests that the actual and ideal selves play distinct roles in the product and brand preferences. As a conclusion, the researcher concludes that the ideal self is very effective as it concerns consumers’ house preferences which are the symbol of their status. Similarly, researchers point out that the self-image congruence is very effective as it concerns the store image (Sirgy & Samli, 1985; Barnes, Mattsson, 2008), brand preferences, brand attitude, purchasing intention (Graeff, 1996), and satisfaction of holiday destinations (Ekinci & Riley, 2003).

Dolich (1969) segments the products into two groups as social and private consumption products. The social consumption products symbolize an individual's status (e.g., cigarettes), while the private consumption products are not related to any symbol of the status (e.g., shampoo). However, in this study, the researcher suggests that the actual-self and ideal-self do not have any effect on the product or brand preferences. Similarly, Gentry and Doering (1979), Shank and Langmeyer (1994), and Madrigal (1995) claim that there is not a relationship or there is a fragile (weak) relationship between the self-image and product or brand image. Malhotra (1988) suggests that the reason can arise from some errors in the determination of the effects of product or brand with personality preferences as well as from some mistakes that have been made in the methodology or measurement development. For example, some of the studies use standard personality scales when comparing the self-concept and product concepts. However, most of these scales are designed for activities other than consumption. Also, the product preferences might not be suitable to define the self-preferences. For example, a restaurant can be a “large” place, but this is not a very accurate expression to describe an individual’s self. Therefore, to make an evaluation, the self should not be described based on the product; instead, the product should be described based on the self (Ekinci & Riley, 2003).

Virtual world’s avatars

An avatar is an electronic image that represents the computer user (Merriam-Webster.com). It refers to an Internet user’s personality connected with the screen name or a handle. Avatar images are “picons” (personal icons) which are objects representing the user. Moreover, avatars are used as an endorser or as an interaction tool in virtual communities.
They are useful resources for marketers because they imply direct and voluntary self-disclosure of information by online consumers (Wang et al., 2007; Belisle & Bodur 2010: 742).

The use of the term avatar for the on-screen representation was expressed in 1985 by Richard Garriott for the computer game known as Ultima IV: Quest of the Avatar for the Apple II. The idea was that the players could choose their characters to be their earth self-manifested into the virtual world. He drew inspiration from the Hindu word for an avatar that identified as the human or animal form of a Hindu God on earth and applied it to a player manifesting in the game. In Hinduism, the descent of a deity to the Earth in a physical form is called an avatar (Lin & Wang, 2014: 213). Today a name, voice, a photo, an animation or any representation that symbolizes a user’s identity is considered to be a user’s avatar.

In the following years, Second Life was launched in 2003 by Linden Research. In these years, it was pioneering virtual worlds. Millions of people enjoyed it, and billions of dollars were spent among users within its economy (Lindenlab). In Second Life, people start to live a new life they have created as a representation of themselves. In Second Life, individuals do not only create avatars. They also have a bank account in Wells Fargo so, they can buy or sell products by using their currency of the game (Linden dollars). There were 44,474,726 Second Life residents on January 4th, 2016 (Daniel Voyager’s Blog; Korolov, 2015; Gadalla, Abosag & Keeling, 2016).
After these developments, topics about avatars have also taken the attention of the academic world. Some studies investigate the avatar creation process including people’s real-self changing to online self-consciousness (Brunskill, 2014; 2016; Aboujaoude, 2011; Suler, 2000; Lohle & Terrell, 2014; Hooi & Cho, 2013). They reveal that some factors influence identity management in cyber spaces and these factors can be a guide for avatar creation processes (see Table 3-2).

**Table 3-2. Factors that have Effect on Online Personality**

<table>
<thead>
<tr>
<th>Factor that influences online identity creation</th>
<th>Factors traits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level of dissociation or integration</td>
<td>A person’s identity is multifaceted so that it may be dissociated, enhanced or integrated online.</td>
</tr>
<tr>
<td>Positive and negative valence/demeanor of users</td>
<td>Individuals’ negative aspects can be acted out or worked through in cyberspace.</td>
</tr>
<tr>
<td>Fantasy or reality level of users</td>
<td>This implies that a person’s online identity is real as in real life or it can be hidden or imaginary.</td>
</tr>
<tr>
<td>Consciousness awareness and control level of user</td>
<td>Users differ from each other when they seek consciousness or emotions in their online attitudes.</td>
</tr>
<tr>
<td>The social media traits</td>
<td>Each social media channel has different personality traits.</td>
</tr>
</tbody>
</table>

Adapted from Suler (2002: 455-460)

Across the psychological standpoint, psychologists mostly say that the differences between online and offline personalities can cause some mental problems. On the other hand, Brunskill (2014) as a psychiatric, claims that creating human avatars helps people select their best aspects to present themselves to others. Several researchers point out that a human avatar effectively contributes to filling the gap between an individual’s online and offline identities. The online community has also played a major role in a person's social identity creation. Porter (2004) investigates characteristics of virtual communities and identifies them as the Five Ps consisting of purpose, place, platform, population, and profit model (see Table 3-2).

Figure 2 depicts how a human avatar causes a shift in an individual’s identity. According to the process, when a person is in the online world, he
or she is exposed to the disinhibiting effect of the online world. These effects are anonymity, invisibility, the asynchronous communication, the induced dissociation, and the perceived equality of all users – because of minimizing of legitimate authority (Brunskill, 2016: 397). Furthermore, people get in a state of disinhibited and dissociated personhood, and this state is the basis for the development of a distinct online personality.

Table 3-3. 5 P’s of Virtual Communities

<table>
<thead>
<tr>
<th>Five Ps</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purpose</td>
<td>It refers to the specific focus of discourse, the content of communication among community members.</td>
</tr>
<tr>
<td>Place</td>
<td>This refers to whether interactions occurs completely virtually or partially virtually.</td>
</tr>
<tr>
<td>Platform</td>
<td>This refers to the technical design of interaction in the virtual community, whether the communication is synchronous, asynchronous or both.</td>
</tr>
<tr>
<td>Population</td>
<td>This refers to both the density of community members and the pattern of social interaction among them.</td>
</tr>
<tr>
<td>Profit Model</td>
<td>This refers to whether a community creates tangible economic value or not.</td>
</tr>
</tbody>
</table>

Adapted from Porter (2004)

It is a fact that an individual prefers a secret identity or real-life identity based on media types, and he or she prefers to reflect his or her negative aspects onto his or her cyber personality. After that, five psychological forces (Grandiosity, Narcissism, Darkness, Regression, and Impulsivity) compete to influence online personality. At the stage of liberating, online personality presence creates a cumulative effect on online traits and an individual’s characteristics. In online activities, personal identity then shifts towards to online personality (Brunskill, 2013, 2014).
Moreover, social avatars have been investigated in an interactive way like a player-avatar relationship (Banks, 2015). It revealed that in human-social relationships, three characteristics play a key role: self-differentiation, emotional intimacy, and variations in the perceived agency. Self-differentiation refers to an individual’s self-representation. Although avatar and user have a different self in some relationships, they can integrate like “we” in other relationships. Emotional intimacy emerges from the connection between players and avatars. If the interaction in between avatar and user has been lasting for a long time, this relationship provides users with emotional benefits. The language of the game also allows rich communication and can lead to a strong emotional bond between users and avatars. Lastly, perceived agency refers to the consolidation of users and avatars. For example, if a user takes the moral responsibility of his or her decisions on avatars, users perceive integrity between the self and avatar (Banakon, Anagnostou, 2009). Avatars are classified in Table 3-4.
### Table 3-4. Classification of Avatars

<table>
<thead>
<tr>
<th>Highly Unsocial person-avatar relationship</th>
<th>Low self-differentiation</th>
<th>Low Intimacy/High Player Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avatar-as-Object</td>
<td>Competition and War Games</td>
<td></td>
</tr>
<tr>
<td>Avatar-as-Me</td>
<td>Practice plays or social plays</td>
<td></td>
</tr>
<tr>
<td>Avatar-as-Symbiote</td>
<td>Identity creation</td>
<td></td>
</tr>
<tr>
<td>Avatar-as-Social others</td>
<td>Escape</td>
<td></td>
</tr>
<tr>
<td>Highly Unsocial person-avatar relationship</td>
<td>High self-differentiation</td>
<td>High Intimacy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Low Player Agency</td>
</tr>
</tbody>
</table>

Adapted from Banks (2015)

An avatar, a computer-generated visual representation of a user, can be customized to fit any desired appearance (Holzwarth, Janiszewski & Neumann, 2006; Wang et al., 2007; Jin & Bolebruch 2009). In this sense, companies prefer using avatars as endorsers to serve an interactive shopping experience to their consumers. For example, due to the popularity of Second Life, real-world companies (e.g., Adidas, American Apparel, Dell, Disney, IBM, Nike, MTV, Reuters, and Toyota) have started to appear in this virtual world (Belisle & Bodur 2010: 742). They create avatars to increase interactions among consumers, provide their consumers with an entertainment value, increase the persuasiveness of online sales channels, and ensure more personalized services. For example, Louis Vuitton has used a Final Fantasy character (avatar) in their ads (see Figure 3). Now, more images of Final Fantasy XIII’s Lightning wearing Louis Vuitton fashion has been released (Hemp, 2006: 49).
Additionally, consumers can experience three-dimensional (3D) environments via their personalized avatars. This type of avatar-based 3D virtual environment offers a promise as a corporate communication channel for brand marketing and interactive advertising. Thus, companies can design and create spokes-avatars and sales avatars that represent their brands and products. In fact, companies are aware that different markets have different preferences, so they use different avatars while serving at various segments. For example, Ikea’s avatar Anna (see Figure 4) is portrayed as a brown-haired avatar in the U.S. website whereas she is portrayed as a blonde avatar in the U.K. internet site (Belisle & Bodur, 2010, p. 756). According to the Neumeier (2007), icons and avatars have a similar concept that both are visual symbols to communicate with the market. Avatars are icons that are active and lifelike characters. The author claims that companies upgrade their icons which sometimes become avatars. For example, AT&T animated its striped globe icon in TV spots (Neumeier, 2007; Hanus & Fox, 2015).

In the literature, researchers investigate whether avatars influence consumer attitudes towards brand or web pages and whether using avatars in advertising increases consumers’ product or brand involvement or not. In a study, Jin and Bolebruch (2009) examine the impacts of the spokes-avatars, which provide consumers with product information and allow consumers to interact with them, on the improvement of consumers’ product involvement, attitude toward the product, and enjoyment of the online shopping experience. They also investigate which physical characteristics have more influence on consumers: humanness versus non-humanness. They design an experiment and use female-male and human-
nonhuman avatar characters introduced in smartphones at and iPhone store in Second Life. The findings show that virtual spokes-avatars have positive effects on consumers’ product evaluations and online shopping experiences in virtual environments.

Furthermore, they understand that advertising messages of multimodal 3D spokes-avatars are more efficient on the improvement of product involvement and attitude toward the product. The participants perceive human-like spokes-avatars as more attractive. They think that interacting with a human-like spokes-avatar is more informative than those who interact with a non-human spokes-avatar (Martin & Neumann, 2006).

Another research question is whether using an avatar affects consumers’ satisfaction and purchase intentions. To analyze it, researchers design an experiment including no avatar, an attractive avatar, or an expert avatar (Holzwarth, Janiszewski & Neumann, 2006). The results of the study show that avatars can increase the effectiveness of a web-based sales channel because consumers look more satisfied with avatars. Additionally, the results highlight that attractive avatars can be useful for all kinds of products requiring low or high involvement. On the other hand, expert avatars are more useful if high involvement is needed, because they are perceived as more credible than other avatars whereas attractive avatars are seen as likable (Holzwarth, Janiszewski & Neumann 2006: 19-36). In a similar study, the impacts of avatars on the persuasiveness of online sales are examined, and it is found that consumers’ persuasiveness of online

Figure 3-4.  Ikea’s avatar Anna

sales can increase with the presentation of avatar characters (Wang et. al., 2007: 143-157).

Individuals’ reflection of their personality in their avatars is also analyzed. In a study, researchers use Big Five personality traits (Belisle & Bodur, 2010). The findings indicate that a participant who has extraversion and agreeableness personality traits tend to use avatars. Authors compare the participant’s self-report ratings and avatar’s ratings, and other participants’ evaluation of the avatar ratings. Participants use avatar cues (e.g. attractiveness, gender, stylish hair, and peaceful expression) to create accurate impressions about other avatars. It can be said that cues reflect proxy measures about participants’ personality. The authors encourage the real-life companies to expand to virtual worlds and use members’ avatars as the basis for targeting and segmentation (Belisle & Bodur, 2010: 756).

Dunn and Guadagno (2012) investigate personality inferences and intentions to befriend by considering simple avatars (i.e. customized cartoon representations of the self) in online channels. They focus on whether participants reflect their real personality traits in their avatars. They accept individual differences such as self-esteem, gender, and personality that guide avatar customization. In another study, researchers use Big Five inventory and find that avatars can provide accurate information regarding trait extraversion, agreeableness, and neuroticism but not conscientiousness or openness (Fong & Mar, 2015: 237-249).

Nowak and Rauh (2005) explore how participants personalize their avatars or which avatars have different kinds of traits they prefer more. They notice that participants would choose some personality traits regarding their androgyny, anthropomorphism, credibility, homophily or attraction during an interaction. The results show that individuals prefer avatars that are masculine or feminine; they don’t prefer androgyny which refers to having both male and female characteristics and qualities (Merriam-webster.com). Anthropomorphism refers to individuals’ intentions, traits, and emotions to non-human avatars. For example, firms bestow brands upon the mind, soul, emotional states, and behavioral features which are an anthropomorphism during the communication with consumers (Hede & Watne, 2013, p. 209). They found that anthropomorphism significantly influences individuals’ perceptions of avatars. Regarding the homophily, which is the tendency of people to associate themselves with similar individuals, participants perceive male avatars as less attractive than female avatars, and most people prefer human avatars matching with their gender. Lastly, anthropomorphic avatars are seen to be more attractive and credible, and people are more
likely to choose to be represented by them (Nowak & Rauh, 2006: 153-178).

Avatars provide marketers with direct and rich interactions with their customers as mentioned above because consumers prefer products that reflect their self-consciousness (real-ideal). In this sense, avatars are useful tools for marketers because they provide more information about consumers’ self-concepts. Researchers point out the avatars’ benefits for marketers and conduct a study to investigate whether avatars contribute to new product development (Kohler, Matzler & Fuller, 2009: 395-407). They use eight cases (Coca-Cola, Steelcase, Osram, Alcatel-Lucent, Toyota Scion, Endemol, Aloft, and Mazda) to investigate participants contribution to new products in Second Life. For example, Coca-Cola invites both public and Second World residents to submit their ideas for the portable virtual vending machine. The director of Coca-Cola’s Global Interactive Marketing claims that the virtual world makes radical innovations possible because inhabitants of the virtual world spread them out unlimitedly. Authors add that utilizing avatars when they want to develop a new product is more effective and useful.

As mentioned above, individuals reflect their ideal selves when they create avatars. Midha and Nandedkar (2012) investigate whether Second Life users perceive any similarity between their avatars and identifiability of themselves or not. They find that when a virtual team member uses an avatar that represents himself or herself, he/she can enhance his/her identifiability in the team.

Researchers also investigate the self-concept in virtual worlds and about avatars. Wasko et al. (2011) claim that “in most virtual worlds, an individual assumes an identity as an avatar, and he chooses or creates a representation of self.” Sung and Moon (2011) conduct a study to test whether there is a relationship between individuals’ actual selves and their avatars’ self or not. They find that avatars’ and owners’ personality ratings are a bit different from owners’ actual selves. Unal, Dalgic, and Akar (2017) investigate avatars’ roles in consumers’ self-image concept in virtual worlds, and they find that individuals use avatars to reflect their ideal self-images. In this sense, avatars are considered useful tools to enhance individuals’ self-image.

Conclusion

It is evident that there is dynamic and interconnected environmental setting shaped by the power of the Internet, and we call this environmental setting a virtual or an online world. These worlds allow many internet
users to communicate, to do business, to have fun, and to enjoy it. Furthermore, virtual worlds have also shaped the behaviors of traditional consumers, and a new type of consumers known as online consumers have emerged.

In this sense, these two developments including virtual environments and online consumers have taken the attention of both academics and marketers. They have started to analyze these consumers’ behaviors, personality traits, and purchase intentions. Studies show that there are big differences between offline and online consumers. Afterward, researchers have focused on the self-concept to understand online consumers’ behaviors deeply from a multidimensional perspective. Research has revealed that consumers prefer products and brands that are congruent with their selves and accepted by the external environment. Although they want to have products reflecting their actual identities, some researchers claim that they may not prefer such products. On the other hand, studies imply that there is a positive relationship between the ideal self and product preferences because consumers want to reflect their desired lives.

Due to popularity and penetration of virtual environments such as Second Life, World of Warcraft, and The Sims, avatars have come into our lives. They have shifted Internet users’ identities and helped to close the gap in between users’ online and offline identities. Businesses have also utilized the opportunity of creating avatars to interact with their customers, to entertain them, to serve customized services, and to increase their sales. Companies have started to design several types of avatars for different segments to represent their brands and products. As mentioned before, avatars can be in various forms. For example, spokes-avatars have positive impacts on consumers’ purchase intentions and product evaluations. In particular, human-like spokes avatars seem more interactive than non-human-like spokes-avatars for consumers. Furthermore, consumers prefer either masculine or feminine avatars. They mostly selected avatars reflecting their genders, and individuals mostly perceive male avatars as less attractive than female ones.

In summary, it is inevitable that the rise of virtual worlds and the importance of online consumers will continue to grow gradually, and these developments will lead academics and businesses to further research.

References

Chapter Three


CHAPTER FOUR

THE CONCEPT OF ETHICS IN THE VIRTUAL WORLD: HOW INNOCENT ARE VIRTUAL MARKETS, OR ELSE, ARE THERE ETHICAL VIOLATIONS?

LEVENT GELİBOLU AND KAMİLE MERİÇ

Introduction

The concept of ethics, as being mentioned in every aspect of our life, is a concept which is often difficult to describe although it is not hard to understand (Çabuk, 2012: 275). The concept of ethics, which has been described by many scientists, authors and thinkers is accepted as one of the oldest disciplines of philosophy (Öztürk, 2015: 297).

Marinova (2013: 535) states that the concept of ethics, which was pointed out by her as an individual behavior, varies between individuals. She emphasizes that they should conform to behavioral standards which are accepted so as to guide all of the marketing decisions of those people who work in the marketing field, although in some cases, they behave in line with their interests, and they must comply with ethical rules which are based on objectives such as honesty, equity and confidence.

The concerns about work ethic have been showing up since at least the 1920s (Bartels, 1967: 20). Ethical rules vary in the course of time. Technological progress influences trade and social life. As a natural consequence of this, ethical rules in these fields must be reviewed constantly. As way of life and technology undergo change, the elements that are related to ethics are expected to adjust to this change (Varinli and Öz, 2006: 71).

Electronic commerce takes its place in the global market of today’s world in a way which spans the entire market, and in which competition is substantially stiff and complex. In particular, as the use of the Internet
increases in communications, existing and newly founded businesses are observed heading towards a new marketing mentality which is known as virtual marketing (Kedar, 2015: 1224).

Consumers face ethical problems such as privacy and confidence when shopping in the virtual environment. These problems boost the critics which are related to shopping in the virtual environment. In addition, consumers do not prefer those businesses which do not behave ethically. Because all of these reasons, required emphasis must be given to the concept of ethics when it comes to virtual marketing decisions (Kurt and Hacioğlu, 2008: 215).

**Concept of ethics**

The concept of ethics, which has been used as the name of a philosophic discipline since Aristoteles (Baydar, 2004: 1), has passed to Turkish from the French word "éthique" and has its origin in he word "ethos," which means "character" in Greek (Doğan and Göker, 2009: 535). The concept of ethics can be assessed nowadays as the knowledge of all kinds of selections, of all kinds of decisions made either individually or socially, of all kinds of actions taken, and of the principles and values which produce these things (Aksu Armağan, 2010: 505).

It is a matter of delusion that the concepts of ethics and morals are often used interchangeably in daily life. Yet, ethics are for rational fact; and morals are for a fact which depends on conscience. While morals assess something as right or wrong, ethics do not do that (Akter, 2009: 90). Crane (1998: 6) points out that concepts of ethics and morals are different from each other, but they are interrelated, and expresses that the concept of morals is used for explaining good or bad, right and wrong in a thinking, feeling or behavior; on the other hand, the concept of ethics refers to a system of morals or to a rule of morals which is judged as right or wrong.

In the Updated Turkish Dictionary by the Turkish Language Institution (Turkish Language Institution, 19.06.2017) ethics are defined as a "science of tradition, body of behaviours which are to be obeyed and avoided by the parties among various fields of profession, science of ethic, moral or pertaining to the moral." The concept of moral meanwhile is defined as "behavioural patterns and rules which the people in a society must comply with." The morals as being an independent concept are a phenomenon which is built inside the human. Therefore, the modern era is related to ethics apart from morals. The moral, which is the first and the most
fundamental element of the society, is not institutional since it is not created by institutions (Palese, 2013: 75).

The ethics of marketing can be defined as "the standards of behaviour which are adapted to marketing implementations and the moral judgement" or "rules of morals or moral system created for marketing area" (Gaski, 1999: 316). The culture in the theories of marketing ethics is the most important factor which affects decision making. Any circumstance which is accepted as "right" in a certain culture might be assessed as "wrong" in another culture (Singhapakdi et seq., 1994: 65).

Ethical marketing is assessed in terms of seven elements, and the significance attributed to each element reflects the degree of a business’s ethical behavior according to Gauzente and Ranchhod (2001) who suggest that the businesses who maintain a sense of ethical marketing will be in the future in more advantageous condition in terms of competition.

These elements are:

- **Knowledge**: It applies to the required information about the consumer, how this information is to be used, and whether this information is to be shared by third parties or not.
- **Choice**: It applies to providing the customer a choice if he/she would accept or not the collection of information about himself/herself.
- **Contact**: It applies to supplying a person or address through which the consumers may communicate in order to be able to inquire about privacy or to make any complaint.
- **Security**: It applies to preserving the information sharing and later on storing this information.
- **Access**: It applies to providing the consumers with access to the information and enabling them to review and correct this information.
- **Coverage**: It is defined as a time element. It applies to how long the businesses may have access to information of the consumers.
- **Interference**: It applies to interference level of marketing techniques on the Internet.

**Virtual marketing and ethics**

Virtual marketing comprises entire web-based marketing instruments such as electronic mail marketing, banner advertisement, weblogs, news settlers and the utilization of businesses’ own websites as a marketing instrument (Kedar, 2015: 1220).
“Electronic mail marketing” is abbreviated shortly as EMM and involves operating the marketing activities through electronic mail as implied by its name. With this marketing type, a customer’s permission is taken and the control of the customer is possible. Further, businesses are able to measure returns in electronic mail marketing (Haşlıoğlu and Süer, 2010: 61-62). Yet, businesses may acquire, behaving in an unethical way, permissions of the visitors of the websites to use their electronic mail addresses by benefiting from their careless attitudes, and from the lack of knowledge, or benefiting from the fact that these persons suppose that the options they face are standard and true ones. As the result of a survey conducted in the United States, it is found that one third of those persons who use the Internet have no knowledge about for what reason they give permission with reference to be included in electronic mail distribution lists (Koçoğlu et seq., 2011: 20).

“Banner advertisements” are small, rectangular graphical images related to a target advertisement. A banner advertisement does not give much information, aside from manifesting the advertiser, and functions as an invitation for the user by clicking on it and accessing much more information (Novak and Hoffman, 1997). Sağlak Özçam and Bilgin (2012: 71) have searched, through a study they carried out with ten years of interval, the perception of ethics involving the advertisements in various media instruments. In consequence, they detected that, throughout the last ten years, and in parallel with the use of the Internet, the advertisements on the Internet have caused irritation, become exaggerated, had delusive elements, and the percentage of people who think that advertisements contained adverse things for the children has increased.

The Turkish equivalent of a blog concept, which is the abbreviated form of the weblog concept, is an environment in which people shares their individual opinions and the matters they care about, and it is utilized in many fields like politics, marketing and training with various purposes and different strategies (Özüdoğru, 2014). It is an unethical implementation that the businesses open themselves a blog while creating the impression that that they are formed by the consumers. When it becomes evident that the business has made blog authors prepare a blog in order to augment its reputation and does not obviously mention this paid blog authoring, that business loses reputation (Mavnąçoğlu, 2009: 67).

As the consumers visit websites of the businesses, they share their knowledge there. At this point, it is possible that the information shared by people about their private lives might be exploited by the businesses. If this information is used for evil purposes, an important ethical problem develops. Furthermore, the fact that addressing higher-income groups
through the Internet may cause lower-income groups to have less information; thereby creating discrimination in that way is cited as another ethical problem (Cited from Armstrong and Kotler by Mucuk, 2014: 254).

One of the most distinctive samples of virtual marketing is Second Life, which gives the people the impression that they live in a virtual world, and provides them socializing through providing the opportunity of chatting. Businesses take part in Second Life for a fee and offer their products and services to the consumer through its stores just like in real world (Kaya, 2009: 337-338). Sharma et al. (2012: 10) assert that Second Life is an important environment for marketing the real-life products and administering brand promotions.

The internet is considered a separate field from the physical world, and it has developed its own ethical culture. Along with the increase in electronic commerce, consumers’ concerns about ethical concepts in the electronic commerce increase as well (Roman 2007: 145). It is because the Internet has distinctive elements and creates a new environment for unethical behavior (Freestone and Mitchell, 2004: 126).

Consumers often consider unethical marketing activities unacceptable, such as ungrounded advertisement and selling harmful products on purpose, and do not want to shop from those persons who behave like this. Therefore, marketing decisions should be assessed from ethical aspects in view of the fact that everyone has different thoughts about what is ethical and what is unethical, depending on their personal beliefs and life experiences (Marinova, 2013: 535).

The fact that businesses operate with an ethical conscience causes the consumers to feel themselves confident in a comfortable manner, and as a consequence, this plays an important role in becoming a loyal consumer (Kurt and Hacıoğlu, 2008: 225).

In research conducted by Bush et al. (2000: 242), the respondents, who work in the marketing field, have specified the internet-related ethical issues in order of priorities as follows:

- Transaction safety,
- Illegal activities (fraud, damage to the database of web sites),
- Privacy,
- Not behaving honestly and properly,
- Assessing internet marketing on the same standards with other marketing instruments,
- Trying to acquire attractiveness by utilizing salacious elements,
- Failure to offer product warranty,
- Unauthorized actions such as copying and stealing,
• Targeting children,
• Spam e-mails,
• Deceptive advertising.

Varinli and Öz (2006: 69) assert in their study that, with respect to the concept of ethics in electronic commerce, there are some new ethical elements in electronic commerce which are specific to the Internet, along with adopting ethical elements available in the traditional marketing to electronic commerce, and they addresses four ethical subjects concerning electronic commerce. These include confidentiality of personal information, unauthorized commercial electronic mail (SPAM), electronic commerce applications intended for children and other issues pertaining to electronic commerce.

The reasons for media’s close interest in children and young people is stated in the study of İnal (2011:422) as such: there is a desire to attract children and the young into the phenomenon of consumption as they are individuals who have brand obsession and who live in their own world through spending as much money as possible at early ages. According to Austin and Reed (1999), children are a significant target group for the businesses due to their great power of expenditure. Because of the fact that access to the Internet is easy and that children may decide on their own without their parents’ help, internet advertisements intended for the children must be thoroughly evaluated in ethical terms. Furthermore, some websites offer presents to the children in return for supplying information about their families.

Schlegelmilch and Öberseder (2010: 3) have determined in their study the subjects which are related to marketing ethics. Among these subjects, there are ethical problems related to the Internet, and privacy, phishing, password cracking and online auctions are cited as the samples.

The American Marketing Association has developed ethical rules related to internet marketing for those who work in the marketing sector. Privacy and security are important elements pursuant thereto. The American Marketing Association lays emphasis on the facts that consumer information should be handled with care, preserved in confidence and be used only for specified purposes, and that each applicable legislation, which regulates communication instruments like email, phone, fax etc., must be obeyed (Bush et al, 2000: 246).
Table 4-1. Ethical Rules of American Marketing Association with Regard to Internet Marketing

<table>
<thead>
<tr>
<th>Ethical Rules which Govern Professional Behaviours of Internet Marketers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Supporting professional ethics in order to avoid damages through preserving privacy, ownership and access rights.</td>
</tr>
<tr>
<td>2. Observing all applicable laws and regulations involving mail, phone, fax or other communication tools which are related to internet marketing.</td>
</tr>
<tr>
<td>3. Being aware of regulation changes regarding internet marketing.</td>
</tr>
<tr>
<td>4. Being in effective contact with organization members about the risks and policies involving internet marketing.</td>
</tr>
<tr>
<td>5. Providing organizational commitment to employees, customers and relevant stakeholders where internet implementations are ethical.</td>
</tr>
</tbody>
</table>


Roman (2007: 131) mentions in his study four factors which gain confidence of and provide satisfaction for online consumers including safety, privacy, trust not to deceive and fulfilment (confidence).

• **Safety**: Safety is introduced as one of the most important elements in order for the customer to feel safe; it will be determinant in the future success or failure of businesses that operate in an electronic environment. Businesses may provide safety through encrypting data, clearly identifying safety policies, offering alternative payment options such as cheque, money order or paying cash at the door (Roman, 2007: 144). Otherwise, if the businesses give the customers’ information to other businesses intentionally or due to their negligence, they will cause ethical anxieties for the people who shop on the Internet (Limbu et seq., 2011: 74). Wolfinbarger and Gilly (2003: 193) approached the safety factor in their study as ensuring the safety of payment which is made via credit card.

• **Privacy**: The businesses that operate over the Internet should pay attention to the content of these privacy policies, and to the fact that the information related to this privacy should be read and understood by the consumers (Roman, 2007: 144). Wolfinbarger and Gilly (2003: 193) have approached the privacy factor as keeping that information confidential which customers shared with the business, and not to disclose it to third parties.
• Trust Not to Deceive: Deceptive implementations arise out of such cases when businesses create a different impression from what customers reasonably expected, and customers are in a completely wrong and delusive situation in this impression (Limbu et seq., 2011: 74). Businesses must provide true information to the customers regarding the features of the products and the benefits they offer (Roman, 2007: 144).

• Fulfilment/Reliability: Roman (2007: 143) asserts in his study that the fulfilment/reliability factor has the greatest influence in achieving the satisfaction of the customers who shop on the Internet. This factor can be defined as displaying and introducing the products properly, such that it ensures purchasing the exact product which customers thought to have ordered. Further, this factor ensures that the right product is delivered to the customer in the promised period (Wolfinbarger and Gilly, 2003: 193). Businesses should honestly declare to the customers the dates on which they are able to deliver the products, and that definite products are available in their stores. Some practices which can positively influence customers’ perception about the reliability of businesses web sites include notifying the customer through electronic mail that the order is received, offering an estimated delivery date, and contacting the customer through phone or electronic mail about the installation of the product (Roman, 2007: 144).

Orhon (2011: 390) has pointed out several concerns involving marketing and economics on the Internet, which should receive attention:

• The marketing which is conducted extensively and in compulsive way,
• New marketing mentalities in which people are accepted individually,
• New marketing mentalities which are not perceived but exist in reality,
• Fraud and theft,
• Virtual theft,
• Protecting the rights and copyrights,
• Illegal data sharing,
• Stealing of credit card information and passwords.
Conclusion

The fact that the Internet has become a part of our life nowadays has led to ethical concerns about the Internet. If individuals and businesses contemplate what kind of outcomes their actions on the internet shall bring about, and they make assessments from the point of ethics, this shall reduce these concerns. In order to win the consumers, a number of whom increases in every passing day, and to maintain the permanency, the issue of ethical rules in virtual environments in particular must be cared about.

The businesses that use the Internet in their marketing activities should pay attention especially to safety, privacy, trust not-to-deceive and fulfilment (reliability) factors. Businesses are required to provide a safe environment for the customers in the credit card payment process, not to share the information obtained from the consumers with another businesses, not to give deceptive information about their products to the consumers, and to deliver the right product at the specified time and share this information with the consumer. Although their purchasing power is high, businesses should not exploit children or gather information about their families. Businesses must be sure that the advertisements they present to the Internet do not bear groundless elements, and do not effect children negatively.

Businesses should only use e-mail addresses of the consumers after they provide them with explanatory information, and after they take consumers’ permission. Further, businesses should avoid creating the impression that a blog has been opened by the customers if they have utilized paid blog authors without sharing this information with the customers. They should not forget that if this situation comes out, the business will lose reputation.

References


Introduction

IoT is a term that can be defined as an “interconnection of sensing and actuating devices providing the ability to share information across platforms through a unified framework, developing a common operating picture for enabling innovative applications” (Gubbi et. al., 2013). It is especially instrumental in illuminating every single detail of the customer transaction with a heretofore unavailable snapshot of the actual experience with real time information to every machine that is connected (Merrifield, 2015).

This chapter aims to explore this vast realm of possibilities by focusing on the potential implications of IoT in marketing. The rationale for this is as follows: the substantial benefits as well as risks of IoT for both companies and customers are being discovered steadily. McKinsey Global Institute (2015) estimates the IoT’s total potential economic impact to reach up to $11.1 trillion per year by 2025. These processes will certainly lead to new functionalities in marketing processes (Roblek, Meško and Krapež, 2016) with sophisticated knowledge management systems via data gathered from the “things” stored in the cloud and updated in real time (Del Giudice, Della Peruta and Maggioni, 2013). On the other hand, however, digitalization can result in undesirable outcomes such as excessive data collection and customer exploitation (De Cremer, Nguyen and Simkin, 2016), security and privacy concerns (Weber, 2010) and the like. In sum, it is easy to see how the IoT and marketing concepts are intricately interrelated with various implications for both the companies and their constituencies. Toward this end, we aim to examine the potentials of IoT systems within marketing processes and identify the
potential implications (both positive and negative) that they have for doing business in the 21st century and beyond.

The chapter starts with a brief description of IoT concepts, and then moves on to explore their potential that this integration might present as an enhancer and inhibitor of modern business success. The chapter concludes with propositions for research and practice in the area.

**IoT and converging technologies**

The recent technological advancements enable customers to have more interactions with the product that will provide a medium for more valuable experiences, to be more informed about the social actions and to have more accurate validation of the brands’ offers (Jara, Parra and Skarmeta, 2012). IoT, one of the most rapidly evolved technologies in the recent years that yields innovative experiences, has emerged from the convergence of currently used technologies such as bar codes, RFIDs, sensors etc. (Bassi and Lange, 2013). This new approach provides customers with more interaction with the product through social networks and extension of the Internet to the product. This extension can easily be achieved by using the new generation Internet: Internet of Things-IoT (Jara, Parra and Skarmeta, 2012).

Internet of things, first announced by Kevin Aston (2009), is a term that stresses the importance of people in empowering computers to gather information and provide them with knowledge of the things that will help them to see, hear and smell the world via RFID and sensor technologies. It can be defined as an “interconnection of sensing and actuating devices providing the ability to share information across platforms through a unified framework, developing a common operating picture for enabling innovative applications” (Gubbi, Buyya, Marusic and Palaniswami, 2013). In the European Commission’s (2010) Cluster of European Research Projects on the Internet of Things (CERP IoT), the concept of “thing” is defined as “a real/physical or digital/virtual entity that exists and moves in space either by assigned identification numbers, names and/or location addresses.” In the same report, it’s stressed that “things” are expected to become active participants in business, information and social processes where they are enabled to interact and communicate among themselves and with the environment by exchanging data and information “sensed” about the environment. This will create a synergy that is generated by the convergence of Consumer, Business and Industrial Internet that leverages the cloud to connect intelligent things for creating new services, content and applications (Vermesan et.al., 2013). These potential benefits of IoT
can be achieved by using many technologies. Some of the widely used IoT technologies are (Lee and Lee, 2015):

- radio frequency identification (RFID);
- wireless sensor networks (WSN);
- middleware;
- cloud computing; and
- IoT application software.

Radio frequency identification (RFID) is an umbrella term that refers to several information and communication technologies that allows for the automatic identification of objects, locations, and individuals by computing systems without any need for manual intervention. It contains a unique identifier code attached or embedded in the target object (Roussos, 2008). The code contains both current and historical information on that object’s physical properties, origin, ownership, and sensory context so that, in real time, this information can dramatically streamline how the object is manufactured, distributed, managed and recycled (Welbourne, 2009). Within the context of IoT, RFID tags can also act as an information processor that communicates with the central computation system (RFID reader) to establish an integrated smart object eco-system. RFID allows one to identify, track and localize the object whereas RFID readers ensures the capability of sensors. The operational steps of RFID process are shown in Figure 5-1 (Naskar, Basu and Sen, 2017).

![Figure 5-1. Basic RFID Operational Model](source)

RFID systems and solutions can be used in several industries like manufacturing, logistics, retailing, automotive, healthcare etc. (see Figure 5-2).

--a spin-off resulting from a partnership between its parent firm, RFID solutions provider Litum Technologies Corp., and Turkish real-time location system (RTLS) Hardware company Wipelot-- is marketing full RTLS solutions to the health-care market. The applications include tracking newborn infants, patients, staff members and high-value assets.

For the staff in a hospital Sanitag RTLS can;

- protect staff from assaults; reach them quickly when they need help,
- monitor doctor visit times,
- monitor staff activity/ inactivity,
- report staff movement history for a selected time period, and
- easily locate staff when patients need them.

For the patients software can monitor the following:

- high precision patient location,
- automatic notification in case of inactivity or falling
- manage (nurse) help calls effectively
- track patients against elopement and boundary crossing
- get report of patient movement history for a selected time period
For the infants the solution can;

- prevent baby mix ups by matching infant with mother
- provide protection against infant kidnapping
- track infants throughout the hospital to make sure they stay inside permitted perimeters
- get report of infant movement history for a selected time period
- monitor infant activity, inactivity

These actions can be achieved by ergonomic tag design that is attached to the patient/infant with a replaceable long life battery that provides quick ROI, call button that makes nurse calling easy and not limited with patient room and motion sensors to help monitor patient/infant (in) activity.

Wireless sensor networks (WSN) are battery-operated devices that collectively monitor and disseminate information about various issues (Iyer et. al., 2008). A sensor network is composed of a large number of sensor nodes which consist of sensing, data processing, and communicating components, and which leverage the idea of sensor networks based on collaborative effort of a large number of nodes (Akyildiz, et. al., 2002). Sensor nodes can be used for continuous sensing, event detection, event identification and location sensing in several areas like military, environment, health, home, commercial, chemical processing etc. (Su, Akan and Cayirci, 2006). One of the most important fields that WSN used is the farming industry. Srbinoska et.al. (2015) proposed an architecture for vegetable greenhouses to achieve scientific cultivation and lower management costs from the aspect of environmental monitoring based on wireless sensor network technology in order to monitor key environmental parameters such as the temperature, humidity and illumination.

Middleware is a software platform required by IoT which provides abstraction to applications from the things, and offering multiple services (Bandyopadhyay et. al., 2011). Middleware provides a software layer between applications, the operating system and the network communications layers, which facilitates and coordinates some aspects of cooperative processing (Razzaque et. al., 2016). Another technology of IoT is cloud computing. It’s a transformative approach which changes the interaction of the user with information and provides services at the infrastructure, platform or software level (Hwang, Fox and Dongarra, 2013). The integration of cloud computing and IoT gave birth to a new set of smart services and applications that can strongly impact everyday life.
The adoption of this integration can bring several opportunities in healthcare, Smart Cities/Communities, smart home and smart mobility etc. (Botta et al., 2016). Finally, IoT application software enables device-to-device and human-to-device interactions in a reliable and robust manner. For example, in transportation and logistics applications, the status of the products in terms of temperature and humidity should be monitored constantly. It will be very important for products like fruits, meat and dairy products to take appropriate actions (Lee and Lee, 2015).

All the above IoT technologies allow marketers to get a wide variety of data with different structures and models from different customer touchpoints at an unprecedented scale to be stored in big, and sometimes distributed, storage systems (Ng and Wakenshaw, 2016). As the objects are getting connected, real-time data allows for the knowledge of the consumption patterns and the motivators of purchasing (Williams, 2014). It can be possible to go beyond the transaction and learn every detail of the customer’s actual and upcoming experiences (Merrifield, 2015).

Opportunities of IoT in marketing

Since the industrial revolution, marketing concepts have gone through several phases, from the product-centric approach, namely Marketing 1.0, to the customer experience approach, which is called Marketing 4.0. One of the most important drivers of that change is the technological improvements which causes disruptive changes in business models, especially in the transition from Marketing 3.0 to Marketing 4.0. The convergence of technological advancements collectively affect marketing practices which causes a shift to a more deepened customer-centric approach covering every aspect of customers’ journeys (Kotler, Kartajaya and Setiawan, 2017). Here are some of the key marketing areas in which IoT is expected to create value:

Product design, development and differentiation

Connected devices emerging with IoT allow companies to gather information about the way the products are used, the place they are being used and the profile of the customers being used. This information can easily be used in both modification and redesign of the products with enhanced features and services. The new perspective will change the way products are modified and customer support is provided (Gandhi and Gervet, 2016). The IoT technologies (sensors, RFID etc.) embedded in products (i) can monitor their own condition and the environment, helping
to review the performance (ii) allow complex product operations to be controlled by the users via remote control technologies (iii) create new opportunities for optimization within the combination of monitoring data and remote-control capability, and finally (iv) allow autonomy. In this way, products can learn and adapt to the environment and to user preferences, service themselves, and operate on their own (Porter and Heppelmann, 2015). For example, a watch from Limmex (www.limmex.com) is still a watch; however, beyond that, it can also alert family members and friends in case of emergency (Fleisch, Weinberger and Wortmann, 2014).

Connectivity evoked by IoT Technologies makes product designers consider the technical issues such as choice of network, power-consumption and interoperability. However, the decisions of product design have not been solely dependent on designers anymore. The most connected products are dependent upon external groups like manufacturers, distributors and third-party developers as connectivity allows them to interact with the product easily. Besides this, core customer interactions may be mediated by external elements. With connected objects, component lifespans can vary much more widely, and third-party partners can update their key components via apps. Thus, it will become very complicated to control the product-life cycles. It requires companies to adapt and develop new capabilities to keep up with the pace of change (Deloitte, 2016).

IoT has also been used by industrial companies. For example, GE, which is one of the leading digital industrial company operating in several industries and performing digital transformation. GE coined the term "Industrial Internet" with its Predix operating system in late 2012. In 2015, they established a “customer experience center” where customers can interact with GE’s latest products and share real-time feedback throughout the development process. These centers also include training centers, labs and showrooms that make customers interact with GE engineers and product management teams during product development (https://www.ge.com/digital/).

IoT Technologies are expected to impact several industries. The important thing evoked by the convergence of the IoT technologies is the growing usage of wearable and ambient sensors in monitoring social interactions, chronic disease-using wearable vital signs sensors, and in body sensors. With the emergence of pattern detection and machine learning algorithms, the patient’s environment could be easily watched, and notifications could be sent out in irregular situations. Furthermore, IoT could be used in the optimization of logistics of the whole supply chain via
making the data from the retail store available (Bandyopadhyay and Sen, 2011).

**Customer relationship management**

The unprecedented volume, velocity, and variety of primary data available from individual consumers, namely big data, in real time is expected to understand the consumer in a deep manner and may provide useful information that is not known about the consumers (Bandyopadhyay and Sen, 2011). Real-time information from objects leads to the ability to create real-time on-demand responsive services from data. The convergence of such data gathered from every object and knowledge engineering algorithm could provide real-time understanding of the consumer and also a way to fulfill it through recommendations (Ng and Wakenshaw, 2016).

These processes will lead new functionalities on CRM (Roblek, Meško and Krapež, 2016) and knowledge management processes with the data gathered from the “things,” stored in the cloud and updated in real time (Del Giudice, Della Peruta and Maggioni, 2013). Traditional CRM systems are pushing information to customers like promotions and advertisements (Chi, Ravichandran and Andrevski, 2010). New generation CRM systems allow marketers to make text analysis of big data from social media to develop individualized products and services to support decision makers (Wang, 2016). As such, the IoT technology has the potential to overhaul the CRM process and its outcomes in ways that may be beyond imagination. McKinsey Global Institute (2015) estimates its total potential economic impact to reach up to $11.1 trillion per year by 2025 with the IoT-based CRM systems, which are estimated to raise sales by as much as 11 percent in categories such as luxury retail.

CRM is a business strategy that focuses on establishing value-creating relationships via information technology, thus enabling organizations to customize the products and services for their specific target customers (Garrido-Moreno and Padilla-Meléndez, 2011). Thus, CRM allows firms to engage and communicate more effectively with customers who have preferences and expectations that fit in with their proposed offerings (Chen and Popovitch, 2003). Up until now, the technology used to achieve such an engagement was limited in time, place and accessibility. However, with the endless connectivity and accessibility that the IoT brings, CRM’s ability to further understand and enhance the customer experience has been greatly expanded (Shah and Patel, 2016) by using real-time interconnectivity, mobile telecommunications, and sensory systems.
technologies (Bauer et al., 2014). The goal of traditional CRM systems was to gather all the information related to the customers and prospects which was available in one company. The data source was the sales representatives who were forced to enter the data in a centralized system. However, the strategy of delivering data to other departments, creating omnichannels, provides one-to-many communications which transferred the data generation process from sales reps to automated generation from other departments, organizations, human beings, intelligent objects and object service providers using a variety of applications including collaborative networks and cyber-physical systems (Britsch, Bulander and Kölmel, 2013; Krämer, Tachilzik and Bongaerts, 2016).

Reflections on social media

One of the most important contexts that is set by IoT technologies in the next generation is social media. A new giant techno-human space is created with the extensive use of sensor signals, receivers, and transmitters following with human to human, human to machine and machine to machine interactions (Lytras, et. al., 2015). The rapid development and extensive usage of social media communication channels like Facebook, Twitter, LinkedIn and Instagram allow the consumers to share their feelings, experiences and intentions with their friends. This motivates consumers to participate in the process of creating value through interaction with other customers via social media. Participation can be possible by the identification of IoT technologies integrated in the products and mobile phones (Jara, Parra and Skarmeta, 2014). The generated data directly or indirectly reveals the consumers’ preference and opinion which will create a powerful predictive vehicle for marketing following with organization-wide learning (Zhou, Alexandre-Bailly and Piramuthu, 2016). Jara, Parra and Skarmeta (2014) presented an interaction model and a participative marketing platform to support customers while interacting with products and social media via IoT technologies, which will help consumers’ buying decisions. Figure 5-3 illustrates the platform in which a customer interacts with the product via making his/her mobile phone read the RFID tag. The interaction with the product may be with shop terminals or online terminals as well. Following the identification of the product, a web page is reached as in the mid Picture of Figure 5-3, which shows the reputation of the product with ratings in terms of quality, experience, popularity, cost etc. and the comments from the consumers. This page can also be shared in consumers’ personal social media accounts, which will be very important
for social media marketing. Finally, it can be presented through a form consisting of comments and experiences.

![Participative Online Platform](image)

Figure 5-3. Participative Online Platform
Source: Jara, Parra and Skarmeta (2014)

The big data gathered from all touchpoints should be analyzed efficiently. There have been several methods that have been applied to data, text, and web analytics applications like data mining, machine learning and powerful algorithms. Other new data analytics techniques are transformed through data mining for high-speed data streams and sensor data (Chen, Chiang and Storey, 2012). Analysis of data will be one of the most important developments in terms of knowledge generation, service enhancement (Jara, Parra and Skarmeta, 2014) and value creation (LaValle et. al., 2011).

**Personalization**

One of the biggest impact of IoT is the opportunity to provide services tailored specifically for the user needs and preferences. It can be applied in several industries. For example, Vallée et. al. (2016) developed a system to improve sleep quality by providing personalized recommendations regarding the time to go to bed, temperature of the room, and the
food/drinks that should be avoided by triggering alerts. Sleep quality could automatically be estimated based on sleep tracking data and through forms filled out by the user regarding his/her sleep quality (see Figure 5-4). IoT can also be very efficient in the health industry. It can provide data from the patient’s everyday activities, and alert doctors to modify or give recommendations for the health care of the patient in real time. Another example can be given in the retail industry. Macy’s, which is one of the biggest retailers, is deploying Shopkick’s shop-Beacon, an enhanced location-based technology. It provides Shopkick app users personalized department-level deals, discounts, recommendations and rewards (Lee and Lee, 2015).

![Figure 5-4. Model for IoT-based Personalized System for Improving Sleep Quality Source: Vallée et.al. (2016)](image)

**Challenges of IoT in Marketing**

IoT will become more important as it brings disruptive business models and new societal services that will improve the quality of life such as vehicle accident-reporting devices, remote health monitoring devices,
smart utility meters, connected refrigerators etc. (Babar, Prasad and Nielsen, 2016). It goes beyond the customer transaction to every little detail of the customer’s actual experience with real time information to every machine that is connected to (Merrifield, 2015). However, there are also some challenges that create risks of damaging the relationship with customers. On the consumer side, due to the conveniences and efficiencies it will achieve, it may create ambivalence that will slow the adoption to IoT services (Lee, 2016). In the literature, there are several issues that should be solved. One of the most important concerns is privacy and security, which can damage or prevent the relationship with customers. With the proliferation of technology and the emerging big data concept, associated growth in data increases the importance of these concepts (Weinberg et al., 2015). Bandyopadhyay and Sen (2011) determine the specific challenges as: (a) data and location privacy (b) need for privacy enhancement technologies and relevant protection laws, and (c) standards, methodologies and tools for identity management of users and objects. Cremer, Nguyen and Sinkine (2016) identify the dark side of IoT with eight types of behavior, which are:

- Confusing customers
- Information misuse
- Privacy issues
- Switching barriers
- Favoritism/Discrimination
- Unfairness
- Dishonesty
- Financial Penalties

In addition to these concerns, there are also some key issues that should be addressed on the supply (company) side. Limitations of the current internet architecture, managing heterogeneous applications and environments, devices designing mechanisms for sensor data discovery and sensor data communication protocols are some of them (Bandyopadhyay and Sen, 2011).

There can be seen a progress in improving the security of existing systems; however, IoT systems require even higher attempts to fulfill these concerns (Hamidi, 2016) like a security framework (Ahlmeyer and Chircu, 2016).
Conclusion

Having past three main waves of technological revolutions since the late 18th century, we are now at the cusp of the next one, Industry 4.0, which is triggered by nine main technologies. Industry 4.0 embraces technology-based production devices which autonomously communicate with each other along the value chain and promises to transform the existing business models (European Parliament, 2016). Among the nine significant digital technologies which underline Industry 4.0, this chapter specifically focused on one, namely, the IoT and explored its potential implications as a marketing tool. This fully connected Internet is changing the way marketers interact, analyze and offer unique services and experiences. The substantial benefits as well as risks of IoT for both companies and customers are being discovered.

On the positive side, these processes will certainly lead to new functionalities in customer relations (Roblek, Meško and Krapež, 2016). On the other hand, however, digitalization can result in undesirable outcomes such as damaging ongoing customer relationships or hindering the building of relationships (Weinberg et. al., 2015), excessive data collection and customer exploitation (De Cremer, Nguyen and Simkin, 2016), security and privacy concerns (Weber, 2010) and the like. In the future, as it will be used in several industries, there should be taken some effective measures for the consumers to easily adapt to these technological experiences.

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CHAPTER SIX

BRAND COMMUNICATION
IN SOCIAL MEDIA MARKETING

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Introduction

With the developments in the technology since the 1990s, the Internet has begun to be used in different areas as a result of its widespread use. Social media becomes prominent as one of these usage areas of the Internet, and it is used increasingly day by day. Social media enables the exchange of products and services with electronic devices and methods, which helps the business communicate with the client in a virtual environment, without the need for a direct and physical connection. Organizations are striving to learn customer needs and requirements to offer products and services that meet these expectations, and to communicate effectively and provide customer satisfaction. Marketing efforts in social media are able to positively affect this ability to be able to access the information that businesses need nowadays and to be able to make instant inquiries and meet rapidly changing customer expectations. On the other hand, social media provides customers with quick and easy access to the products and services they need.

For organizations that use social media tools actively, it becomes increasingly important to establish a long-lasting and continuous relationship with customers. Therefore, enterprises set providing customer satisfaction as the goal. In order to be successful, businesses must maintain profitability in the long run. The key to profitability in the long term is only possible with meeting customer satisfaction. The credibility and reputation of the business affects customer satisfaction positively. One of the most important tools to grow profitably is to retain the customer, in other words, to create customer loyalty. It is now very well known that the cost of acquiring a new customer is five times higher than the cost of doing business with an existing customer. The customer's perception of
decisive characteristics in a brand and being impressed by them causes the loyalty and the power of reliance to increase for the brand and the enterprise.

The Internet, in other words, the digital environment, is constantly experiencing intense interest from masses as it has become increasingly important as a new medium of communication that meets the demands of changing lifestyles, brands' awareness strategies, consumer expectations, the importance of time and the ease of use. The Internet, which provides quick and easy access to information, is a computer network that communicates using a common language worldwide. The Internet is such a large network that it is not known exactly how many users it has today, but the number of connected people increases every month.

With the development of the Internet, social media, a new concept, has entered our lives. The social media revolution has given consumers all over the world the greatest power they have ever had, which has forced businesses to think about how they could be more open and flexible. Along with the global crisis, social media canalized corporations, organizations and governments to be discussed in this environment and to think about how they can transmit their messages cheaper without having to use media organs like television or radio and without spending a lot of money. Knowing that consumers can defend their rights and that they can easily reach producers or sellers through social media has also made it easier for them to increase their purchases or to make faster decisions.

Social media is a massive socio-economic change. Although the marketing dynamics that have been practiced since the past centuries are still in effect, social media has completely changed the way of doing business and the expectations of people. Television campaigns that were worth millions of dollars are not key elements to trigger buying anymore. The new king is the access to products and services using social media tools. From now on, those who will win are not those who hold traditional media and cornerstones, but those who can best present their products and services in the social media as a result of this easy and rapid distribution of information. In fact, this ultimately shows that social media is the new outstanding marketing tool to advertise products and brands.

Social Media Concept and Definition

Today, information and technology are the leading elements of society. Rapid change in technology is also affecting lifestyles. The development of technology with other means of communication and the Internet becoming easier to reach and less costly than it was ten years ago are two
factors that help businesses develop new ways to promote their products and brands. Social media is at the forefront of these new marketing methods and techniques. Because social media is a communication platform in which users share their personal information and interests, it also allows for mutual exchange of ideas about products, brands and businesses. Chauhan & Pillai (2013), draw attention to a different aspect of social media by identifying social media as a new type of online information source that is created, maintained and used by consumers to inform each other about products, brands, services, general features and other topics.

Social media, which has reached a very large number of users in a short period of time, is a new communication platform used by many people today. The rapid rise of social media is also drawing the attention of businesses today, and they are rapidly applying this new way of communication to their operations. Businesses are using social media potently as an alternative to traditional media tools to reach existing and prospective customers, in their branding efforts and in other marketing activities. It is of utmost importance to actively participate in social media for enterprises that want to survive and grow in a competitive environment where international borders are removed. (Kwon et al., 2013). Therefore, understanding this new tool of promotion, knowing the advantages and disadvantages it has and how social media should be used to reach and communicate with customers in marketing efforts are among the most important issues for businesses.

While social media initially allows users to post and comment on photos, now it has an activity area where various activities are performed from sharing ideas, sending videos, liking posts and organizing many social support applications (Moise & Cruceru, 2014) Andzulis et al. (2012) state that social media is not only a concept limited to personal use with tools such as Facebook and Twitter, but also a medium that significantly affects and changes especially the promotional activities of enterprises. In this regard, social media is not only a communication platform where users share personal information and interests, but it also draws attention to the possibility of being able to comment on the corporate structure of the product, the brand and the business. Chauhan & Pillai (2013) define social media as a new source of information created, maintained and used by consumers to inform each other about products, brands, services, general features and other issues.

Lei et al. (2017) interpret social media as "a very broad concept in which it is unlikely to hear two completely identical definitions." While there are many different definitions of social media emphasizing different
aspects, social media can be summarized as online tools and websites that allow users to interact with each other by sharing their knowledge, opinions and interests. According to Syed-Ahmad & Murphy (2010), social media is a concept that requires a new user framework. There are some rules in the social media such as originality, participation, transparency and interest for the development of the environment shaped by the users. Xiang & Gretzel (2010) describe social media as a new type of online media with features such as the highest level of sharing, participation, openness (feedback and participation openness), dialogue, community building, and connectedness. Social media is also defined on the basis of identification of individuals. This definition can be framed by the possibilities of social media that give identities to individuals such as sharing for users, showing / hiding existence in an environment, communicating, gaining fame and grouping (joining a group, forming a group) (Kietzmann, et al., 2012:110).

The main reason why social media has become very popular in recent years is the rise of average time spent in this environment, especially among young people. This leads businesses to comprehend social media as a powerful tool for establishing and developing contact with existing and potential customers (Kwon et al., 2013). Thanks to social media, communication between consumers and businesses has improved. As a result of this development, consumers are able to share their thoughts, expectations and satisfaction level about the product with the business and other consumers via social media. In addition, consumers are affected by their own feelings and thoughts as well as their surroundings, family or friends when purchasing the product. In this context, answers to research questions that may be important in terms of marketing include who is using social media tools, how they are used, how they are influenced by consumers' comments on the product, service or brand in terms of information received from the social media tools in the purchasing process (Ashley & Tuten, 2015).

For businesses, the content created by users or consumers about the product and brand is important in social media. However, businesses should pay attention to the social media environment used in this content and its content creators because this content is produced by millions of consumers or users worldwide. This content, starting with informal discussions about the product and the brand, reach consumers everywhere in the world with comments and evaluations made by creating texts and videos. Consumers are beginning to interfere with increasing or decreasing the value of the brand, causing the enterprises to change their product and brand and to keep up with the innovations (Berthon et al., 2012).
The content created by users is created without any profit expectation, contrary to what is thought. However, the number of contributors to these platforms is constantly increasing. Thus, the content provides a database with extraordinarily rich value for businesses that can use data that matches the marketing research made to understand the consumer's interests, trends, needs and wishes (Dahlin et al., 2014). Another valuable aspect of social media is the ability to provide feedback. With this feedback, businesses can have knowledge about the thoughts and interpretations of the target market about the product and brand they are offering, and can shape marketing strategies by taking this feedback into consideration (Sin et al., 2012).

**Social media marketing concept and definition**

With the development from the past to present, the increase of communication possibilities and globalization, it is observed that the level of consciousness has also increased depending on the level of education of the consumer. Along with all these changes, the definition of marketing, marketing mix, the role of marketing, focal points and communication methods, in other words, marketing strategies, have also changed. In the relevant process of change, the consumer has become the focal point of marketing and in this context, the concepts of relationship marketing and value creation have become prominent (Weinberg, 2009). When the focal point of marketing became the consumer, the desire and expectation of the consumer became even more important. According to the focal point, businesses can primarily determine consumer demands and thus build on marketing strategies to fulfill the consumer's wishes and desires. Therefore, the use of social media tools, which provide easy communication with consumers, has gained importance instead of the use of traditional media. (Trainor et al., 2014).

In the past, the customer could get ideas about the product from a limited number of people around before deciding to buy the product. However, today, with the increasing use of social media, the opinions of these few people have been replaced by the opinions of a much bigger consumer mass (Scott, 2010). Accordingly, the consumer finds the opportunity to have more information about the product and can make more rational decisions in the light of this information.

In addition, the widespread use of the internet technologies can lead to an increase in the knowledge and experience of the online consumer. Because of this, today, many businesses have come to realize that increased interaction with consumers and intermediaries and increased use
of social media provide more effective opportunities to meet customer demands. As a result, many businesses have started to use social media actively in their marketing programs (Hensel & Deis, 2010).

Social media allows for measuring the positive or negative attitudes of millions of consumers about the products and brand. This situation is both advantageous and disadvantageous for businesses. Businesses have to determine a new road map according to comments and reactions to the product. A marketing approach that uses social media tools such as YouTube, Facebook or Twitter is necessary, and this marketing approach is called social media marketing. (Samer et al., 2010).

Social media marketing is the process by which businesses make marketing efforts via social media channels (Kabani, 2010). According to another definition, social media marketing is a technique of using individuals and social media channels that have influence over each other via sharing in social networks, for organizational purposes (Singh, 2010: 10). Social media marketing puts customers at the center of the businesses and offers new tools to encourage businesses to connect with customers and listen to them (Smith and Zook, 2011: 4). Marketing activities via social media channels provide significant advantages for increasing the visibility of the business website and drawing attention by reaching large communities that would not be possible with traditional marketing channels. Social media marketing can be used as a tool to create brand awareness, to learn consumer ideas, to benefit from crowds, to identify idea leaders in the community, to spread messages in the virtual environment, to develop customer databases, to instill brand confidence in consumers and to enhance brand image.

According to another definition, social media marketing is a tool used to create brand awareness, to explore consumer ideas, to benefit from crowds, to identify opinion leaders, to spread private messages as viral (spreading like the virus), to develop consumer databases, to instill brand confidence in consumers and to improve brand image (Lei et al., 2017).

In the light of these definitions, social media marketing aims to present the content needed by customers when they need it on their social media networks where they exist with their personal choice. Companies are able to share their promotion efforts for themselves and their products thanks to social media tools directly to the target market without the need for specialized media organizations.

The increase in consumers’ use of social media forces businesses to observe and change their marketing strategies. Businesses can increase marketing communication and improve the loyalty of the consumers with the ads they place on social media, the comments they make on their
pages, the feedback they receive and share in social media, or the web addresses of brands or the business. The benefits of social media for businesses in marketing activities can be listed as follows (Zimmerman & Sahlin, 2010):

Getting to Know Consumers Closely: Advertisements that businesses place on their social media sites and connection with consumers via these sites provide them with a better understanding of consumer habits and the behavior of prospective consumers.

Promoting Services and Products: Businesses can introduce new services and products to a much wider audience using social media sites.

Decrease in Promotion Expenses: Businesses or brands have taken significant cost advantages by benefitting from the cost advantages of social media, both by making less marketing expenditure and reducing marketing budgets.

Increasing Brand Awareness: Businesses' marketing activities on their social media sites generate brand awareness by reaching a large number of users and affect users' perceptions of the business positively.

Providing Branding Facilitation: At the forefront of marketing communication's goal is to provide product awareness, to create visibility and awareness. If the business or brands can read and display the brand name correctly and accurately on the social media platforms, the consumer of the brand name will be more likely to remain in consumers' minds.

Social media marketing allows businesses to gain new customers, increase profitability, reduce advertising costs, and use consumers as brand representatives. Social media enables customer relationship management and facilitates feedback from consumers. Finally, to summarize the issue of social media marketing, shopping on the Internet has become one of the most important events that has emerged in recent years. Therefore, as a result of the merging of marketing with the technology in shopping on social networks, this subject gains more importance for academicians. Today, social media marketing is a channel that is being used increasingly day by day. This is becoming the first source of revenue for institutions and organizations (Handley & Chapman, 2012).

What makes social media marketing different from traditional marketing?

Marketing activities using traditional media are not as effective as in their first period. Traditional forms of media have led to a number of adverse situations that causes consumers to lose their trust both due to competition
and commercial concerns. Social media marketing is striving to reach its customers with a full identity change. Social media marketing focuses on listening and responding more than telling. One of the differences between social media and traditional media about marketing is making the new product take its place in the network instead of taking an active role in promoting it. (Keegan & Rowley, 2017).

The culture of participation is at the core of social media, and it needs to be embedded in the marketing techniques and used in these marketing processes. The participation platform, which changes marketing, not only changes the rules of the game, but also expands the context with new players and strategies. There are reasons that make social media marketing different from traditional marketing strategies. They can be specified as (Weinberg, 2009) the following:

Social media marketing allows for the creation and discovery of new content. If the information, visuals, video or sounds existing in social media tools as component marketing activities attract the consumer's attention, this content is shared in other social media tools and viewed by a large number of potential consumer candidates.

Social media marketing increases the traffic of the website of the organization or the brand. Web traffic refers to visits via search engines and other social media tools to the website of the business or the brand, and it shows how consumers track and adopt the business or brand.

Social media marketing has strong relationships with consumers and social media users on behalf of businesses and brands. Businesses and brands that spend time and energy on social media platforms have a strong relationship and communication with consumers via these tools. It is known that when adherence between the business and the consumer increases, it will also increase the positive perception of the business or the brand in the consumer's mind.

Although social media tools seem to be at the forefront when traditional and social media tools are compared, marketing activities based on traditional media have a low intensity and high profitability, while social media marketing activities are more intensive but at a low level of profitability. In addition, traditional and social media have mutual dependence on each other. This dependency emerges when an activity in social media takes place in traditional media, and the content that is served via traditional media triggers user-based content on social media platforms (Stephen and Galak, 2010).

In today's marketing trends, the points that trigger the transition process from traditional media-based marketing strategies to social media
marketing need to be evaluated separately in terms of businesses, brands and consumers.

From the viewpoint of businesses and brands, we are in a period when the effect of the promotional campaigns in the traditional media is low, the cost is high, and the customer feedback is tough (Aral et al., 2013). However, mass communication involving mass messages created with the help of traditional media tools often does not reach the actual target audience. The presentation of similar content in similar ways in TV commercials on TV channels has resulted in consumers using their preferences for thematic channels that specialize on certain topics (Peters et al., 2013). The high cost of marketing activities via traditional media, the one-way communication, the inability to deliver personalized messages to featured receivers and the incommensurability of the effectiveness of communication activities clearly have directed businesses and brands to social media marketing, which is easy to measure and cheaper, mutual, stronger and easier to reach the classified target audience (Jarvenpaa & Tuunainen, 2013).

When the transition from the traditional media to social media is taken into account in terms of consumers, the results are in line with the preferences of the enterprises and brands. The widespread internet network, the rapid developments in the smart-devices technology, the dramatic increase in the number of users in social networks (Facebook, LinkedIn, Twitter, etc.), the increase of the time spent on social media platforms each year compared to the previous year, the existence of active accounts of most of the consumers of the businesses and brands in social networks suggest that consumers take a warmer look at marketing fairs via social media platforms and take into account other users' ideas and suggestions on social media platforms in the process of making purchasing decisions (Hanna et al., 2011).

**Brand communication concept and definition**

Increasing competition with globalization pushes businesses into seeking new strategic games in the war of market share, namely global domination. (Kitchen & Schultz, 2003). Therefore, the ability of businesses to respond to the global competition with an unconventional management and thinking structure is only possible through the use of the brand as a form of sustainable communication (Algesheimer et al., 2005). In this respect, a brand has a wider meaning than the definition, "a brand is a distinctive name or symbol (such as a logo, a trademark package design), which is designed to identify a product or service by a group of people and
to differentiate it from the products and services of its competitors” (Aaker, 1991). This is because it represents an identity that is integrated with its brand qualities and its components, the friendship and inseparability with associated people. This means that the brand is embodied and can make a good contact and maintain communication with the target audience (Algesheimer et al., 2005).

Brand communication serves to provide information about the brand, to make the brand known, and to create distinctive meanings and associations from other brands that make the brand more attractive (Feldwick, 2003). Brands work as kind of a widespread administrative tool that manages or programs the day-to-day life. In addition, the brand occupies a valuable place in the consumers' mind. This place is of value in the consumers' mind as a source of surplus value and profitability, in that it can provide brand interaction that fits exactly what the consumer wants to do with the brand. In the context of brand communication, the enterprise helps the brand to create a positive image, establishing relationships with consumers, distributors and employees (Arvidsson, 2006).

Brand communication is the integration of all communication efforts that businesses plan to achieve their goals and implement their strategies for this purpose. In terms of companies, brand communication is a holistic communication strategy delivering a message to the target audience with public relations, direct marketing, personal sales, sales development, product placement and advertising activities. For successful brand communication, the information about what value the brand offers and the content must be clear, consistent and continuous. There must be conformity and harmony between the promises of the brand, communication tools and messages. (Arruda, 2009). Brand communication is a concept that creates shared meanings beyond delivering an informative message from the brand to the individual. Brand communication affects consumer behavior with connotations that provide the right link. Brand communication is shaped by the codes and social conventions shared by consumers, as an indicator system that conveys brand promise and location (Oswald, 2012).

The main aim of the communication is to be able to give positive and impressive messages to the consumers about getting the products of the enterprise. For this purpose, brand communication aims to deliver the correct messages via correct channels, at the right time, in an integrated manner to the right target group. In this context, it is possible to distinguish the purposes of brand communication as follows (Tekin & Ozturk, 2010):
Developing product-brand needs: Consumers do not choose to purchase if the product or the brand doesn't meet their needs or expectations. The first key requirement that a brand must fulfill is to contain features that meet the needs of the target group. At this stage, it is attempted to create a need or to increase the existing demand for the product or the brand. For example, when a new product that is not in the market is presented to the market for the first time, demand is created by delivering effective communication messages to consumers about what kind of need it meets or what advantages it has compared to the existing products. In non-new existing products, brand positioning should be made with brand communication efforts, emotional items should be separated from competitor products, a different psychological benefit should be presented, and the existing demand should be increased in this way.

Providing brand awareness through recognition and recall: Identification of a brand by its visual characteristics, its identification with the product, and the ease with which the brand comes to mind in case of a need for the product all indicate that the brand has raised awareness. The brand is a whole with its name, logo, formal features, color, organized and supported activities, distribution channels and price. This integrity ensures that the brand is recognized and remembered.

Creating brand information: It means that brand information is formed if consumers have the necessary information about emotional and rational benefits and basic qualities of the product and the brand. The quality and quantity of brand knowledge enables the brand to be in a strong position against the competitors and therefore be preferred. Creating brand information with the help of brand communication plans events that will allow the target market to add new things to existing information stored in memory. Informative news in the media about the product, articles, expedient sponsorships, social responsibility campaigns and advertisements aim to raise awareness among consumers about the product and to establish brand identity at the same time. In brand communication, the process of establishing brand knowledge is generally carried out by public relations and advertising. However, personal sales, direct marketing, point-of-purchase communication and sales development efforts also contribute to brand awareness efforts.

Creating brand attitude: If there is no brand attitude that can be defined as the perceived value of the brand, or if there is an undesired attitude, it is necessary to start to create an attitude in the desired direction. Positive and moderate attitudes should be strengthened. Brand-focused periodic and long-term events, as well as the media's positive attitude
towards the brand, help to build a positive attitude or consolidate the attitude of the target audience.

Providing brand loyalty: Brand loyalty, which can be defined as emotional attachment and relationship between brand and consumer, is among the main targets of brand communication. Brand communication facilitates the continuity of sales by realizing brand loyalty. The most effective brand communication tools to establish brand loyalty are often public relations and direct marketing.

Brand communication in social media marketing

The main purpose of brand communication is to reach the target group, i.e. consumers, to have the desired perception about the brand and to create "customers" from them. Therefore, brand communication has to use the communication channels used by the consumer. With the widespread use of the Internet, a new one has been added to the communication channels that brands use in brand communications. As a first step in brand communication in this period, brands have taken their place in this new environment with web pages. Attempts to provide interaction in communication began with "information forms." In this period, template responses were prepared to respond to on-line inquiries and automated response systems were used without human intervention. Later on, the "World Wide Web" was seen as a democratic force amongst stakeholders and institutions (brands) that enabled small groups to reach brands and even their managers (Yan, 2011).

The boundaries of "communication" and hence the interaction have been completely changed with the reflection of the changes taking place in information technologies to mobile communication in an integrated way. Now, consumers have become connected to each other both on a virtual scale and on a global scale. This revealed a situation where the consumer is not only facing the brand as an individual, but also as a person who may turn into the opinion leader at any moment. In addition, the characteristics of the consumers that brands will communicate with have also changed. Thanks to the Internet, a more conscious consumer profile was born sharing experiences, benefiting from others' experiences, commenting and complaining. Moreover, these comments mostly don't remain only on the Internet; the brands on which the reactions or interactions are focused are on the news in the traditional media (Acikel & Celikol, 2012).

Brands are trying to be aware of these reactions, to follow comments about themselves, to answer questions, to find solutions to criticisms, and even more importantly, to direct this communication which is not under
their control indirectly by existing in all tools used by consumers in the social media. Brands that were not being active in social media with their websites have begun to appear on web pages such as Facebook, Twitter, YouTube and Instagram just like a consumer (Zaglia, 2013). While trying to establish positive relationships with their followers, they try to add new users to their networks. Undoubtedly, both the structure of social media and the communication formats of consumers with new features in the social media have changed the tactics, language and frequency of brand communication (Sirapracha & Tocquer, 2012).

The brand, which is the subject of brand communication with social media, is no longer in a position to decide what is to be thought about itself. Admittedly, there has been no change in the ultimate goals of the brands. The ability to use communication channels like brands promoted consumers to the user position in communication channels from being audiences, listeners and readers. Brands had to accept this and act on the new consumer's ability to respond instantly to their brand communication efforts (Yannopoulou et al., 2013).

For brands, social media is both a new area of responsibility and the market itself. In this case, it is inevitable for the brands to take part in social media, which is intensively used by individuals. Thus, while the continuity of communication is ensured, it is seen as an important step to achieve being friends with consumers.

**Brands and blogs**

Brands, who have realized the "impression" power of blogs, only communicated with blog authors to make them brand voices in the beginning. More recently, the increasing power of social media, and the fact that brands have profiles on these platforms just like an individual, have brought with it the idea that "brands can also have blogs" (Scoble & Shel, 2006). In terms of marketing communications for brands, blogs provide important advantages in getting feedbacks on products and services, in improving customer relations, in providing new ideas and research, in communicating corporate messages, in speed and flexibility, in personalizing institutions, reaching the target audience at a low cost and managing crises (Onishi & Manchanda, 2012).

Brands can create a transparent structure for communicating with employees, stakeholders, and target audiences thanks to their corporate blogs, and are able to get more interaction from their websites. Constantly updated corporate blogs can also be ranked and measured in search engines with the effect of the number of the followers (Wang et al., 2012).
However, as is the case with all brand management and brand communication efforts, opening up a "corporate blog" requires a series of research and a serious strategy beforehand. It is crucial for a brand to clearly define a number of issues such as the adequate time to have before opening a blog, constant content creation, preparation of communication plans for possible crises, and the choice of bloggers. Otherwise an unsuccessful blog initiative could damage even a high standing brand and overturn its brand image (Smith & Zook, 2011).

It is very important for a successful brand blog to have "human" features. Any communication made in the form of marketing a brand is noticed by the user, and the benefits provided by the blog, different from traditional communication tools in marketing communication, disappear (Scott, 2010).

**Brands and forums**

The forum logic lies in the roots of the individual use of the Internet. Forums based on the communication and sharing of people gathered in the direction of common features or interests emerged as "chat rooms" in the Web 1.0 era. The widespread use of the Internet in the Web 2.0 era and after has widened the concept of "common interests" and almost every group had a "forum." Regardless of the user's interest, the fact that it is related to "consumption" made brands become involved in forums (Scott, 2010).

While brands can learn about the ideas of many users in their forums, they also have a chance to observe their industrial perspectives, needs, expectations and direct R & D work accordingly. It is also possible to receive feedback on every marketing phase from the product itself to the distribution, from the after sales service to the advertising work on this channel. In short, forums have been the answer to the question, "What do they say about me?, that has always been a mystery for the brands. (Scott, 2010). However, the point to be underlined here is that brands should not use forums only to observe consumers. Brands, like consumers, should be in a position to be involved in the subject, to comment, to criticize and to respond to dissatisfaction. Even today, many brands create their own official forums and allow consumers to interact with each other and with brands (Arca, 2012).
**Brands and wikis**

The corporate wikis of brands help the brand / organization gather information from various sources, share plans and ideas, and collect information. In addition, brands can answer questions about the brand via the corporate wiki. With the sense of being involved in the social media, a brand's customers or potential consumers are able to share their interests in wiki to interact and "participate" (Handley & Chapman, 2012).

Giving the opportunity to users to freely express ideas in a wiki prepared for the brand is seen as a proactive effort to free up long-lasting crisis situations. In the wikis of brands (Hutter et al., 2013), there is corporate information like in other social networks, photo galleries can be seen, Wiki activities can be controlled, links can be given to other social networks and for those who want to open a new wiki page a rich page is created by giving various links according to the content of the mark.

**Brands and social networks**

Social media allows brand managers to communicate directly with consumers at the design stage of the brand. In this process, consumers are in the designer position of the brand at the same time. In other words, the consumer turns into an active participant instead of a passive receiver of the brand. Consumers' participation and becoming active in the design process of the brand facilitates brand purchase behaviors and establishes loyalty, in addition to ensuring the consumers receive communication messages effectively (Naylor et al., 2012).

Millions of users share content on the most popular social networks such as Facebook, Twitter and YouTube. Brands aim to be the "shared content" with elements such as products, events, brand values, videos and advertisements. At the same time, the brands in these sites with their own accounts and profiles want the consumers to be friends with themselves, thus supporting their cooperation in the production of their content and find an opportunity to have individual contact with the consumer. However, the point to be underlined at this point is that not all of these sharings are completely free for brands. A certain amount of money is paid for the shared content to reach more than a certain number of users (Go & You, 2016). Nevertheless, it is possible to say that social networks are cheaper than conventional mass media and are a more effective medium for peer to peer communication.
Conclusion

Social media marketing is still in its childhood period. When an organization wants to invest in social media marketing, it must understand the importance of social media marketing in marketing strategy and its contribution to this strategy.

We live in the age of customer satisfaction. Today, the interaction is at the forefront, not the sale. Organizations have a lot to learn from their customers. With the use of social media, customers can be identified, their feedback can be listened to, and these notifications can be used for the development and renewal of products and services.

- Social media marketing is not a mass advertising strategy and can be used to identify peer groups and to advertise to specific groups. Social media can be used to define influences, and this leads to possible customer acquisition.
- Social media marketing, mostly from multi-tasking phenomena, requires new advertising methods because the attention of online junta is very short. The advertisement must be innovative and interesting to take the attention of prospective customers and social media users who do more than one job at the same time.
- At the same time, the message should provoke the recipient for action. The buyer can look for a detailed description of the service / product, suggest it to a friend, or intend to buy it. Therefore, if an advertisement wants to sell something, it should be possible for the prospective customer to purchase with minimum effort.
- Similarly, social media can be used to increase customer loyalty through customer support services, thereby reducing customer loss.
- Social media marketing can also be used to prevent any negative publicity. But brands must be cautious in this regard, because if it is done too much, customers and stakeholders can get angry.

Businesses should ensure that social media marketing is successful in the long term by developing successful social media marketing strategies for positive and negative situations. Thus, the spread of information that may adversely affect the sales and image of the business may be prevented in the virtual environment.

If you want to implement a successful social media marketing, you should keep the following in mind:
The firm should not follow the majority just because the others are doing something. First, it should be analyzed whether social media marketing can really benefit the brand or not. The firm should find out whether its social media marketing strategy is compatible with the brand or not.

Social media marketing is not an independent marketing tool, and it should be used in conjunction with other traditional marketing strategies.

Successful brand communication in social media can provide the following:

- Brand communications can be done in a unique, original, and engaging tone, helping to articulate brand identities.
- The brand must be linked to the best customers or brand sympathizers, and they must be presented with reasons for them to like or follow the brand on social networks.
- The brand should contact people to keep its communication more participative and personal.
- Through inspirational and effective people, other people should be influenced by brand-related messages on their networks.
- Social integration of brand and product experiences must be ensured, making them more beneficial and useful.
- The brand must be renewed by observing the status of the brand in social channels and improving its brand experiences.

References


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CHAPTER SEVEN

VALUE CO-CREATION IN OMNI-CHANNEL RETAILING: REFRAMING THE SERVICE-DOMINANT LOGIC PERSPECTIVE

GÜL DENKTAŞ ŞAKAR AND EBRU SÜRÜCÜ

Introduction

One of the main factors of the global economy is retail industry. Retailing has experienced an enormous change in the past decade. In the modern world, digitalization (both online and mobile), competition, trying to meet customers’ needs and the need for providing better service have made it necessary to constantly innovate in retail industry. Together with the introduction of the online channel and additional digital channels like mobile channels and social media, retailers have modified their business models, processes and the retail mix. A recent study by Deloitte (2014) revealed that customers are using multiple channels on their buying processes. 20% of the customers follow brands on social media, 75% browse and research online before going to a physical store and 56% use their smart mobile devices for shopping-related research while they are in the store. Moreover, another study shows that the customers’ expectations about multichannel shopping have been increased (Forrester Consulting, 2014). In the light of these studies, it can be deduced that there has been a shift from single channel retailing systems to omni-channel retailing systems in accordance with the developments in the marketplace. Since the line between the online and physical channel is blurred, retailers should develop and design appropriate strategies and offer modified value propositions to the customers through omni-channel management practices. Omni-channel retailing seems to be the future of e-commerce while offering seamless shopping experience via digital technologies.
During the omni-channel retailing process, value is co-created with customers, suppliers and partners. Service-dominant logic (SDL) views the customers and related actors as the main value co-creators and resources during the overall process of service offerings, and the integration of this approach with omni-channel retailing is considered to provide substantial benefits in order to provide more flawless omni-channel service offerings and value propositions. As Hübner et al. (2016) purported, the rapid development of online sales and changing customer behaviour mainly triggered the research on retailing with multiple channels. Hence, omni-channel retailing research mostly focuses on channel-specific requirements, online retailing and customer behaviour (Verhoef et al. 2015; Kozlenkova et al. 2015). Current literature lacks the understanding of the value co-creation concept from the viewpoint of omni-channel retailing and SDL perspective. Moreover, in his study, Verhoef (2015) mentioned the movement from a single channel strategy to omni-channel retailing has not been conceptualized despite its growing importance in practice. Hence, this study aims to conceptualize value co-creation within omni-channel retailing with respect to SDL through digital technologies.

In the light of these, this chapter aims to advance the theoretical understanding of the omni-channel retailing from SDL via digital technologies. Although previous studies heavily focused on customer-based value propositions and value-co-creation in the retailing industry, this study takes a holistic view of the main actors involved in the omni-channel retailing environment by focusing on the main determinants for value co-creation from the viewpoint of each critical actor. The originality of the study lies in its purpose to explore the main contributions of each critical actor in the omni-channel retailing environment supported by the resource use and integration schemes. To this end, the study focuses on the retailers’, suppliers’/partners’ and customers’ value propositions and value-in-experiences. This paper presents a unique theoretical framework of omni-channel relationships considering value co-creation. The framework has three main components named as retailers’ value propositions, suppliers’/partners’ value propositions, and the customer-based value propositions, value-in-experience. Moreover, these components are classified under three main sections named as retailers’ value proposition phase, suppliers’/partners’ value proposition phase and value-in-experience phase. To achieve this goal, this chapter proceeds as follows: firstly, a detailed literature review on omnichannel retailing integrated with SDL perspective as well as the main digital technologies used in omni-channel retailing is provided. Then, a theoretical framework
supported by the research propositions is explained. Lastly, conclusions
together with managerial and practical implications are presented.

Radical change: From single to omni-channel retailing

The developments taking place in the digital environments as well as retail
markets necessitated e-tailers, brick-and-mortars and brick-and-clicks to
reconsider their strategies and business processes. The single channel
system is not considered sufficient, and traditional retailers are looking for
ways to go online as well as e-tailers are trying to establish a physical
presence in the market (Deloitte, 2015). Several definitions have been
developed for the retailing practices in multiple channels such as multi-
channel, cross-channel and omni-channel systems. Although these terms
are mostly used interchangeably and without clear distinction (Banker and
Cooke, 2013, Beck and Rygl, 2015), there are minor differences in the
concepts and the components of each term. Single channel retailing is a
system where retailers only operate one sales channel and a logistics
system, which includes exclusively brick and mortar retailers and pure
online retailers (Avery et al., 2012; Hübner et al., 2016). Maintaining the
current situation with global players with high investment in new
customer-centric services is no longer considered an option since this
results in higher levels of expectation amongst customers and higher levels
of operational complexity (IBM, 2007). Retailers’ response to these
developments taking place in the market was a multi-channel strategy.
This retailing perspective originated in the 1990’s when traditional brick-
and-mortars began to sell their products online, in addition to their already
existing channels such as catalogue, call centres and physical stores
(Grewal et al. 2004). In multi-channel retailing, physical stores supply
chances for pre-purchase testing, immediate satisfaction and personalized
interest although websites provide wide accessibility, product data and
innovation (Grewal et al. 2004). The retailer offers several channels as
independent entities in order to coordinate them with specific customer
segments (Frazer and Stiehler, 2014; Zhang et al., 2010). As a definition of
multi-channel customer management, Neslin et al. (2006) mentioned that
it is “the design, deployment, coordination, and evaluation of channels to
enhance customer value through effective customer acquisition, retention,
and development.” The common features of a successful multiple channel
strategy involve highly-integrated promotions, product consistency across
channels, an integrated information system which shares customer, pricing
and inventory data across multiple channels and lastly a process that
enables pick-up for items purchased from an online shop (Berman and
Thelen, 2004). Use of multichannel allows the companies to develop long-lasting relationships with the customers, offering at the same time a great deal of information, products, support and a combination of these (Rangaswamy and Van Bruggen, 2005). Multichannel strategy is the opportunity given to the consumer to obtain the same product, from the same retailer through multiple purchase channels (Porto, 2006). In order to succeed in this strategy, companies should determine specific goals for several channels utilized and hence the customer needs to know what to expect and will find in each channel.

Although multi-channel strategy allowed the customers to benefit from more than one channel system, there were bottlenecks in providing the seamless buying experience and satisfying the expectations of the customers which led to the use of cross-channel retailing strategy. Effective operation of multichannel strategy becomes very complex due to infrastructural issues and decision making, and product prices, product delivery logistics and options of offers can be listed as some of the challenges of the companies adopting multiple channel strategies. Other main challenges in multichannel strategy are mainly listed as data integration across channels, understanding customer behaviour in a multiple channel environment, channel evaluation, allocating resources across channels, coordination of channel strategies (Neslin et al., 2006), organizational structure, data integration, consumer analytics, evaluation and performance metrics (Zhang et al., 2010). Cross-channel integration is suggested as a way to employ multiple channels or media, which means the “use of more than one channel or medium” (Stone et al. 2002) and “employment of websites and physical store-fronts possible in addition to other channels” (Goersch, 2002). Cross-channel retailing is related to using multiple channels to complete one transaction, and it includes the first attempts to integrate brick-and-mortar stores and web channels and enhance the cross-functionality between them (Cao and Li, 2015). If a customer sees a product online and decides to buy it in the store rather than purchasing it online, it can be mentioned as a cross-channel activity.

In accordance with the digitalization in marketing and retailing (Leeflang et al., 2014), there has been continuous change in the retail landscape. Introduction of mobile channels, tablets, social media, and the integration of these new channels in online and offline retailing triggered the move from multi-channel design to omni-channel retailing model (Rigby, 2011). Moreover, additional factors triggered the development of retailing channels towards omni-channel structures. Technological developments are mainly the core factors that influence the development of omni-channel systems since more advanced technology allows for better
integration of the retail channels (Oh et al. 2012). Change in the customers’ shopping patterns is also a critical factor for which the retailers had to take action to meet these changing needs. Customers prefer to combine various channels and approaches such as searching online to buy offline, searching offline to buy online and everything in between (Wind and Mahajan, 2002: 65). Also, customer centricity has become necessity for retailers to adopt their strategies based on the needs and expectations of the customers. Shah et al. (2006) defined the term as the creation of value for the customer rather than focusing on selling the product, which is mainly the characteristic of product-centric organizations where the product remains at the core of all organizational activities. Hence, retailers should strive to be more customer centric in their omni-channel strategies for providing a seamless shopping experience to the customers. Becoming more customer centric may offer new solutions for generating new competitive strategies for the retailers. Competitive strategies of the retailers are expected to change as a result of the shift towards omni-channel retailing since new channels will break down the old barriers such as geography and consumer ignorance, and retailers together with their partners will need to consider their current competitive strategies (Brynjolfsson et al., 2013). Omni-channel retailing is defined as the concept of complete integration of all channels, and it has developed as an extension of multi-channel retailing (Frazer and Stiehler, 2014; Rigby, 2011). “Omni” is a Latin word meaning “all” and “universal.” Parker and Hand (2009) and Ortis and Casoli (2009) were the first scholars to use this term, and they mentioned that the omni-channel shopper is an evolution of the multichannel consumer who uses the channels simultaneously. In the light of academic literature, Rigby (2011) defined omni-channel retailing as: “an integrated sales experience that melds the advantages of physical stores with the information-rich experience of online shopping.” Omni-channel is different from a multi-channel strategy, which is based on various channels involving retail stores, mail order catalogues and websites (brick and mortar stores), that are used to target the same customer (Wallace et al., 2004). An omni-channel strategy seeks to create a holistic shopping experience by merging various touch-points, allowing customers to use whichever channel is best for them at whatever stage of the customer journey they are in (Harris, 2012).

As Neslin et al. (2006) defined, channel is “a customer contact point, or a medium through which the firm and the customer interact,” and it can be mentioned as a key concept in omni-channel retailing. There is an ongoing change in customers since they become omni-channel shoppers by using multiple channels including physical stores, websites, social
platforms and mobile applications for conducting a single transaction (Parise et al., 2016: 412). The main aim of omni-channel retailing is to make the customer experience as seamless as possible (Müller-Lankenau et al. 2006; Griffiths and Howard, 2008). By providing a seamless consumer experience across all available channels, omni-channel strategy requires retailers to adjust their physical (store-based) and virtual (online and mobile) channels through the coordination of order management, fulfilment, and logistics processes (Burt and Sparks, 2003). Considering the customer side, social media has helped customers to access a huge amount of information and buy the products they require anytime and anywhere. This also triggered retailers to remove barriers within the channels and provide some cross-channel services such as “click and collect,” “order in-store, deliver home,” “order online, return to store,” “showrooms,” and other combinations of online and traditional retail activities (Piotrowicz and Cuthbertson, 2014). As Verhoef et al. (2015) mentioned omni-channel retailing has started to take a broader view on channels and how customers are influenced and move through channels in their search and buying processes. The authors defined omni-channel management as: “the synergetic management of the numerous available channels and customer touchpoints, in such a way that the customer experience across channels and the performance over channels is optimized (Verhoef et al., 2015: 176). In this system, customers can choose to use any of the possible channels during any phase of their buying process depending on their needs. Integration strategies include not only attention to online sites and physical stores, but also other points of contact such as catalogues, telephone sales, mobile apps and social media for retailers. Through the use of omni-channel retailing, the retailer takes a holistic approach and provides a seamless cross-channel experience for the customer (Oh et al., 2012; Verhoef et al., 2015). As Parise et al. (2016) highlighted, there may not be a choice between online versus physical stores since there will be a complex mix of touchpoints to the retailer determining the customer experience. Although there are various incentives for the implementation of an omni-channel retailing strategy, there are also some factors to be considered by the retailers. These are mainly an increased level of complexity due to the many structural differences in terms of logistics, customer behaviour, return policies and service expectations between the channels (Johnson and Whang, 2002); high costs of changing the processes and investing in new system and technologies (Herhausen et al., 2015); risk of internal conflicts when the goals of various channels are different (Agatz et al., 2008) or simply
There is an increasing interest in omni-channel and partly multi-channel retailing issues in the literature focusing on diverse areas and disciplines. Technologies in omni-channels (Parise et al. 2016), logistics and supply chain perspectives including click and collect, in-store returns, in-store returns of click and collect orders (Piotrowicz and Cuthbertson, 2014; Hübner et al., 2016; Ishfan et al., 2016, Jeanpert and Paché, 2016) personal selling and sales tools (Herhausen et al., 2015; Cummings et al. 2016), omni-channel promotion providing consistent information to facilitate and encourage combined channel use- (Oh et al. 2012); customer experience (Peltola et al., 2015, Lemon and Verhoef, 2016), marketing strategies (Neslin et al., 2006; Verhoef et al. 2007; Van Baal, 2014), channel integration and design (Berman and Thelen, 2004; Lee and Kim, 2010; Oh et al. 2012; Cao and Li, 2015, Picot-Coupey et al. 2016), performance measures related to omni-channel initiatives (Cook, 2014) and definition-related studies (Beck and Rygl, 2015).

**Digital technologies in omni-channel retailing**

Omni-channel retailing aims to offer a unified customer experience while providing a smooth and seamless experience to the customers (Piotrowicz and Cuthbertson, 2014) disregarding which channel is used (Brynjolfsson et al. 2013; Rigby, 2011). The greatest support comes from digital technologies during the achievement of this aim. According to Piotrowicz and Cuthbertson (2014), digital technologies include smart mobile devices and related software including apps, mobile payments, e-valets, e-coupons, digital flyers and location-based services, QR codes as well as the new in-store technologies (virtual screens and aisles, virtual mirrors and fitting rooms, digital signage, intelligent self-service kiosks, vending machines and dynamic menus). Nash et al. (2013) highlighted the importance of related technologies to provide data-enabled customer interactions and advanced analytics for the creation of enhanced customer experience, which results in increased customer satisfaction, loyalty and greater customer lifetime value. Customers can do their online shopping from a desktop or mobile device, or smartphone or in a brick-and-mortar store. Moreover, these technologies enable a highly personalized and immersive environment that permits exchanging information between the brand and customer. Besides this, thanks to digital technologies, customer real time experiences are transformed into context-specific expertise whenever and wherever a customer needs it (Parise et al., 2016). Moreover, since these
technologies increase the customer touchpoints, they can be seen as another area where a customer can co-create value (McNeal, 2013). All of these technologies play an important role in the transformation of “brick-and-mortar” to “click-and-order”. These digital technologies are grouped according to their usage areas in Table 7-1.

### Table 7-1. Digital Technologies in Omni-Channel Retailing

<table>
<thead>
<tr>
<th>Technologies</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smart Mobile Devices</td>
<td>Smart Phones, Tablets, Phablets</td>
</tr>
<tr>
<td>In-Store Technologies</td>
<td>Virtual Reality, Augmented Reality, Augmented Reality Mirrors, Intelligent Self-Service Kiosks, QR Codes</td>
</tr>
<tr>
<td>Emerging Technologies</td>
<td>Wearable Technologies (smart watches &amp; smart glasses)</td>
</tr>
</tbody>
</table>

Source: Compiled by the authors.

With using technologies that are shown in Table 7-1, firms generate data and this data is used to gain newer insights, better positioning and more effective communication strategies (Porter and Heppelmann, 2014). Moreover, these technologies enable seamless shopping experiences at each customer touchpoint (Brynjolfsson et al., 2013) while helping retailers to create new relationships with their customers and develop new strategies and competencies. By using all these technologies together, retailers can establish an improved omni-channel ecosystem (Balaji and Roy, 2017). Value co-creation takes place when a customer interacts with technologies during omni-channel shopping, which can motivate its adoption and continued use (Vargo and Lusch, 2016). Smart mobile devices, software and in-store technologies must work within an overall customer engagement strategy that allows any and every medium and delivers an optimized browsing and buying experience without considering how the customer executes the purchasing activity.

#### Smart mobile devices

Smart devices are electronic gadgets that are able to connect, share and interact with its user and other smart devices such as smart phones, tablets,
phablets, smartwatches and smart glasses (Techopedia, 2017). According to Brynjolfsson et al. (2013), all of the omni-channel efforts will succeed though the use of smart mobile devices. Since customers don’t want to lose their mobility during the shopping process, smart phones are considered very popular tools for omni-channel retailing activities. In a study, Krueger (2015) mentioned that 71% of the customers using their smart phones implied that smart phones became an important part of their shopping experience. These devices are not restricted to only smartphones; tablets and phablets are also considered other devices used in omni-channel retailing. According to a recent study, 40% of the online shopping customers uses smartphones, tablets and phablets for product research and comparison and uses other channels to finish buying activities (Gozutok Unal, 2017).

**Software technologies**

Applications, mobile payment tools, voice digital assistants and digital signage are the key software technologies that are used in omni-channel retailing. Currently, organizations use mobile applications to build a personalized, immersive customer experience. A mobile application is defined as “a software designed to run on a mobile device such as smartphone or tablet computers” (Techopedia, 2017). Mobile apps have a huge usage area in omni-channel retailing such as rewarding customers and delivering coupons. Location-based applications, mobile payment applications, loyalty program applications, barcode scanning applications, and VR and AR applications are the most commonly used applications in the omni-channel retailing. Location-based applications are widely used by retailers. One of the usage areas is geolocation targeting which is sending messages or electronic coupons to customers’ smart phones when the customer enters a store or a targeted location (Meyer, 2016). Besides this, to make customer analytics and create their own reward program based on these analytics, retailers can prefer to use location-based applications (Crowe, 2011). For example, Walgreens has collaborated with Foursquare, a location based social networking website, to give customers electronic coupons on their phones at the moment when they enter a Walgreens store. Doot is another location-based application which enables leaving private or general messages to friends and/or families about restaurants and stores, and these messages becomes activated when designated people reach the application (Brynjolfsson et al. 2013). Mobile payment applications are other software tools that are employed by both retailers and customers. Mobile payments are defined as “payments made
or enabled through digital mobility technologies, via handheld devices, with or without the use of mobile telecommunications networks.” These payments are digital financial transactions, although not necessarily linked to financial institutions or banks (Dinez et al., 2011). Mobile payments are seen as catalyst to omni-channel retail activities (McDermott, 2016) since they can be used in any type of services such as travel ticketing, product purchase or finishing payments in physical stores with a smartphone “wallet” or other payment applications (Lukies, 2011). Google Wallet and PayPal are the most well-known examples of mobile payment applications. Retailers mostly prefer to use loyalty programs and apps to increase customer retention rates. One of the well-known apps is Loopt, which enables real-time location-based services focusing on specific users and popular locations. Moreover, Loopt can be used as a virtual loyalty card, which also enables retailers to contact directly with consumers based on their locations (Brynjolfsson et al., 2013). Barcode scanning and VR and AR applications are other crucial applications for both omni-channel retailers and customers. Voice digital assistants are another example of software that affects omni-channel retailing; today’s shoppers prefer to use voice digital assistant on smartphones such as Apples’ Siri, Android’s Google Now and Window Phone’s Cortana to help their daily routine tasks (Parise et al. 2016). These assistants can make recommendations (based on location and other factors) that consumers may not have even heard of, directing out of town visitors to local specialty stores or restaurants (Brynjolfsson et al., 2013). Moreover, voice digital assistants like Nina, offers an intuitive, automated experience for retailers’ all digital channels to engage in customers. This type of software enables virtual assistance in any digital channel (Nuance Communications, 2017). Digital signage is a sub-segment of signage. Digital signs use technologies such LCD, LED, and Projection to display content such as digital images, video, streaming media and information. They can be found in public spaces, transportation systems, museums, stadiums, retail stores, hotels, restaurants and corporate buildings to provide wayfinding, exhibitions, marketing and outdoor advertising (Signagelive, 2017). When digital signage software is installed in locations, it can bring the omni-channel buying experience to a higher level for both consumers and retailers. This software offers flexibility to retailers by increasing the number of buying options, offering inventory information, offering visual products, cross-selling products, educating and informing, empowering the employee and boosting the brand (Khan, 2016). Basically, with the help of this software, retailers increase the touchpoints for the consumer. After adopting this software, Best Buy
increased their sales by offering ship-to options from other stores and even offered express kiosks for their customers (Khan, 2016).

**In-store technologies**

In-store technologies play an important role in offering smooth and seamless omni-channel experiences. Some of these technologies are VR and AR applications, AR mirrors, intelligent self-service kiosks and QR Codes. Virtual reality (VR) includes the use of advanced technologies, involving computers and various multimedia peripherals to create a simulated environment that users can observe as comparable to real world objects and events (Pehlivanis et al., 2004). One of the in-store virtual reality technologies is avatars. This technology has been used by many different industries including energy, automotive and architecture, but now enters into the retail industry, as well. For example, Dassault Systems is improving 3D mannequin and avatar technology and is working with retailers to develop these applications. User-defined characteristics are loaded into avatars like customer sizing and appearance. Tesco has been using this 3D avatar technology and puts trials of the virtual fitting room on Facebook. With this service, customers form their own 3D avatar by uploading two photos, adding their body measures and editing their body and face features; then they try on garments from Tesco and share results via Facebook, Twitter or e-mail (Bodhani, 2012). Augmented Reality (AR) applications can be listed as another in-store technology that retailers use in their omni-channel activities. The implications of AR date back to the late 1960s; however, it has long lived in the shadow of VR. While VR moves customers to a virtual world with unique experiences, AR brings these experiences to the actual world (Klamann and Krastev, 2017). AR mainly aims to create brand experiences, interactive marketing campaigns and innovative product experiences for consumers (Scholz et al., 2016). Mobile devices are mentioned as a popular method for AR applications by connecting the retailers with consumers. Consumers currently use mobile devices in-store to perform price and product comparison to find a cheaper alternative whilst shopping in-store, via bar code scanning or internet search (Piotrowicz and Cuthbertson, 2014). Through the use of AR in-store, there is an improvement in shopping experience since consumers can easily access enriched product information compared to online and physical stores without AR (Poushneh and Vazquez-Parraga, 2017). Dacko (2016) highlighted that since virtual demonstrations of the product in-store are provided, purchase certainty increases through the use of AR. AR technologies are implemented on smart mobile devices by combining
touch-and-feel information in the physical world with online content in the digital world. AR tools manage real-time interactivities between products, physical spaces, brands, and consumers. It coordinates the digital environment on smart devices with the real-time surroundings in a special way that boundaries between them disappear (Javornik, 2014). AR can be seen in different forms such as touch-screen recommenders, virtual mirrors, Google Glass, in-store product videos, virtual screens, and aisles. Through the use of AR software, retailers may show buyers what it would feel like driving a specific car or wearing a specific piece of clothing or makeup (Parise et al. 2016). Augmented Reality Mirrors (ARMs), is another in-store technology that can be used for omni-channel activities that can virtually change the image of the scene reflected in the mirror by means of the AR technology (Portales et al. 2016). Usage of full body ARMs in virtual fitting rooms can be given as the most known example. Intelligent Self-Service Kiosks is another in-store technology that is used for omni-channel activities. These kiosks create customer touchpoints as well. Moreover, customers can start and finish their buying process by themselves by adding bar code scanners and mobile-friendly payment methods (Olea Kiosks, 2017). QR Code is a software that consumers can both use in ordering a product and in the payment process. While comparing prices and gathering information from the Internet for a specific product, consumers scan QR codes. Moreover, these codes are used to see online reviews and exclusive video content (Poncin and Ben Mimoun, 2014).

**Emerging technologies**

Wearables such as Apple Watches, Fitbits, and other wearable devices are seen as another component of an omni-channel strategy. An analyst predicts that the wearable markets will reach over $150 billion annually by 2027 compared to $28.7 billion in 2016 (IDTechEx, 2017; Abhishek, 2016). Even though it can be seen as new technology compared to smartphones and tablets, retailers have already begun to adopt these technologies to their omni-channel retailing strategies. Another wearable technology that is expected to be used in omni-channel is smart glasses. Worn smart glasses will be used by store assistants to help customers who are taking a virtual store visit with the help of a click-to-call button. The remote customer gets connected to the sales person at the store or showroom. They exchange their smart glasses and customers may be able to see physical goods through the eyes of the sales person (Whisbi, 2015).
This can be one of the expected application areas of the smart glasses in omni-channel retailing.

**Value co-creation in omni-channel retailing: Service-dominant logic perspective**

There has been growing interest in service as a fundamental concept within marketing in recent years (Grönroos, 2008, Vargo and Lusch, 2004, Vargo and Lusch, 2008). The concepts of value and value creation have gained increasing attention in marketing since the main focus has shifted from goods to services. Service Dominant Logic (SDL) provides a solid ground for the identification of the value concept within the perspective of both the company and the customer. SDL perspective suggests that an organization should focus on considering the customer as a resource contributing to the creation of value that actually makes the customer a co-creator of value (Vargo and Lusch, 2008). Since customers mobilize knowledge and other resources in the service process that also influence the outcome of value proposition (Ordanini and Passini, 2008), they are viewed as the main actors in the value creation process as well as the co-creators and producers. On the other hand, companies are viewed as co-producers or co-creators of value that participate in the value creation processes of the customer through making value propositions and providing resources for customers (Payne and Frow, 2005, Vargo and Lusch, 2004, Payne et al. 2008). Moreover, Lusch et al., (2010) define the value co-creation network as “value proposing social and economic actors interacting through institutions and technology, to: (1) co-produce service offerings, (2) exchange service offerings, and (3) co-create value.” Two main types of resources are highlighted in SDL: operant and operand resources (Vargo and Lusch, 2004). Operant resources, such as all tangibles resources including the facilities and infrastructure-related properties, are the ones on which an operation is performed to produce an effect. Operant resources, including knowledge, skill, capabilities and all related intangible resources, are employed to act on operand resources (Constantin and Lusch, 1994). Integration of these resources enables the organizations to develop the service provision termed as “value-in-use.” Interactions between the company and the customers play a critical role for supporting the value-creating processes since such interactions permit companies to support a customer’s value actualization processes. The companies gradually become active participants in the customer's value-creating process instead of acting only as a passive facilitator (Grönroos and Ravald, 2011; Grönroos, 2008). The components and the main
assumptions of an SDL approach can be adapted to omni-channel retailing since there are common concepts to be integrated in terms of resources, value-creation processes and the roles of the parties. SDL is based on 10 foundational premises (FP), which constitute a dynamic and service-centred framework (Vargo and Lusch, 2008), and its main assumptions are adapted to the omni-channel retailing perspective as listed in Table 7-2.

**Table 7-2. SDL Reflections in Omni-Channel Retailing**

<table>
<thead>
<tr>
<th>Service-Dominant Logic Perspective</th>
<th>SDL Reflections in Omni-Channel Retailing</th>
</tr>
</thead>
<tbody>
<tr>
<td>FP1: Service is the fundamental basis of exchange.</td>
<td>Omni-channel value-in-experience is the fundamental basis of exchange.</td>
</tr>
<tr>
<td>FP2: Indirect exchange masks the fundamental basis of exchange.</td>
<td>Since omni-channel value-in-experience is provided through complex combinations of goods, money, digital technologies and institutions, the service basis is not always apparent.</td>
</tr>
<tr>
<td>FP3: Goods are a distribution mechanism for service provision.</td>
<td>Goods and digital technologies are distribution mechanisms for omni-channel service provision.</td>
</tr>
<tr>
<td>FP4: Operant resources especially knowledge are the fundamental source of competitive advantage. Skills, competences, capabilities and knowledge when applied are examples of operant resources. S-D logic views operant resources as the primary source of competitive advantage.</td>
<td>Operant resources (mainly the technological infrastructure, programs and devices) supported by the operand resources (skills, competences and capabilities of the partners as well as the employees) are the main sources of superior omni-channel value-in-experience.</td>
</tr>
<tr>
<td>FP5: All economies are service economies.</td>
<td>All economies are service economies enriched by omni-channel customer experiences.</td>
</tr>
<tr>
<td>FP6: The customer is always a co-creator of value.</td>
<td>Omni-channel customers and suppliers/partners are always co-creators of value and value-in-experience.</td>
</tr>
<tr>
<td>FP7: The enterprise cannot deliver value, but only offer value propositions.</td>
<td>The retailers and suppliers/partners can only offer omni-channel-based value propositions.</td>
</tr>
<tr>
<td>FP8: A service-centred view is inherently customer oriented and relational.</td>
<td>The customer always remains at the focus of the service exchange.</td>
</tr>
</tbody>
</table>
**FP9:** All social and economic actors are resource integrators.

**FP10:** Value is always uniquely and phenomenologically determined by the beneficiary.

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**FP (1)** focuses on the omni-channel value-in-experience as the critical component since it may become a complex task for retailers to adapt their existing processes to a new system integrating all types of channels. Since the channels are jointly managed, customers expect to have the same brand experience every time they interact with the retailer (Piotrowicz and Cuthbertson, 2014). According to the SDL perspective, co-creation of value refers to value-in-use, which is determined through the use or integration of resources (Vargo and Lusch, 2004; Lusch and Vargo, 2006). However, in the omni-channel retailing perspective, customer experience should also be considered for understanding the main characteristics of the process. Vargo and Lusch (2006) pointed out this as “there is no value until an offering is used—experience and perception are essential to value determination.” The meaning of value creation as value-in-use is relational and reciprocal, and it is based on perceptions and experiences. Value-in-experience is defined as an effort-based meaning of value creation which is closely related to the SDL perspective since it is aligned with a marketing fulfillment mindset (Grönroos, 2009). Value-in-experience is also closely related to the understanding that customer value is an interactive relativistic preference experience (Holbrook, 1999). As Payne et al. (2008) stated, value is embedded in individuals’ personalized experiences so that the value-in-experience is established as a result of the interactions between the retailer, customer as well as the related partners.

According to Baxendale et al. (2015), experience from omni-channel shopping is notable and revolutionary since continuity of true shopping experience is achieved. The customer may experience all processes regarding omni-channel stages of the retailer and may eventually become omniscient in that he or she perceives and understands all the available and futuristic products from diverse brands (Carvalho and Compomar, 2014). Hence, the retailers should strive to gain an understanding regarding the critical points along their channels for the creation of superior shopping experience. As in **FP (2),** service may not be apparent since there are many other components in the service provision stage including the money transfer, the products, the related institutions as well as the digital technologies used. In the age of digitalization, customers can easily make...
purchases just by clicking or downloading the required app for the retailer so that service-related mechanisms can only be evaluated through the use of digital technologies, devices etc. FP (3) views the goods and the digital technologies as the main distribution mechanisms for omni-channel service provision. Recent developments in information and communication technologies are one of the drivers of digitalization in various industries and they are much related with the shift toward serving customers as they provide companies with tools to reach out to customers’ contexts and customers’ value-creating processes in much better ways than before (Saarijärvi et al., 2014). There are many changes accompanying the omni-channel development in the retail industry and the changes are mainly driven by new technologies. By pointing out the importance of technology in value co-creation, Maglio and Spohrer (2008) suggested that technology is one integral part of value-creation configuration in services. Although mostly tangible aspects of technology are considered, a wide range of technology-related intangible components, including the skills and capabilities to use such technologies, play a very important role in value co-creation.

Such tangibles and intangibles remain at the very focal point of SDL perspective and according to FP (4), operand and operand resources are the main tools that integrate the omni-channel-based value propositions of the retailer, suppliers/partners with the customer. While operand resources are typically tangible and static such as digital infrastructure or devices, operant resources are mainly dynamic and intangible resources, which act on other resources in the value creation process. They may be considered as people’s skills and expertise. According to Akaka and Vargo (2014), technology previously has been treated as an operand resource by highlighting the material characteristics of technology, but it can also be viewed as a dynamic and intangible operant resource. Types of resources to be utilized by the retailer and the customer may be classified according to the SDL perspective that while examples for tangible resources can be the stores and all types of tangible materials used in the stores, all digital technologies including smart mobile devices, software technologies, in-store technologies and emerging technologies and selling competences and the skills of the salesperson can be considered as the operand resources. Since the use and the integration of the digital technologies require skilled personnel to simplify the shopping experiences of the customers, training of the workforce according to the characteristics of the channel should be considered. Omni-channel thinking, enriched by the digital technology use, should be integrated to the employees’ workflow in order to develop the required skills and competences. Sales people in an omni-channel
retailing environment should develop skills by adapting their selling behavior depending on each customer’s needs and expectations. As Peltola et al. (2015) highlighted, companies traditionally developed their processes, information and communication technologies according to the separate channels they used in their exchanges together with their employees motivated to maximize the profit in their own channel or product group. However, Bagge (2007) purports that although the processes and the operations are modified to match the omni-channel customer behavior, it is important to understand that the transformation also affects the employees in their everyday actions. Apart from the employees, partners and both their operant and operand resources should be considered in the development of omni-channel value. Hence, value delivery includes establishing close relationships with customers and suppliers, and increasingly with new varieties of technological and channel partners. In this case, retailers and their related partners (IT solution providers, media etc.) in omni-channel retailing together with the customers are considered the co-creators of value. Huuhka et al. (2014) specified that in accordance with the changes taking place in the retailer in terms of digitalization, organization, service scope etc., new challenges may occur in selecting strategic partners. For instance, the more dependent businesses are on external partners’ digital e-commerce platforms, the more effort there should be in choosing these long-term partners. In addition, the resources of these partners critically affect the service provided as well as the value created. Retailers and their partner companies offering media, IT solutions, and market knowledge, in addition to the customers, may be considered as co-creators of value.

FP (5)’s contribution is related to the understanding that service economies within an omni-channel structure can only succeed when a superior customer experience enriched by digital technologies is achieved. Although SDL’s focal point is the service and the service exchanges in marketing, its reflection in omni-channel retailing is service enriched by the superior customer experience and value-in-experience. Since omni-channel retailing encompasses both digital and non-digital retailing in order to provide customers a seamless retail experience, retailers should strive to find new ways for establishing brand new experiences in each purchase of the customers. According to FP (6), retailers and their suppliers/partners offer omni-channel-based value propositions to their customers, and these value propositions can be transformed into co-created value only if these are accepted and integrated by the customers. This may be possible when the customers can trigger full interaction and use channels simultaneously. FP (7) views the retailers and the
suppliers/partners as the parties that can only offer omni-channel-based value propositions. Fernández-Sabiote and Román (2015) argued that an omni-channel experience brings out many benefits to the retailer by facilitating the creation of future research, selection of products, and easy payments. As a result of customer’s involvement in a holistic omni-channel experience, the retailer may build new areas for development in its own processes related to digital marketing, logistics and supply chain issues or the sales of the products. The ability of the retailer to interpret the data from the feedback originating from the omni-channel plays an important role for the generation of omni-channel-based value propositions. Kwon and Jane (2009) argued that an omni-channel experience during shopping allows consumers to identify themselves. In addition, the retailer gets the chance of understanding the consumer preferences in the current market.

*FP (8)* is mainly about locating the customer at the heart of the service exchange. According to Nambisan and Nambisan (2008), there is a change in the role of customers and their social networks that rather than being the passive recipient of marketing activities, they are becoming the co-creator of the content, co-innovator and co-marketer. Grönroos (2006) pointed out that customers have to be identified as the value creators in the value-creation process. While there are service offerings supported by digital or non-digital infrastructure originating from the retailer side, it is basically the customer who decides which factors add value to the value proposition of the retailer. *FP (9)* views all the members in the omni-channel system as resource integrators. As explained in *FP (4)*, there should be significant contributions from the retailer itself with the solid digital infrastructure, stores, devices etc. together with the skilled labor force. The integration of both the tangible and intangible resources from the retailer and the personnel sides may generate only a certain level of success in omni-channel retailing activities. In addition, partners of the retailers in social media, logistics, digital technologies etc. can also act as the resource integrators in this process. Although all economic and social actors are viewed as resource integrators in SDL, Lusch and Vargo (2006) have mentioned that this FP still requires further elaboration and refinement. Chen et al. (2011) suggested that experience sharing, as part of resource integration, can also be included in this case. An example of experience sharing would be customers sharing their personalized ways of using applications with other consumers in iPhone online communities. This can also be applied to the omni-channel retailing concept that customers benefiting from a very efficient mobile app or AR applications in
showrooms of retailers can provide suggestions to other customers in online communities which may lead to the creation of experience sharing.

**FP (10)** mainly considers the value and the experience concepts as the critical components in omni-channel retailing. Value drivers are mainly the sources of value creation, and they are defined as the factors that enhance the total value created by the companies. While the value drivers for supply chain management can be summarized as average finished goods inventory, demand fulfillment (Levy, 1995); order cycle time, order completeness (Christopher, 1992); delivery performance, lead time and level of defects and responsiveness (Lambert and Sharman, 1990), Sorescu et al. (2011) argued that the creation of customer value is directly related to the creation of shopping experiences. According to Yrjölä (2014), customer value occurs when the customer and the retailer utilize and integrate different resources during the shopping process. Since customer value dimensions are highly dependent on product categories and industries (Gallarza et al., 2011), there is no single implication for the value creation concept in omni-channel retailing. Although Helbling et al. (2011) view the omni-channel environment as reinforcing the importance of economic value to customers, they mentioned the main functional benefits as product assortment, free shipping, in-store collection, return policies and price-match guarantees. Balasubramanian et al. (2005) argued that from the customer’s point of view, social interaction, self-affirmation, experiences and symbolic meanings play an important role in channel choice.

**Theoretical framework**

The theoretical framework is composed of three main components including (1) retailers’ omni-channel-based value propositions, (2) suppliers’/partners’ omni-channel-based value propositions, and lastly (3) the customer-based value propositions and value-in-experience. These components are classified under three main sections as (a) retailers’ value proposition phase, (b) suppliers’/partners’ value proposition phase and (c) value-in-experience phase. The framework suggests that retailers should provide omni-channel-based value propositions to their customers through the use of suppliers’/partners’ omni-channel based value offerings for the generation of holistic omni-channel customer experience and value. Digital technologies are the backbone for the integration of these three phases for creating a superior customer experience. Retailers’ omni-channel-based value propositions facilitate the value creation by consolidating both the operand and the operant resources and thus
producing potential value-in-use. However, the existence of such consolidation may not be sufficient in today’s competitive retail environment triggered by the digital revolution. Hence, an interaction, namely resource integration, is proposed for the integration of retailers’ omni-channel-based value propositions with the partners and the suppliers. This interaction creates a proper platform enabling the retailer to actively participate in the value creation process by providing the related resources and service offerings. Figure 1 shows the theoretical framework suggested for the generation of holistic omni-channel customer experience and value.

**Retailers’ value proposition phase**

In this value proposition phase, retailers’ omni-channel-based value propositions act as the main trigger for the establishment of holistic omni-channel customer experience and value. Three main components, channel integration, innovation and supply chain management, enriched by the skills, capabilities and competences (operand resources) and all tangibles such as stores, devices, distribution centres, equipment etc. (operant resources) of the retailer constitute the omni-channel-based value propositions. Since the retailer is the key actor and the initiator of the omni-channel service offerings to the customer, its basic resources play a key role in shaping the value propositions. As discussed in the previous section, one of SDL’s foundational premises is related to the inevitable role of the operand resources (skills, capabilities and competences of the employees) for achieving superior customer experience in omni-channel systems. These operand resources are closely linked with the operant resources since they complement each other. For instance, the skilled salespeople should support the application and the use of new in-store technologies.

Innovation of the retailer in this framework is mainly related to the capabilities: competences and skills to develop and innovate improved omni-channel experience for the customer as well as the existence of related tangibles providing solid ground for innovation. This can be achieved through various ways as a change in the layout of the physical store, an introduction of a new app, a new component added to the current website of the retailer etc. Since technology is considered an integral part of innovation (Maglio and Spohrer, 2008), one of the capabilities to be developed is the integration of technology-related know-how to the omni-channel services by dedicating the appropriate digital technologies through certain channels. The retailers may succeed only if they implement the right technological innovations in order to provide personalized and
seamless customer experience to their customers. As Bardwell (2013) stated, integrating the appropriate innovations to the omni-channel system can bring out full engagement and total experience, which can be defined as an entirely new level of relationship with customers that is more than sales interaction and sales cycle.

Channel integration is considered a critical component in omni-channel retailing since the integration of the retailers with their partners and the customers through digital technologies is one of the prerequisites for achieving superior customer experience. Cao and Li (2015) stated that retailers with better integration regarding their channels experience stronger sales growth. Reduction in perceived risk of the online store and increase in perceived quality of online channel resulting in positive choice effects for the online channel and reduced cannibalization in the offline channel is also achieved by the integration of online and offline channels (Herhausen et al., 2015). According to Frazer and Stiehler (2014), the unity and integration of channels (store, website, mobile channels and social media) and touch-points is just the first step in creating a good omnichannel experience. Peltola et al. (2015) suggested two key factors for establishing a good omni-channel experience as (1) reduction of the risk of losing the customer during omni-channel experience by providing standard and integrated services and (2) encouragement of the customer to continue the journey by providing seamless transactions in each touchpoint. These factors are directly related to the success of the retailer regarding channel integration since the customer can only be adapted to the omni-channel system through the integration of retail channels as well as the digital technologies used. Görsch (2002) argued that the aim of the multi-channel integration must be to provide a superior customer experience, which is consistent and seamless across channels.

Such integration by managing both online and in-store channels in seamless and transparent form provides a ground for increased customer loyalty as well (Bendoly, 2005). Channel integration is viewed as a “quality” concept defined as the retailer’s ability to provide a seamless service experience in all channels available in an omni-channel system (Souse and Voss, 2006). This integration can be considered the capability, skill and the competence of the retailer to arrange its current infrastructure (stores, hardware and software technologies, systems, warehouses, devices etc.) according to the requirements of the omni-channel system. For instance, physical stores can be considered one of the operant resources of the retailers and together with the increasing competition in the retail industry, retailers are triggered to design and develop more attractive stores through the use of digital technologies in order to extend the use of
these stores within their retail channels (Parsons and Conroy, 2006). On the other hand, virtual stores with the advantages of time saving, reduction in operational costs and more products choice than a traditional store, due to the possibility for customers to access the store directly from their place (Lee, 2007) are critical components of the retailers’ value propositions. When the skills, competences and the capabilities of the employees involved in any part of the operations (sales in physical stores or virtual stores, website design, logistics etc.) are integrated efficiently with the operant resources, a desired level of value proposition, which may be considered positively by the customer, may be achieved.

Supply chain management (SCM) is the third component for the integration of basic skills, competences and capabilities in omni-channel retailing value-creation processes. Retailers face some challenges as they modify their operations and services in accordance with the requirements of omni-channel strategies. Integration of the omni-channel demands with the inventory levels of the retailer can be considered the main challenge in this case. As Bell et al. (2013) stated, the omni-channel structure increases the requirements of the retailer’s inventory that must match with its value chain, which shows that retailers need to establish highly responsive inventory optimization techniques. Retailers should also simultaneously monitor the changes in the demand, meet varying lead-times, and decrease costs for each channel in their omni-channel system. These should be considered in terms of forward and backward distribution. While the forward distribution includes the dispatching locations such as distribution centres, warehouses and stores, destination points (stores and customers) and possible delivery processes, the backward distribution is mainly about the physical flow of product returns from the customer to the retailer including the returns centre, warehouses and stores (Hübner et al., 2013). In case of both in-store and online services, improved inventory and order management systems supported by digital technologies are needed in order to achieve the holistic omni-channel customer experience. These all lead to the understanding that it becomes necessary for retailers to re-evaluate and redefine their supply chain systems (Carvalho and Compomar, 2014).

In the context of the above discussion concerning retailers’ value proposition phase, the following propositions are listed below:

P1a: Channel integration is a key determinant in the generation of retailers’ omni-channel-based value propositions supported by operand and operant resources.

P1b: Innovation supported by the retailers’ operand and operant resources acts as a facilitator in retailers’ omni-channel-based value proposition journeys.
P1c: Supply chain management is a key component of retailers’ omni-channel based value propositions supported by operand and operant resources.

P1d: Retailers’ value propositions integrated with digital technologies contribute to resource integration in omni-channel retailing.

P1e: There is a direct relationship between the retailers and their suppliers/partners in the generation of omni-channel service and superior value-in-experience.

Figure 7-1. Theoretical Framework

Suppliers'/partners’ value proposition phase

Many suppliers and partners can be included in a typical omni-channel including the social media experts of the retailers, digital technologies providers, logistics service providers, consultants in supply chain management, store and website design etc. As Rintamäki et al. (2007) mentioned, supplier/alliance market value propositions can be considered with partners, with whom resources and competencies are exchanged for value co-creation. As highlighted in the foundational premises of SDL, Vargo and Lusch (2006) stated, “all economic and social actors are resource integrators”. This view is modified according to the requirements of omni-channel retailing, as “all members in omni-channel retailing chain...
are resource integrators”. The members are mainly the retailers and their partners (social media companies, logistics service providers, technology companies etc.), however, customer is also considered as a member contributing to the creation of omni-channel customer experience and value-in-experience. This takes a holistic view for the creation of value in the omni-channel since the involvement of the customers, partners and the retailers may generate the required output - “value-in-experience”- in the omni-channel. This approach can only be utilized when the retailer’s service offerings and resources are integrated with the resources of the suppliers and partners, their value propositions and customers’ contributions. The retailers should follow the main path to achieve the full integration of the operand and operant resources. While this integration can be considered within the own omni-channel processes of the retailer, this could also be used in terms of the relationships between the retailers, partners and the customers. According to Häikiö and Koivumäki (2016), service provider companies face two main challenges in this journey in terms of managing the efficient inter-firm resource integration activities with other companies, namely the partners, and adjusting their value generation processes and service delivery mechanisms with the customers’ value creation processes. In case of omni-channel retailing perspective, alignment of retailer’s operand and operant resources related to channel integration, innovation and supply chain management with the partners’ own processes and resources and the customers should be managed well in order to establish a fruitful value creation process with the customer.

Omni-channel retailing looks for to serve all additional distribution channels from the same stocks, assets and supply chains. Although this situation creates major economic advantages, it also brings extensive complexity in the supply chain. In this respect, transparent and collaborative relationships become more important than ever (Elmegaard, 2016). Collaboration with partners/suppliers is one of the key element to manage omni-channel activities effectively (DHL, 2015). As the omni-channel is intended to provide seamless shopping experience through different channels, it is very important to ensure collaboration between partners. Collaboration is a component of the suppliers/partners in this framework is mainly related with keeping products on store shelves and ensuring shopper satisfaction with association of retailer-supplier. Collaboration is more focused on relationships and based on mutual benefit (Mangan et al., 2008). However, being on the mutual benefit point is hard to achieve and for this reason trust is seen as a main source of collaboration (Rodrigues et al., 2015). With high collaboration, actual product inventory on stock can be kept in minimum levels (Dragan, 2014).
Different type of omni-channel fulfilment strategies occur such as buy online/pickup in-store, or order online/deliver to home and these different types of strategies enable necessity to collaborate between suppliers and retailers (Fiorletta, 2014). Moreover, different types of fulfilment offering require different type of collaboration; vertical and horizontal collaboration are most commonly used types in omni channel retailing (Mangan et al. 2008). In omni-channel retailing generally web-sites and stores have different inventory management systems which can be seen as a barrier (IBM, 2014). To overcome this barrier collaboration between partners is generally applied. However, collaboration is not only used for inventory management. Supplier and retailer systems must be integrated to improve stocks mobility and increase customer satisfaction (IBM, 2015).

Purchasing and delivering points in omni-channel retailing mostly differs. Thus, arranging mobility of inventory becomes difficult. However, this situation can be overcome with both collaboration and visibility. Visibility gives clear perspective about inventory and overall omni-channel activities. Likewise, inventory management, data management has some similar issues. With the usage of digital technologies, everyday retailers get huge amount of data which can be named as big data (EY, 2014). However, managing big data is a difficult task, so partners/suppliers must again collaborate and be visible to each other.

Customization is defined as "the action of modifying something to suit a particular individual or task" (Oxford Dictionary, 2017). Even though omni-channel retailing allows customers to purchase through different channels, customers also want to experience a personalized purchasing experience. Thus, each touch point must be customized according to customers’ needs. Buy online/ pick up in-store, offering kiosks in stores, order online/ deliver to home and order online/deliver to store are some of the examples of customization considering customer needs (Kourimsky and van den Berk, 2014). From the retailer perspective, omni-channel systems should be customized to fit each retailers’ business, while considering their retail locations, products that they sell and shopping habits of their customers and many other factors (Elmegaar, 2016). With customization, partners add more value to their relationships by tailoring the needs of retailers (Adamson, 2016). The use of digital technologies in omni-channel retailing results in more data being received by retailers. After receiving these data, they are used to create more customized and personalized omni-channel experience (Certona, 2015).

In accordance with the network perspective, communities, experience networks, service delivery networks, collaborators and even the broader ecosystem should be considered (Tax et al. 2013). Bodine (2013) defined
the customer experience ecosystem as; “the complex set of relationships among a company’s employees, partners and customers that determines the quality of all customer interactions”. Such ecosystem view encompasses the multiple actors in the creation of a total customer experience. The framework in this study mainly considers “partners” of the retailers and their omni-channel-based value propositions. The explosion in potential customer touch points and the reduced control of the experience require firms to integrate multiple business functions, including information technology (IT), service operations, logistics, marketing, human resources, and even external partners, in creating and delivering positive customer experiences.

Propositions related to the suppliers’/partners’ value propositions are listed below:

P2a: Suppliers’/partners’ collaboration activities enriched with their operand and operant resources facilitate the generation of suppliers’/partners’ omni-channel-based value propositions.

P2b: Suppliers’/partners’ customization efforts enriched with their operand and operant resources facilitate their service delivery processes as well as their value propositions activities.

P2c: Suppliers’/partners’ value propositions integrated with digital technologies lead to resource integration in omni-channel retailing environment.

P2d: There is indirect relationship between the suppliers/partners and the customers in the generation of omni-channel service and superior value-in-experience.

Resource integration

Resource integration mainly includes the direct and indirect relationships between the retailer, customer and the partners/suppliers as well as the digital technologies. Digital technologies (smart mobile devices, software technologies, in-store technologies, emerging technologies) are mainly the backbone components for the creation value-in-experience since the customer is involved in the overall process of purchases through the use of various technologies. Digital technologies act as accelerator since it turns customer service improvement into an urgent requirement. The retailers are required to make use of digital technologies while serving the omni-channel customer so that information and data are not only available to the customers, but also to the staff serving those customers (Cook, 2014). Hence, the involvement of the employees in the use of digital technologies enriched with their skills, capabilities and competencies is considered as
an important contribution to the value creation process. Digital technologies such as in-store media, augmented reality and virtual fitting rooms as well as mobile services help companies to offer differentiated solutions to their customers. Digital technologies are utilized mainly by the customers and their skills, competencies and capabilities regarding the use of such technologies and their tangibles such as smart phones, tablets etc. are integrated with both the operand and the operant resources of the retailers and their partners and suppliers as well. For instance, the customer may firstly prefer to search for the products from the smart phone using the retailer’s applications and then may decide to visit the store and try the products using AR mirrors. Due to the fragmentation in customer needs and expectations, customized services enriched with digital technologies may provide superior solutions to the customers. Hence, digital technologies provide unique solutions such as carrying the wide product assortment with minimum inventory by improving the customization process (Yrjölä, 2014). Deloitte (2013) report highlights that the amount of technology deployed will not as the main determinant in tomorrow’s retail environment and the way that the retailers evolve their whole service operations to respond to changing customer requirements will be considered as the new motivation. This also supports the view that digital technologies should be considered as the key factor in the agenda of the all actors (mainly the retailers, suppliers/partners and the customers) in the omni-channel environment but such technologies should offer customized solutions for the retailers’ operations, industry or market as well as the suppliers/partners and the customers. While all the digital technologies classified in this study may be involved in the service offerings of the retailers and suppliers/partners, a selection of the appropriate digital technologies customized for the creation of value-in-experience can also work well for the actors in the omni-channel environment. One proposition related to the role of resource integration in omni-channel retailing is listed below:

**P3:** Resource integration is a common determinant for the integration of retailers’, suppliers’/partners’ and customers’ value propositions through digital technologies in omni-channel retailing environment.

**Value-in-experience phase**

The last section in the framework evaluates the value co-creation concept in omni-channel retailing from the viewpoint of the customer. The framework suggests that as customer-focused components (customer engagement and technology orientation) enriched with skills, competences
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and the capabilities of the customer (operand resources) and the tangible (operant) resources of the customer are integrated together with the retailers’ value proposition through resource integration enablers, an efficient value-in-experience in an omni-channel system is achieved. The commercial success of the omni-channel retailing services is directly related to how this value proposition is judged from the customer perspective (Anderson et al., 2006; Rintamäki et al., 2007). By highlighting the critical importance of user experience, it was mentioned that investing in user experience throughout the implementation of digital technologies improves customer satisfaction and brand recognition (Deloitte, 2013). This brings out the inevitable contribution of the customer to the development of the omni-channel processes. Omni-channel customers play a very critical role in the overall value co-created compared to the traditional ones. They are known to spend up to 3.5 times more than single-channel customers, they are better informed by making use of digital technologies and demand more from those retailers they do business with (Bardwell, 2013, Cook, 2014). The customers provided with seamless experience across multiple channels are more prone to shop frequently by purchasing a broad number of product categories (Bardwell, 2013), hence, they become very loyal and profitable providing that the overall experience is maintained (Cook, 2014). In addition, omni-channel customers usually believe that they have more information about a purchase than the salespeople so that they perceive themselves as having more control over the sales encounter (Rippé et al., 2015).

As seen in the framework, customer-focused components are customer engagement and technology orientation. Customer engagement is defined as "a psychological state that occurs by virtue of interactive, co-creative customer experiences with a focal agent/object (e.g. brand) in focal service relationships." According to Lemon and Verhoef (2016) engagement is a motivational state that directs customers to participate with the companies. Digital technologies, social media and the improvements in omni-channel retailing have accelerated the development of the customer engagement notion since customers have become active co-producers or destroyers of value (Verhoef et al., 2010, Beckers et al., 2014). Lemon and Verhoef (2016) acknowledged that value extraction is established as a result of customer engagement behaviours. The customer engagement approach coincides well with the omni-channel retailing concept since customers are highly involved with the omni-channel processes through the use of various retail channels and digital technologies. Customers feel themselves attached to the omni-channel-based retailers’ value propositions as long as they are fully satisfied with
their omni-channel experiences and value-in-experience consecutively. As engaged customers are equipped satisfactorily with the required skills, competences and the capabilities in order to get the most of the omni-channel experience during their customer journey, they may be able to offer their own value propositions to the omni-channel system as well. This process can be sustained with value creation processes. As Grönroos (2009) mentioned, while companies can be involved actively in customers’ value creation processes, customers can also create value for themselves (e.g. initiating the development of new resources). Similarly, the research framework suggests that by learning to get the most benefit from their experiences with the retailers’ value propositions, customers gradually begin to shape their value-in-experiences with their own operand and operant resources. Apart from customers’ own operand resources (skills, competences and capabilities), customers should also embody their own tangibles (mobile phones, tablets, other technological devices) to their omni-channel journey and integrate them with the operand resources. In case of any mismatch between the operand and the operant resources of the customer (e.g. customers lacking skills, infrastructure or hardware to use the latest digital offerings of the retailer), it is not expected to achieve a smooth value-in-experience process.

Technology orientation is suggested as the second component in the customer-based value propositions. It is observed that customers go to physical stores for brand experience rather than just for products. This increases the tendency to use online tools for browsing, matching and the purchase. The advances in technology enriched with innovations open up options for customers to benefit from the omni-channel experience offerings of the retailers. Technology orientation of the customer deals directly with the readiness and the availability of the omni-channel customer to use digital technologies in the customer journey. According to the research by PCM (2017), customers consider shopping experience and convenience to be more important than price or rewards. The study shows that value (44%), track record/experience (36%) and convenience (34%) outpace loyalty rewards (26%) as the components that drive the customer back to the same retailer. While these mostly can be achieved by the retailers’ value propositions supported by the suppliers/partners’ value propositions, existence of customers equipped with a technology base is a critical requirement for the establishment of a superior customer value-in-experience. Triggered by the development of social media and mobile devices, customers connected to the retailer on a permanent basis played a critical role in maintaining a close interaction with the brand and realizing the existence of many touchpoints.
Technology-oriented customers demand more convenient shopping with possible access to global retailing places since the use of such technologies provides customers access to unlimited digital information by allowing them to make more informed decisions. Selected omni-channel retailing key criteria reported by the customers include faster shopping, flexibility including delivery options, payment methods, downloads etc., connected services and payments in-store and online, cross-border operations (PMC, 2017). These benefits can be provided through the technology-oriented omni-channel offerings of the retailers. On the other hand, customers’ willingness for the use of such digital technologies integrated with the customers’ operant (devices, technology infrastructure, tablets, internet etc.) and operand resources (skills, competences and capabilities) are suggested as an important contributor for the omni-channel experience. Customers embrace digital technologies that enable them to shop in a convenient manner and retailers consider such technologies as enablers for more customer convenience and interaction.

Technology orientation can be associated with the Technology Acceptance Model (TAM) in which there are common determinants to be used for an omni-channel customer. TAM explains the usage intentions and behaviour towards technology. Two main factors that lead to the attitude towards the use of technology are perceived usefulness and the perceived ease of use. According to TAM, one’s actual use of a technology system is influenced directly or indirectly by the user’s behavioural intentions, attitude, perceived usefulness of the system, and perceived ease of the system. The perceived usefulness is based on the understanding that “people tend to use or not to use the application to the extent they believe it will help them perform their job better” (Davis et al., 1989: 320). This is suggested to impact the attitude toward use of the system. It is argued that perceived ease of use is the extent to which a person accepts as true that using a method would be at no cost to that individual (Davis et al., 1989). Perceived ease of use is related to the understanding that information systems that users perceive easier to use and less complex will increase the likelihood of its adoption and usage (Teo et al., 1999). Venkatesh (2000) stated that perceived ease of use defines the individual’s perception of how easy the innovation is easy to learn and to use. These variables directly influence the user’s attitude toward using new technologies, which in turn leads to the user’s behavioural intention to use (Bradley, 2011). Both perceived usefulness and perceived ease of use predict attitudes towards using the system. In case of omni-channel retailing, it is suggested that technology orientation embodies these concepts since the customers’ perceived ease of use and
perceived usefulness may affect the interaction between the retailer and the customer. In case of perceived usefulness, customers should ensure that experiencing the omni-channel shopping through digital technologies supported by customers’ own operand and operant resources will enhance their performance. Since customers are not only the actors affecting the omni-channel system, value propositions of both the retailers and their suppliers/partners as well as their operant and operand resources should be considered. This concept is shown in the theoretical framework as the “resource integration” characteristics of the omni-channel system. From customers’ point of view, perceived ease of use is mainly about the perception that the use of available digital technologies in an omni-channel system (both offline and online) will be free of effort. No customer will be eager to use the digital technologies (apps, AR, VR applications etc.) during their omni-channel journey unless they offer easy procedures and methods to use. Hence, customers should have the feeling that there is a true and proper integration of various technologies in the omni-channel which enable them to shop seamlessly. For instance, customers should be able to find the right app to be downloaded to their mobile phones easily and they should combine their skills, competences and capabilities to find the right product they are looking for. Then, customers can be willing to get the benefit of using AR applications within the physical store or via their mobile phones to find the most appropriate outlook of the product as well.

Lastly, it is suggested that the value-in-experience is equally as important as the omni-channel-based value propositions of the retailers. Prahalad and Ramaswamy (2004a, 2004b) remarked the shift from goods and services-centric approaches to models where value is embedded in experiences by highlighting that such move to an experience-centric view of co-creation is expected to create new and exciting opportunities. There is an increasing interest in customer experience from the viewpoint of omni-channel retailing as customers interact with companies through multiple retail channels and various digital technologies. Grewal et al. (2009) highlighted the importance of customer experience in the retailing literature by saying that “it sits atop most marketing and chief executives’ agendas, both in consumer packaged goods manufacturing and retailing fields and it remains a critical area for academic research.” While the omni-channel-based value propositions of the retailers mainly identify the retailer side of the business focusing on channel integration, innovation and supply chain management enriched with the operand and the operant resources, the value-in-experience mainly originates from the customers and their related resources (operand and operant) in the generation of a
superior customer experience. It is also suggested that although customers are the key actors in the generation of such value-in-experience, retailers and their partners are the main facilitators for customers to reveal and understand the main outcome. By focusing on the importance of the contributions of the related actors to the value-in-experience, Chen et al. (2011) agreed that value-in-experience is conceptualised to capture value derived from efforts made by actors. According to Ballantyne et al. (2011), “An enterprise can initiate or participate in developing value propositions as reciprocal promises of value but beneficiaries will always determine what is of value in their own terms.” In this case, the customers and the partners’ interpretations of value and the value-in-experience as a result of this exchange should also be considered.

Research propositions classified under the customer and value-in-experience domain are listed below:

P4a: Customer engagement enriched with operand and operant resources allows for creating a superior value-in-experience in an omni-channel retailing environment.

P4b: Technology orientation of the customers facilitates the creation of a superior value-in-experience in an omni-channel retailing environment.

P4c: Customers’ value propositions integrated with digital technologies lead to resource integration in an omni-channel retailing environment.

P4d: There is a direct relationship between the retailers and their customers in the generation of omni-channel service and superior value-in-experience.

Conclusion

With the help of digital technologies, retailers are able to integrate emerging channels and customers’ touchpoints, which leads to today’s emerging phenomena, omni-channel retailing (Brynjolfsson et al., 2013; Seck and Philippe, 2013). Omni-channel retailing enables creating value with customers and partners (Deloitte, 2014) while offering seamless customer dialogue through every stage of the customer journey, from pre-purchase research to post-sales touches (Brand, 2016) and often requires embracing social media (Ingenico, 2016). Given the lack of understanding of the value co-creation concept from the viewpoint of omni-channel retailing and SDL perspective, this study has sought to advance the theoretical understanding of the omni-channel retailing from the SDL perspective via digital technologies.

As a theoretical contribution, this study presented a unique theoretical
framework of omni-channel relationships considering value co-creation. The framework has three main components: retailers’ value propositions, suppliers’/partners’ value propositions, and the customer-based value propositions, value-in-experience. Moreover, these components are classified under three main sections: retailers’ value proposition phase, suppliers’/partners’ value proposition phase and value-in-experience phase.

As a managerial implication, retailers can target two fundamental attitudes: (1) offering a flexible holistic customer experience and (2) investing in digital technologies. In omni-channel retailing, customers must be able to switch channels seamlessly. For example, during the buying process, customers want to be able to examine the product in the retail store while reading comments about the product from the Internet and based on this information, order online and choose to pick up in-store delivery and finally comment on the received product via social media and follow the company’s social media accounts. These processes show that today’s customers not only want use only one channel but also engage with the brand within a continuous management. However, by allowing customers to use whichever channel is best for them at whatever stage of the customer journey they are in requires a certain degree of flexibility (Harris, 2012). Due to the increasing number and complexity of customer touchpoints and improved customer loyalty and word of mouth, customer experience is seen as one of the most important research challenges in the coming years (Court et al. 2009; Edelman, 2010; Homburg et al. 2015). Thus, being flexible and offering seamless customer shopping experiences via integrating in-store, mobile, social and websites must be the ultimate goal of a retailer.

To maximize benefits of the omni-channel retailing, digital technologies must be adopted (Brynjolfsson et al., 2013; Peltola et al., 2015). In-store technologies are tremendously important to increase the shopping experience (Juaneda-Ayensa et al., 2016). Moreover, retailers must give importance to providing customers’ needs for connectivity throughout the channels with the usage of digital technologies (Mosquera et al., 2017). Lastly, the role of employees in the retailing store must be changed. Even though employees must be aware of the in-store technologies and able to help shoppers with using these technologies, they should still need to act as advisors and curators (Parise et al., 2016).

Since omni-channel retailing is still in its introduction phase in the academic literature, it requires further research. Future research can be conducted on the following subjects: (a) which type of industry, company or product influences the omni-channel strategy, (b) whether there is a
relationship between omni-channel management and customer loyalty, (c) requirements for seamless omni-channel customer experience, (d) whether social media has any effect on omni-channel retailing, (e) whether technology affects a customer’s purchase intention, (f) whether there is a relationship between customer loyalty/trust/awareness and omni-channel retailing, (g) what is the role of mobile devices in omni-channel retailing, (h) whether interactive technologies affect customer experience, and (i) how salespeople should be trained to cope with omni-channel retailing.

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CHAPTER EIGHT

VIRTUAL EXPERIENTIAL MARKETING
IN THE VIRTUAL WORLD

HATÎCE AYDIN

Introduction

Businesses that act according to the traditional mentality of marketing concept focus too much on the functional characteristics of the products, produce identical products, and move away from the effort to make a difference. Today's consumers, however, want to buy not only the rational benefits but also the symbolic meanings of the products. In this sense, consumers attach importance to the experiences they have before, during, and after consumption, and they perceive the products and services of the businesses offering them an experience as more valuable (Liu and Chen, 2006). The shift in consumer expectations and perceptions has also changed the focal point of today's businesses from the benefits provided by products and services to the experiences they offer (Tsai, 2005). One of the important tools considered to be influential in all these changes is technological developments. Developments in technologies such as websites, social media, internet, online games, mobile applications, and virtual reality have deflected the economic value into experience, and made it possible to apply experiential marketing activities to virtual environments (Liu and Chen, 2006).

Retailers who want to have loyal customers and gain a competitive advantage have understood that the customer-centric approach or customer experience is a key element in brand choice, and that customer experience-building effort must be attractive in the virtual environment as well as in the physical environment (Gilmore and Pine, 2002). In this regard, along with the "experience economy," which refers to evolving values, retailers redefine themselves as agents that create different experiences rather than companies that provide products. At this point, the concept of virtual experiential marketing has begun to gain importance. In this section,
information about virtual experiential marketing, its dimensions, and its providers are given.

**How did experiential marketing emerge?**

With the developing technologies, customers wanted to get different products and services. This situation necessitated businesses to develop new strategies and produce products with differences to differ from their competitors. However, different products were perceived as having similar characteristics in a short period of time and as a result, businesses tried to differ by adding services to their products. In this regard, service providers started offering goods almost free of charge. For example, operators in the GSM sector began to sell mobile phones at low prices if their operators were preferred. This situation increased the number of standardized products, and the products lost their importance. After that point, it was not enough to support products with services, and it was inevitable for businesses to have a "unique experience" in order to create economic value. Because of these developments, there has been a change in value element from commodities to goods, from goods to services, and from services to experiences (Pine and Gilmore, 2011-2013). The stages of the value elements are summarized in Table 8-1.

**Table 8-1. Development of the Experience Elements**

<table>
<thead>
<tr>
<th>Economic Offering</th>
<th>Commodity</th>
<th>Good</th>
<th>Service</th>
<th>Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economy</td>
<td>Agrarian</td>
<td>Industrial</td>
<td>Service</td>
<td>Experience</td>
</tr>
<tr>
<td>Economic Function</td>
<td>Extract</td>
<td>Make</td>
<td>Deliver</td>
<td>Stage</td>
</tr>
<tr>
<td>Nature of Offering</td>
<td>Fungible</td>
<td>Tangible</td>
<td>Intangible</td>
<td>Memorable</td>
</tr>
<tr>
<td>Key Attribute</td>
<td>Natural</td>
<td>Standardized</td>
<td>Customized</td>
<td>Personal</td>
</tr>
<tr>
<td>Method of supply</td>
<td>Stored in bulk</td>
<td>Inventoried after production</td>
<td>Delivered on demand</td>
<td>Revealed over a duration</td>
</tr>
<tr>
<td>Seller</td>
<td>Trader</td>
<td>Manufacturer</td>
<td>Provider</td>
<td>Stager</td>
</tr>
<tr>
<td>Buyer</td>
<td>Market</td>
<td>User</td>
<td>Client</td>
<td>Guest</td>
</tr>
<tr>
<td>Factors of Demand</td>
<td>Characteristics</td>
<td>Features</td>
<td>Benefits</td>
<td>Sensations</td>
</tr>
</tbody>
</table>

Source: Pine and Gilmore, 2011; Pine and Gilmore, 2013
Commodities, which are the first stage of the economic value, are assets that are obtained from nature, are measurable, and are required to be exposed to certain processes to be marketable. They cannot be differentiated in price. Goods are assets that can be differentiated by their production processes and prices (Pine and Gilmore, 2013). This has allowed the goods to be perceived as more valuable than the commodities. Services are a number of non-tangible activities offered to customers. Although concreteness makes services more valuable than commodities, after a while it leads services to become ordinary and experiences to replace services. Experiences may be easily remembered, distinctive economic offerings that give the consumer a variety of memories, and create an emotional commitment to the business (Schmitt, 2009). The most important feature distinguishing experiences from other economic outputs may be that although the staged event is the same, the experience is perceived differently according to the individual characteristics, and the product or service offered is memorable (Petkus, 2002).

The values changing for experience-building have also changed the marketing understanding of businesses. In the past, businesses fulfilled the rational needs of consumers; however, today's businesses are trying to focus on the emotional needs of consumers through experience (Kotler and Keller, 2012). Therefore, it can be said that the foundations of the concept of experiential marketing have been laid with the concept of experiential economy (Kazancoğlu and Dirsehan, 2014). Experiential marketing deals with the feelings of consumers rather than the physical characteristics of products. In this sense, experiential marketing can be described as a chain of events in which the consumer who has an aim to realize a life experience takes part (Pine and Gilmore, 2001). In experiential marketing, consumers are seen as emotional assets, and marketing practices try to present unique experiences to consumers in order to make consumption enjoyable. Through experience, consumers find a product or service attractive and are willing to pay more.

**What is virtual experiential marketing?**

In the present era when information is converting to digital more and more, products and services can become virtual as well. The emotional situation that occurs when the consumer interacts with products and services in the virtual environment is called virtual experience. Virtual experiences provide both direct experience that allows direct interaction with the product and indirect experience that informs the consumer about the product (Li et al., 2001). Today, with the use of many technologies
such as three-dimensional product visualization (3D) and augmented reality (AR) in online shopping sites, virtual experiences are offered to consumers along with products. In this regard, product marketing activities carried out in the virtual environment are called virtual marketing.

Virtual experiential marketing is the occurrence of the chain of events involving a consumer heading for realization of a life experience in the virtual environment (Pine and Gilmore, 2001). This experience is based on the consumer's emotional bond with the product in the online environment (Luo et al., 2011). In short, experiential marketing realized in an online environment can be called virtual experiential marketing. Virtual experiential marketing includes more kinds of technologies such as mobile technologies, product visualization, and virtual reality that generates experience by using channels such as the Internet, websites, social media, online games, and internet advertisements. According to the concept of virtual experiential marketing, consumers live in different dimensions when they are involved in virtual events (Baisya and Das, 2008).

**Virtual experiential marketing dimensions**

What is important for today's consumers is satisfaction and pleasure with the consumption experience rather than with the rational utility of the product or service (Howard, 2007). In this context, experiential marketing focuses on values that appeal to five sensory organs (i.e. sight, hearing, smell, taste, and touch) to create a commitment to the product, service, and brand. Experiential marketing is based on five experiential values: sense, feel, think, act, and relate, which are called strategic experiential modules (SEMs). “Sense” experience is any experience that can be perceived by five sensory organs such as sight, hearing, smell, taste, and touch and creates powerful emotions in the customer's inner world (Gentile et al., 2007). “Fell” experience involves experiences that will create strong inner emotions in the customer (Yuan and Wu, 2008). “Think” experience involves a new, creative and rational thinking about the business and its brands among customers “Act” experience is any experience created based on the customer’s lifestyle, behavioural patterns or consumer’s physical body. Lastly, “relate” experience is any experience that is offered through interaction with other people and based on establishing a relationship between the consumer and the brand, and also integrate individual to a social community (Schmitt, 1999). With the development of technology, consumers have started to access products and services in the virtual world more easily. In the face of this change, online shoppers have realized that it is necessary to offer experience in the virtual environment as well as in
the physical environment, and they have tried to give customers different experiences from the physical world. In this sense, the dimensions of virtual experience can be classified as sense or sensory, interactive or relational, pleasure, flow, and community relations (Liu and Chen, 2006; Chen et al., 2008).

Sense or sensory experience refers to any experience that is created by making use of the online shopping site's characteristics that appeal to the visual senses such as colour, graphics, and design (Gentile et al., 2007). The differentiation of products, motivating customers to buy products and services and offering value to customers, are the three main purposes of sensory marketing practices. Interactional (relational) experience is the type of experience that depends on relations with others and comes out as a result of the interaction between the internet user and the website (Gentile et al., 2007). This type of experience includes three dimensions: two-way communication, active control, and synchronism. Mutual communication between the website user and the website refers to “two-way communication” increased control of the website user through choosing the language of the website, product delivery tracking, downloading images about the product, etc. refers to “active control” and the communication taking place between the website and the website users simultaneously refers to “synchronism” (Van Noort et al., 2012). Pleasure experience can be defined as the consumer's having feelings such as excitement, pleasure, sympathy, etc. while receiving a product or service in the virtual environment. (Hartman and Samra, 2008). Today's consumers may act with their emotions even while they are making rational decisions about products and services and want to undergo experiences that provide pleasure when consuming. Accordingly, emotional experience is the customer experience dimension that enables the customer to establish an emotional bond with the business, brand, or product (Gentile et al., 2007). Flow experience is a sense of control (Jackson and Ecklund, 2004), which may be created in the consumer through interactions with technology. According to this experience, consumers’ attention is focused on a certain point, their curiosity is raised and interaction is made interesting (Shang et al., 2005; Lee and Chen, 2010; Lowry et al., 2012; Domina et al., 2012). Flow experience is also when individuals have positive feelings and are in a mood, making them forget themselves and time in virtual environments (Chen, 2006). It is thought that businesses in the tourism sector offer more flow experience. Community relations experience refers to all the experiences coming out as a result of the interactions of those who are members of a virtual community. Community members have experiences based on sharing their
specific interests about the consumption of a product or service (Luo et al., 2011). Today, websites such as Myspace, YouTube, Facebook, and Wikipedia are frequently used virtual community environments (De Valck et al., 2009).

Virtual experience providers

Today, in many sectors, companies take advantage of different channels of communication in order to offer different experiences to consumers. The marketing tools or communication points used to create new experiences are called experience providers. With the developments in digital technology and especially with the increasing use of mobile devices in recent years, the augmented reality applications that can be integrated into smartphones and tablets are becoming the most preferred tools (Küçükşararç and Saymer, 2016). There are some virtual experience providers, which are increasing in type and number every passing day as a result of technological developments (Meyer and Schwager, 2007). Internet channels and technology are some of these providers that contribute to the offering of virtual experiences, and explained below.

Internet channels as virtual experience provider

Websites, internet advertising, online games, and social media may be classified as some of the important internet channels.

Website is an internet-based global information initiative and referred to as the World Wide Web (www). Thanks to the images and videos it contains, it is a tool that enables consumers to perceive themselves in the real world (Güzeloğlu and Karabulut, 2015). The design and atmosphere of the website, its product sales, delivery and return policy, games on the site, and so on are the features helping create virtual experience (Constantinides, 2004). While the design of the website creates a sense experience, its interactive structure allowing the participation of users provides an interactive experience. Features such as music, animations, and video clips can improve the experience offered by the website.

Display advertising, search engine ads, mobile and e-mail advertising, online ads, adware, and affiliate marketing are the main types of internet advertising (Aktaş, 2010). The possibility of customization of these ads to the target audience can help strengthen the bond between the consumer and the company. Volkswagen may consider as one of the strong brand that uses internet advertising effectively. Volkswagen has designed an interactive advertising banner for the introduction of a new technology
mobile phone that can be audibly controlled without the use of hands in its
cars. After they enter the Facebook website, people clicking on the ad can
search any of their friends in their Facebook friends list without using their
hands as if they were in the car. A steering wheel and hands of different
types of people holding the steering wheel have been added to the talks to
give users the feeling of being in the car. In this way, Volkswagen
introduces its product to consumers and offers them a fun experience. Like
this experience, Mercedes usually offers a driving experience to
consumers.

The use of virtual (online) games created on the Internet is a virtual
experience becoming more and more common. Offering day-to-day fun, games enable customers to visit a site more often and learn about a
company and its products while engaging in other activities (Gummerus et
al., 2012). In online games, users can build their own virtual organizations,
develop strong relationships within the game, and even introduce
themselves with the identities they create. The identity is represented by an
avatar, which is a way of introducing a person's identity (Chen and Liu,
2007). Users can express their identity with a nickname, a fake ID, or a
fake profile. Thanks to avatars, the consumer can access the virtual world
more easily and share virtual experiences. Toyota, Ford, General Motors,
Procter & Gamble, and Sony are some of the brands benefiting from
online games (Levine, 2003).

Social media is a tool of communication through which individuals
share their own thoughts and knowledge with each other and live virtual
experiences (Blossom, 2009). Social network sites, online communities,
blogs, and video portals are the main social media tools. Social network
sites are virtual spaces that allow people to come together to create a
virtual environment and exhibit activities that are similar to everyday life
activities (Ploderer et al., 2008). Sites such as Facebook and Twitter are
social network sites. The interactive contest game “Get my hand,” which
Turkcell has organized on Twitter, is aiming to offer experience in a social
networking site. The contestants participate in this game with “twitter
connect” and touch the phone they want with each tweet they write until
another user touches the same phone with his/her tweet. The game starts in
the company with the campaign music every day, and when the music
stops, the contestants holding the phones in their hands win such phones
(IabTurkey, 2017). Virtual communities are groupings in which two or
more people interact in a virtual environment; emotional bonds and sense
of belonging develop among members; and each member produces
different content for each other. Consumers have pragmatic, hedonic,
social, etc. experiences as a result of interaction with online communities
Some companies create virtual communities that enable consumers to share ideas that will improve their products (Nambisan and Nambisan, 2008). Blogs are websites where personal, visual, and auditory activities and thoughts are shared about a specific topic or specialty (Güzeloğlu and Karabulut, 2015). Blogs often offer experience by providing supportive content (e.g. useful information, tricks) about brands, products, and services rather than making a direct mention of such brands, products, and services. It is thought that this tool of experience usually offers an experience of interaction. Companies and organizations may have their own blogs. In this case, bloggers are company employees and often act in concert with the related company (Sinha et al., 2011). It is also possible for a consumer to share the experiences s/he has had with a business in his/her own blog. Video portals are video sharing sites that allow users to watch video and audio content over the internet free of charge. The videos on the sites can be created by the users as well as by companies (Cha, 2014). Videos mostly contain criticism, publicity, features, stories, and comments about products and services (Smith et al., 2012). It is possible to see video portals as an experience channel that provides continuous broadcasting. For example, Samsung’s video portal is broadcasting a video about scratches on phone screens under the title of "Edge Screen Scratch" in their channel on YouTube. Thanks to these videos, consumers can learn that Samsung phones are robust and can directly have the product experience virtually (YouTube, 2017).

**Internet Technologies as Virtual Experience Provider**

Virtual reality, product visualization and mobile technologies may be classified as some of the important technologies that provide virtual experience.

Virtual reality refers to technologies that allow the real-time interaction of users by the help of enriched auditory channels (e.g. visual, auditory) and the Internet. These technologies involve a reality produced in the mind. Virtual tours are computer presentations that show the geometric properties of the area where a place is located and can be referred to as a virtual reality technology. The 360-degree panoramic view provided by a virtual tour allows the user to navigate through the area where the virtual tour is taking place (Kurtuluş, 2013). Virtual tours are heavily used by businesses providing accommodation services in the tourism sector. In addition to the Internet and virtual tours, special devices put on the body allow users to create a virtual world in their minds. All the computer
technologies that enable users to feel as if they were part of a three-dimensional virtual environment can be called virtual reality. In essence, virtual reality confronts us as blended reality (BR) and augmented reality (AR). It is possible to watch a real-world broadcast in virtual worlds or to witness an event taking place in a virtual world in the real world. The simultaneous interaction that involves the blurring of the lines separating the virtual and physical worlds from each other and a mutual transition between the virtual and physical worlds allowed by modern technology is called "blended reality" (Castronova, 2005). In other words, blended reality is an interactive or mixed reality environment in which the physical and virtual environments influence each other, are kept separate from each other, and have no dominance over one another (Billinghurst et al., 2001).

Augmented reality is a technology that allows users to combine three-dimensional virtual objects with the real world. The possibility of consumers to interact with augmented reality allows brands to promote their products by creating virtual content, enhances consumer control, and enables consumers to gain experience close to the actual features of the product (Arrighi and Mougenot, 2016). The increased use of mobile devices has brought the augmented reality applications that can be integrated into smartphones and tablets into the forefront. For example, Ikea published a catalogue of furniture, where items can be displayed in three dimensions and settled in the house. With the catalogue containing an augmented reality application, users can view the positions of the goods in their houses through their smart devices. Here, virtual objects complement a real environment. Renault, Milliyet, Avon, Maybelline, Pepsi, Coca-Cola, and Heinz are some of the companies that have been successful in providing experience with augmented reality technology (Küçükşaraç and Saymier, 2016).

Technologies about product visualization are interactive images (IIT) and three-dimensional product visualization technologies (3D). Interactive image technology provides consumers an insight about design of the products on websites and cognitive experience that increase consumers’ control and mutual interaction (Lee, 2012). Websites with 3-D features offer consumers a chance to zoom in, zoom out, rotate, personalize, etc. as well as a possibility to examine their products and various controlled and personalized experiences. In the clothing sector, this technology is utilized along with virtual fitting cabinets.

Mobile technologies can be classified as mobile applications, QR code technology, and wearable technology. Mobile applications can be defined as software that can be loaded on mobile devices. Toyota has enabled consumers to have a test drive on virtual vehicles, thereby increasing its
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car sales and providing an interactive experience (Solomon, 2003). QR technology is a type of bar code designed to be readable by smartphones. The codes consist of black units arranged in the form of a square on a white background and contain texts embedded in them. Today, thanks to QR applications found in almost every smartphone, users can view the contents of the codes. Such a technological interaction with brands can positively affect consumers' feelings about brands (Shin et al., 2012). QR is an application that is common in the health sector and medicine, but is new in most other areas (Memişoğlu and Kalkan, 2016). Wearable technologies are all kinds of computers that we can put on our bodies. They have ease of use and extra computer support. Wearable technologies are applied in many areas such as electronic textiles, glasses, music players, fashion design, and military service (Popat and Sharma, 2013). Glasses (Google Glass), watches (Samsung Gear, Apple Smartwatch, Sony, Nissan), gloves (iGlove) and bracelets (Samsung Gear Fit, Sony Smartband) are some smart devices and brands that are produced as wearable technologies. In addition to these, the number of products such as rings equipped with sensors, action-tracking collars for dogs, and smart socks is increasing as a result of technological developments. It is expected that the clothes that can measure the body properties will be at top of the list of wearable technologies in the future (Yetmen, 2017).

Conclusion

Ever-diversifying information technology differentiates every area it touches. In the present era when diversity is an important competitive tool, businesses have realized that they cannot achieve competitive advantage and have loyal customers by producing similar products and services. Moreover, as technology is now even in mobile phones and it is easy to access the Internet anywhere and anytime, businesses must offer more than traditional methods to stimulate a desire for their products and services. The advances in information technology have also increased the number of businesses that are putting their assets in the virtual environment, and thus the competition among businesses has become more and more intense. In the ever-changing market environment, businesses use experience as a tool to create differences in products and services and to stay ahead of their competitors. The concept of virtual experiential marketing emerged as experience began to be applied in the virtual environment.

Internet tools such as websites, social media, internet advertising, and online games and internet technologies such as product visualization,
mobile technology, and virtual reality are virtual experience providers enabling consumers to know the products of businesses. Information technology that helps businesses to connect with consumers enables new types of experiences to emerge and experience to occur in different dimensions. Virtual experiences take place in the forms of sense experience, interactive experience, pleasure experience, flow experience, and community relations experience. These experiences are effective enough to eliminate the perception of time among consumers, stimulate their feelings, and make them communicate with others. In whatever dimension they are felt, experiences enrich customers' inner worlds and life experiences and make it easier for them to buy products and services. For this reason, businesses that can put experiential marketing practices at the centre of their business practices and effectively use virtual experience providers can build emotional bonds with their customers by gaining a place in customers' memory, provide sustainable differentiation, and so gain competitive advantage.

It should always be remembered that businesses that offer products and services with a nice-looking design, provide easy and fast navigation within their sites, allow customers to give feedback, control products, make the adventure to be provided by its products clear, and offer experiences that eliminate the perception of time by making customers forget all that is around them will gain new customers, increase the loyalty of existing customers, and will be more successful than competitive brands. Businesses should strengthen their physical experience by using virtual experiences because of their positive effects. For this purpose, they should focus on the experiences that customers have in online shopping and on the internet tools and technologies that can make such experiences effective. This is because as technology develops, the possibilities for businesses to provide consumers with experience are increasing, and experiences may show different characteristics depending on their sources. It is expected that the evaluation of the internet tools and technologies allowing an experience in the virtual environment will help to understand the effects of the experiences created in the virtual environment more clearly.

References


CHAPTER NINE

THE DEVELOPMENT OF VIRTUAL REALITY MARKET

BİLSEN BİLGİLİ AND SONGUL BİLGİLİ SÜLÜK

Introduction

Virtual reality (VR) applications were first recognized by the game and entertainment industry. However, they have become widespread in education, health and many industrial application technologies in recent years. The history of VR applications, which entered the market with 3D video games, dates back to the 1930s when a vision simulator was produced that gave the feeling of a real environment with the help of light (Arslan, 2017).

Consumers in today's markets, who consume applications based on information technology, are increasingly consuming VR technologies that find a place for themselves in many fields. It is predicted that the VR markets, which are growing very rapidly and whose product variety is increasing day by day, will grow much more in the future due to the high interest of Y and Z generation consumers in information technologies.

This section includes information on the current structure of the VR market and predictions for its future. The marketing mix of these markets has been interpreted at a basic level, considering the developments that have taken place in the market in recent years. The development of the market in the world and in Turkey was explained by comparing them both in terms of businesses and consumers.

Historical development of virtual reality markets

Today, the efforts of many sectors to give people the feeling of reality by their services resembles the aim of people that lived 30,000 years ago who wanted to reflect the reality of their own stories, make those who looked at
the pictures imagine the truth of the story and be a part of it. The race horse film made in 1878 by Edward Muybridge by the moving picture technique can be regarded as one of the important developments in maintaining the sense of reality. Along with the development of moving image technology, a short film of a train, made in 1896, created a sense of reality as if it were going towards the audience and caused the audience to scream although there was no sound. Over the years, the expectations of the audience have increased, and the effects in movies that give a feeling of reality have also begun to vary. Trip to the Moon, made in 1902, is one of the major turning points of this process. From 1968 to 2001, films using classical movie techniques were made and an important path was taken to give the audience a sense of reality compared to the previous movie picture period. When we compare these films shown in Figure 9-1 with the Gravity film made in 2013, it is possible to see how much of a big step was taken in giving the audience a feeling of reality (La Valle, 2017).

Figure 9-1. (a) Arrival of a Train at La Ciotat Station, 1896. (b) A Trip to the Moon, 1902. (c) The movie 2001, from 1968. (d) Gravity, 2013.

This process, from cave paintings to 3D cinema film technologies, is based on the aim of enabling people to experience a story, an event or a situation at the highest level of reality. The development process is completely
linear with consumer's expectation to experience the feeling of reality. The technology of produced films has developed in this direction as people's expectations to experience this feeling have increased.

Technology-based VR applications, a popular concept nowadays, evolved out of consumers’ expectation to experience a sense of reality for a given product, a service, or an object.

A short story named The Veldt was published by the famous British writer Ray Bradbury in 1950. In the story, a wealthy family buys a system which represents the African steppes with its three-dimensional features that appeal to all sorts of senses that may come to mind such as image, sound, smell etc. and sets it up in the children’s room. The parents were worried that their children's passion for this virtual African world would grow, and after a while they decide to remove it and then suddenly disappeared after explaining their decision to their children. At the end of the story, African lions in the virtual world rip two human bodies to shreds while the children who are no longer obliged to leave their virtual world that they were attached to with passion are very happy... With this story, Bradbury was given the title of the creator of the VR concept (Oppenheim, 1993, Kurbanoğlu, 1996).

VR is being applied in many fields today, especially in entertainment, health, education, industry and industrial applications. The first applications of the VR idea dates back to 1930s. The first product is the View-Master that was produced in 1939. It is a vision simulator that enables a viewer to watch films inside it as if in the real environment with the help of light. Being completely mechanical, the first product to create a sense of augmented VR was Sensorama. Developed by Morton Heilig in 1962, it was designed by 3D stereoscopic image, a body-shaking platform, a smell system and a stereo sound system so that the viewer can feel himself/herself in the cinema or in the event of the play onstage. Presenting a virtual environment through the senses of sight, hearing, touch and smell, this machine is an indicator of the process that goes to computers and is still in operating condition (Robinett, 1994). The flight simulator developed by Thomas A. Furness in 1966 can be considered the third important step in the VR process. The source of inspiration for the headsets used for the VR perception today is the one nicknamed the Sword of Damocles, developed by Ivan Sutherland in 1968, although it was very primitive (Öy, 2016).

The video games that have been rapidly evolving since the 1980s have an accelerating role in the development of VR applications. The game products that were initially developed based on graphics and animated pictures have reached an advanced point in reality in the last few years (La
VR applications have been intensively used for educational purposes (Kayabaş, 2005) in health (Aktan, 2007), and technical and engineering (Abulrub, et al., 2011) fields since the 2000s, and they are becoming increasingly widespread.

“Product” in the virtual reality market

It cannot be argued that VR is a form of perception that is not real. In other words, VR is what users produce in their minds outside of reality by interacting with real time simulations with the help of multiple sensory channels such as sight, hearing, smell and taste as well as special devices that are worn. Virtual environments are made up of artificial visual copies of real-world or designed spaces and objects such as 3D high-resolution photographs and moving images (videos). VR environments basically enable the user to have a visual experience by a stereoscopic (3D) image display screen. In more sophisticated VR systems, the user is also alerted to sensations such as smell, hearing, touch, heat and humidity, and movement (Orhan and Karaman, 2011). Therefore, there are various technology products in different categories in the VR market. These products are physical hardware products (glasses, headset etc.) and applications (games, activities etc.) offered to consumers through physical hardware products.

While VR may currently be at the top of our minds, this is not the first time. Sensorama, produced in 1962 and regarded as the first of VR products, had all the equipment to include the theatre audience in the scene with the 3D stereoscopic image, stereo sound system, body shaking mechanism and aromatic scent system. Heilig, being unable to find financial support for the product, could not mass produce Sensorama. It was designed by Ivan Sutherland in 1968 and named the Sword of Damocles, which was the first example of today’s headsets used in the field of VR. This VR device, used by suspending it from the ceiling as it was very heavy, was an inspiration to modern VR glasses.

In the 1990s, when 3D gaming was introduced, virtual reality saw a similar boom. Gaming companies introduced 3D videogames and got into the market by a product with SegaVR LCD screen, stereo speaker and head motion sensor in 1991, and Virtuality's VR arcade pods and Nintendo's Virtual Boy (July 21, 1995). Virtual Boy was the first portable gaming console that could provide 3D image in the world. However, it could not survive in the market as its market price was too high, it was tiring during long use and the marketing strategies were not formed properly. Virtual Boy has led to the growth of today's wearable technology
products and the rapid development of virtual reality technologies (http://www.atmeeting.com.tr/sanal-gerceklik/). Movies, such as the Lawnmower Man, Virtuosity, and Johnny Mnemonic, portrayed new, immersive cyber-worlds. Books, including Snow Crash and Disclosure, similarly depicted this new type of reality. However, the technology was not able to keep pace with these unrealistic portrayals in the media. The 3D arcade games suffered from poor graphics, expensive prices, time lags, and low computing power. Eventually, these products failed, as consumers became unsatisfied with the technology, and the boom was over (Bellini, et. al., 2016).

A similar hype began when Facebook acquired Oculus for $2B in 2014 and Bellini, et al. (2016) note that over the last 2 years there have been over 225 VC investments in augmented reality, raising $3.5B in capital. So, what has changed that differentiates the current state from the 1990s flop? The answer is the technology, in their view. Today, computers are powerful enough to render realistic virtual worlds. Additionally, the mobile phone industry has improved the price, size, and performance of displays and sensors. Today’s technologies have improved on the inefficiencies present in the 1990s. As a result of this progress, companies have become involved:

Table 9-1. Recent Involvement in Virtual Reality by Technology Giants

<table>
<thead>
<tr>
<th>Company</th>
<th>Date</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualcomm</td>
<td>Jan-12</td>
<td>Raised seed funding for the mobile augmented reality startup Blippar</td>
</tr>
<tr>
<td>Google</td>
<td>Apr-12</td>
<td>Introduced augmented reality glasses, Google Glass, to public</td>
</tr>
<tr>
<td>Sony</td>
<td>Mar-14</td>
<td>Sony announces Project Morpheus, later renamed PlayStation VR</td>
</tr>
<tr>
<td>HP</td>
<td>Mar-14</td>
<td>Launched Aurasma 3.0, an augmented reality platform that it acquired through Autonomy</td>
</tr>
<tr>
<td>Facebook</td>
<td>Mar-14</td>
<td>Acquired Oculus, a VR startup, for $2B</td>
</tr>
<tr>
<td>Samsung</td>
<td>Sep-14</td>
<td>Revealed its own head-mounted display, Samsung Gear VR, partnering with Oculus</td>
</tr>
<tr>
<td>Google</td>
<td>Oct-14</td>
<td>Invested $542mn in the startup Magic Leap</td>
</tr>
<tr>
<td>Company</td>
<td>Date</td>
<td>Event Description</td>
</tr>
<tr>
<td>-----------------------</td>
<td>------------</td>
<td>-----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Intel</td>
<td>Apr-15</td>
<td>Invested in Series A funding for the VR startup WorldViz</td>
</tr>
<tr>
<td>Apple</td>
<td>May-15</td>
<td>Reportedly acquired Metaio, an augmented reality software maker</td>
</tr>
<tr>
<td>Disney</td>
<td>Sep-15</td>
<td>Led a $65mn finding round in Jaunt, a VR content startup</td>
</tr>
<tr>
<td>Microsoft</td>
<td>Oct-15</td>
<td>Acquired Havok, a 3D physics engine used for videogames</td>
</tr>
<tr>
<td>Comcast &amp; Time Warner</td>
<td>Nov-15</td>
<td>Participated in a $30.5mn funding round for Next VR, which captures live events in VR</td>
</tr>
<tr>
<td>Apple</td>
<td>Nov-15</td>
<td>Acquired Faceshift, a facial recognition capture and animation company</td>
</tr>
<tr>
<td>Fox</td>
<td>Jan-16</td>
<td>Acquired minority stake in Osterhout Design Group, a VR/AR HMD maker</td>
</tr>
</tbody>
</table>

Achieving lower hardware costs and more ergonomic and usable VR glasses compared to the previous years has allowed VR technologies to evolve. Nowadays, in many countries of the world, investments worth billions are made in VR technologies. Philip Rosedale accelerated the process in 1999 with 360° image studies. In 2001, a computer-based three-dimensional cubic room was introduced by Z-A Production. In 2007, with the StreetView application, Google enabled viewing 360° of real world images. The Oculus Company, bought by one of the biggest players of the VR market, Facebook, developed the first Oculus Rift VR prototype that works by connecting it to the computer in 2010. In addition to these, Sony produced a PlayStation-4 compatible VR headset in 2014. Developed by HTC Company, the HTC Vive VR glasses, which still need a computer, are among the known products. "Build-it-yourself" style CardBoard, which is used on smart phones, was also produced by Google. VR is not only limited to glasses, but also enables us to develop devices that incorporate senses such as direction, movement, and smell into applications. In addition, VR glasses are now abundant on the market, with their own integrated lenses, so anyone who has a smart phone with gyroscope can experience the VR through VR mobile applications (http://www.atmeeting.com.tr/sanal-gerceklik/).
“Price” in the virtual reality marketing

Virtual worlds must be displayed in real time or near real time speed in order to provide interactive control and reflect the changes in the objects. All of the above mentioned technologies are present today although some deficiencies need to be overcome technologically. Commonly used computers are not yet powerful enough to process complex 3D images in real time. It is necessary to better coordinate the interaction of virtual worlds with the tracking-tracing devices that transfer human movements to computers. Otherwise, delays in viewing user movements lead to unwanted problems in the human metabolism. The prolonged use of such systems can cause dizziness and nausea in people. That SG systems are expensive is a frequently articulated disadvantage. Therefore, it has found more application opportunities in the world of games and entertainment (Bayraktar and Kaleli, 2007).

When the computer and its hardware are not compatible with the VR systems, it seems that this causes many problems both in terms of the quality of reality and the physical harmony of the human body. In order to achieve a quality VR, the systems and the hardware used must be compatible with the current technology while ensuring this compliance requires significant expenditure. The prices of computer and hardware systems with up-to-date technology are always high. In other words, purchasing VR products such as glasses is not enough to buy VR quality. The VR product needs to have up-to-date technology as well as high-priced up-to-date technological features with which the hardware is compatible.

However, it is also possible to find low-priced products that are produced as alternatives in the market. As mentioned above, consumers can satisfy their needs for VR by low-priced products if s/he has a high toleration for the quality of VR products or has a low level of quality acceptance. Recently, there are also cases where lower-priced games which have a lower reality feature, yet give the user the opportunity to imagine, makes the user happier than the ones with augmented reality feature. Games with augmented reality require high-tech hardware, and make the user unhappy unless they are used with the appropriate equipment. On the other hand, games which are less realistic and with simpler designs can make the user happier since they can be played on smart phones which have simple features.

Cost and portability are among the important factors motivating today's consumers in this market. Although the level of reality is important, consumers can exhibit low acceptance behavior toward the level of VR of
products that offer cost and portability advantages. In fact, families are more eager to spend time in front of the TV to watch free broadcasts in their homes even though they have the chance to watch high-resolution, colorful, panoramic and 3D movies by going to the cinema. The expectation of portability includes three basic concepts; 1) having to go somewhere, 2) being able to watch at home, 3) being able to carry the equipment everywhere. These expectations apply to all VR applications used for pictures, movies, phones, computers or video games (Bellini, et al., 2016). Therefore, portability and low cost is being emphasized for the new products in recent times. Both high-priced products with portable characteristics and high VR quality and the low-priced ones with portable characteristic and low VR quality can find a buyer in the market.

The prices of the top three products in the market in 2016 are as follows; The Oculus Rift that was launched on March 28 was $599, the HTC Vive that was put on the market on April 5 was $799 and Sony PlayStation VR that was released on October 13 found its place in the market at $399. When we compare VR headsets in terms of their prices, it is seen that Sony PlayStation VR is the most advantageous one while the HTC Vive has a $200 higher price than its most expensive competitor. In the sales reports of 2016, it is stated that HTC fell behind. According to the information, HTC Vive formed 12 percent of the company's total revenue this year (http://shiftdelete.net/sanal-gerceklik-pazari). In fact, based on this report, it is possible to say that the consumer of VR products is sensitive to the price since the prices of the leading brands really force buyer's purchasing power. The consumer who cannot find affordable prices in big brands can go for brandless products that have simple designs. In particular, Chinese producers can find large consumer groups for VR products through online sales.

“Place/distribution” in the virtual reality marketing

The distribution model of the VR market has a highly plain structure that forces vertical integration. The products in the market are composed of products in two main categories: VR applications and physical hardware required for these applications. The first consists of programs based on software (games, activities, etc.), and the second consists of VR equipment (glasses, etc.) used to deliver these programs to the consumer. It seems that these two product groups differ in terms of the type of production and producer specialization. Therefore, channel members of these product groups in the market are also made up of different businesses.
When the structure of channel members is examined in the market, it is seen that a vast majority of enterprises only produce VR applications and do not go into VR hardware production or trade. However, some of the enterprises that produce VR applications in the market also produce simple designed glasses. The aim of producing these glasses is to increase the sales of the application by offering consumers cheap product equipment. It is possible to say that it is for promotion purposes. Enterprises producing big brand VR applications usually operate in cooperation with major brands that produce physical VR hardware products (glasses, etc.) in the market. The enterprise selling the application recommends or sells the VR hardware product of the brand that it cooperates with.

When we look at Gartner's Hype Cycle for Emerging Technologies report, it is stated that VR is expected to reach peak levels within the next 5 to 10 years. This means that in the coming years, this technology has the potential to target all users in the market. It is possible to see Samsung's Gear VRs or low-priced VR products from China while traveling in small shopping malls selling information technology (e.g. Yazıcıoğlu Business Center / Kadıköy-Istanbul). In the next 5 years, we can see these products in supermarkets and chain stores (Gartner, 2015). When it comes to VR, it might be thought that this area has potential for only giant corporations that invest millions of dollars. Yet, the situation is not as it seems. A small company called Roberts Space Industries has received $100 million by crowdfunding for its Star Citizen game.

When delivering VR products to the ultimate consumer, it is possible to see intermediary enterprises which have physical position in the market. However, in reaching the ultimate consumers who are already users of information technology, a large part of the distribution is carried out via the internet and through non-store retailing.

“Promotion” in the virtual reality marketing

Promotional activities in the VR markets are closely related to whether the enterprises producing the application products and the enterprises producing the physical hardware cooperate with each other or not. If there is cooperation between them, product / brand placement within the application is widely used. If there is no cooperation, VR application environments have the role of a media domain to do promotional advertising for VR physical hardware products. VR application products (games, etc.) are also the media environment for product / brand placement for the products in other sectors.
Since a vast majority of consumers in the target market of VR products are internet users, the most suitable media domain for these products is the internet environment.

In the VR market where sales incentives are applied, VR products (glasses etc.) are mostly given as gifts in the purchase of VR application products (games etc.). In this kind of a sales incentive, there is usually cooperation between the VR application product company and the VR product company.

**Virtual reality market today and its future**

It can be assumed that VR technologies are particularly concerned with consumers interested in the gaming and entertainment industry. However, it has a great potential in other sectors as well, and it is becoming more widespread day by day. It has a potential of intensive use in many fields, especially in education, traveling, communication, the medical sector, health and industry. Leading brands who want to communicate to their customers by offering brand new experiences through innovative channels have already allocated a significant share of their marketing budget for VR. From General Electric to Nike, and even to the latest Disney Star Wars movie, many brands have started to use these technologies. On the publishing side, The New York Times pioneered the launch of the 3D viewer (http://digitalage.com.tr/makale/).

Every field benefiting from computer-aided design such as mechanical engineering, civil engineering, ergonomic design, aircraft design, architecture, interior design, car design and costume design is a potential market for VR applications (Kurbanoğlu, 1996).

With the VR technology, it is possible to experiment with factors such as color, lighting and ergonomics. Application areas outside of houses, workplaces and shops can also be considered such as the arrangement of an art gallery, the stage lighting and the arrangement of decorations (Oppenheim, 1993; Ceran, 1992). As a high-cost area, architectural projects and related regulations are considered worth investing in terms of the implementation of VR technology. To give an example from the present applications in the field of computer-aided design, the Art + Com Company in Berlin uses VR technology in building designs and layout designs of art exhibitions (Ceran, 1992). In the United Kingdom, Satra Footwear Technologies Company uses VR technology for footwear design while the Matsushita Company in Japan uses this technology for designing kitchens (Stone, 1991; Oppenheim, 1993).
VR products are most commonly encountered in the entertainment industry, in games and in education in the world. The new generation of teaching materials is widely supported by VR and augmented reality interactive products. In this regard, VR offers very suitable materials and equipment for all educational phases. The concepts, places, methods, practices and objects in the curriculum are presented in a three-dimensional manner to students through a realistic perception. This makes learning attractive and permanent. VR headsets and glasses, simulators, and even consoles give the opportunity to take an active role in 3D games and the player is able to gain experiences that s/he has never had before or cannot easily have. VR headsets, glasses, platforms and clothes provide students the opportunity of one-to-one learning about the subject; they receive education as well as the chance of having a real life-like experience. For example, while describing an event in geography or history classes, giving education that enable students to see the phenomenon and experience it as if they were present at the place and the environment, or doing an experiment at no expense in the chemistry class where students do not have to wait for each other, or even teaching an animal's anatomy, its internal organs, how blood circulates in veins, how the heart beats and how sweat goes out of the skin as if students see it themselves in the biology class will make learning fun, especially for Y and Z generations who are difficult to keep in the class (Arslan, 2017). In the aviation industry and heavy machinery industries, VR simulators offer great benefits to teach practical use of high cost machines used in ports. These VR applications provide outstanding achievement in educating the candidates participating in the training and creating qualified employment, while reducing the risk of breakdown of the mentioned machines.

In the faculties where medicine, veterinary medicine and dentistry education are given, experiments, laboratories, diagnostics, treatments and operations can be carried out by simulations. Virtual classrooms, laboratories and operating rooms are being tried in some universities. These environments maintain the actual interaction between the instructor and the student, but the process is experienced in the virtual environment. With the Real Image Viewing technique, the hologram images of the organs can be interfered with the electronic scalpel. However, studies and products in this area are inadequate in the field of medicine. For example, in Turkey, where animal husbandry is a very important sector, veterinary medicine education should definitely be supported with VR equipment, and considering the inadequacy of the number of physicians, operations with Real Image Viewing technique will bring significant advantages as well as carrying Turkey ahead in terms of international competitiveness in
scientific and technical areas. With the help of gloves and consoles that are integrated into VR glasses, doctors and veterinarians who are trained in the field of medicine can perform operations through operation simulations by using their hands in the virtual environment and gain experience (Wojciechowski and Cellary, 2013).

The tourism and travel sector offers more experience to its customers through 360° images and virtual tour applications. The places and images displayed on the internet can be visited as if you were in that place by using integrated software. Home, car, furniture, clothing, accessories and decoration materials can be subject to preliminary review as in real life for customers in the virtual environment. It is possible to visit, furnish the house, try and test the car, clothes, and things you want to buy in the virtual environment. Defense training and exercises are becoming very close to reality by the use of equipment in the virtual environment. The fields of communication and media began to use VR techniques, and thus examples that will change the horizon of journalism have started to be watched. For the first time, journalist De la Pena enabled people to watch Syrian children's experiences in the battlefield with VR glasses by modeling this real news with 360° reality through which the audience felt it in the real environment. Sports, exercises and training are becoming more successful and individualized thanks to virtual and augmented reality applications. Getting into shape and doing body building is now possible by individualized programs providing the feeling of working out in the real environment. These developments can be seen as an important opportunity for those who do not like the treadmill or have claustrophobia. Treating VR applications as subheadings for some areas can create a faster awareness (Öy, 2016).

The brands which make good use of the potential in the ever-growing VR market such as Sony, Oculus, HTC, Google and Samsung dominate the vast majority of the market. The distribution of the market by brands is shown in Figure 9-2.
Investments made by VR/AR/MR companies in these markets since 2012 and the situation expected to take place by 2020 are shown in Figure 9-3.

Figure 9-3. Worldwide Virtual Reality revenue by segment (SuperData Research, 2017)
As can be seen, the growth rate of the VR in the market is quite high, and according to the research, it is predicted that the growth will continue at a rapid pace until 2020. Also, it is predicted that VR revenue will total almost $38B by 2020. Estimates of market growth are shown in Figure 9-4.

VR software revenue will reach $19.9B by 2020, surpassing hardware earnings for the first time. Hardware will earn more than software through 2019 due to the high upfront price of console and PC hardware and limited monetization opportunities for paid content (SuperData Research, 2017).

According to Goldman Sachs Global Investment Research Report, their 2025 VR/AR estimates by use case for consumer-driven use cases in video games, live events and video driving are 60% of software spending with the remainder from enterprise and the public sector. Their 2025 software estimates by VR and AR shows VR use cases driving 75% of their software estimate; as AR technology matures, they expect more enterprise use cases to emerge (see Figure 9-3.)
Only mobile games earned the equivalent of all box office sales in 2016 (see Figure 9-6.). In addition to this, virtual reality made $1.88B in its first commercial year. Samsung Gear VR led with 4.5M devices sold. Sony’s PlayStation VR beat out other non-mobile headsets, approaching a million in sales by the end of 2016 (SuperData Research, 2017). Based on this, it seems possible to make the above estimates about the VR market.

According to research, The Features of American VR Users are as follows (SuperData Research, 2017):
The Immersed Console Player: - Male Millennials ages 1-24, - Only demographic to use PSVR (52%) over any other headset, - Three in four use VR to play games, - Spends up to twice as much each month on VR content than any other audience segment ($43) - Spends almost 5 minutes longer per VR session than any other demographic (18 minutes), - Most interested in content that features their favorite athletes (34% are interested).

The Starstruck Explorer: - Female Millennials ages 18-24, - Most compelled by content where they can explore landmarks and locations (37%), - Want to see their favorite celebrities (24%), artists (24%) and fashion designers (23%) in VR, - Willing to spend more than older demographic on tickets to VR events ($19), - Spends more than twice as much on console content ($47) than mobile ($17) or PC ($21).

The High-Earning Virtual Tourist: - Males 35 years old and over, - Earns almost 40% more annual income than all other user types ($81K), - Most likely among all demographics to try tourism and travel experiences (25%), - 2 in 5 want to see landmarks and destinations in content, - Most likely to use a mobile headset over any other demographic (70%), - Uses mobile more often than other headsets each week (8) but spends the least amount of time in them during each session (10 minutes).

The Engaged Mobile Crusader: - Females 35 years old and over, - Most likely to try a device for the first time inside their own home (48%), often trying their children’s headsets, - More than half have used a mobile device but less than a quarter have used a PC headset, - Willing to spend the least amount of money on content ($12) than any other demographic, but spends most on mobile content ($30), - Fewer know how to skip mobile VR ads than other user types (36%).

When the profiles of the consumers in the VR market are examined, it is seen they constitute a large crowd with very different characteristics in terms of age, sex, income level and consumption behavior. With this result, it is possible to say that the total VR market has a potential to grow to a large extent in the future.

**Conclusion**

Research and predictions show that the VR market will grow rapidly in the coming years. However, since the brands in the market are so powerful, it is difficult to predict who will outrun this fierce competition. Competitive success depends on the technologies and platforms offered by brands, as well as on the power of new applications and content to work on these platforms. This new platform will have new stars, contributors, storytellers
and actors. For institutions and individuals on a middle and local scale, there may be many opportunities in this area. A market structure that has a buyer in all quality levels and prices in VR applications and VR technological physical products demonstrates that businesses at different levels outside major brands may receive shares in this market. In particular, countries with high Y and Z generation consumer populations are the main attractive markets for large brands to focus on. It is anticipated that VR technology applications, which have many market potentials besides the game market, will continue to bring innovations for different markets. It can be said that stronger collaborations will be formed between brands that produce VR application products and brands that produce VR physical hardware products, or that vertical growth strategies in the distribution channel will become widespread. As the VR market offers tremendous opportunities especially for developing countries, it is recommended to go for long term strategic investment plans in order to get a share from this market.

References


CHAPTER TEN

A NEW STRATEGY IN MARKETING PRODUCTS AND SERVICES: SEMANTIC WEB (WEB 3.0)

ALPASLAN YÜCE AND YAĞMUR KERSE

Introduction

We are witnessing a new development almost every day in the virtual world. Many technological innovations such as developments in the web world, emergence of intelligent tools, and birth of artificial intelligence have deeply affected both daily life and business life. The marketing world is also one of the fields where these changes are experienced. In this chapter, the historical developments of the Web, semantic web technology and its relationship with marketing are explained.

The historical development of the web

We were introduced to the Web when Tim Berner-Lee discovered the World Wide Web (www) in CERN (European Organization For Nuclear Research) in 1989. Initially, it was designed to meet the automatic information sharing demand between scientists in universities and organizations. The first website in both CERN and the world was in Berner-Lee’s computer. This website described how documents of other people could be accessed and how to build one’s own server, i.e. basic properties of the web (https://home.cern/topics/birth-web). Today it is still possible to access this website: http://info.cern.ch/hypertext/WWW/TheProject.html.

The Web has been significantly developed over the years and through today. Basic developments in question have been divided into three periods, namely Web 1.0, Web 2.0 and Web 3.0. Although such divisions
were not made by an official authority, they were adopted along with the
development of marketing (Doğan & Kesken, 2007: 44).

Traditional Web, i.e. the Web 1.0 period, provided us with a one-
direction publishing medium. Its basic aim was to publish information
which could be easily accessed by everyone using a standard web browser
over the Internet. Therefore, we can say that Web 1.0 was information-
focused. Later on, it was used for commercial applications and online
operations, which caused the emergence of electronic commerce (e-
commerce). Basic developments and advancements took place in this
period. Communication rules such as HTTP, markup languages such as
HTML and XML, web browsers, website designs for academic activities,
development of web portals and the first use of the Web for commercial
purposes took place in this period (Murugesan, 2009: 2-3). During this
period, users played a passive role. They could access websites of
companies and read the information offered by companies, but they could
not make comments and interact.

By the emergence of Web 2.0, the content became more socially-based
and more target audience-oriented. Social networks such as Facebook,
Twitter and MySpace came into our lives. Bloggers and Vloggers
emerged. E-commerce expanded and consumers began to purchase almost
everything online (Clow & Baack, 2016: 225). Users who were passive in
the Web 1.0 world became active users who were able to make comments
about the offered content, change such content and even create their own.
By the help of social networks, consumers were able to establish
communication with both each other and other brands, and they reinforced
their power on brands through sharing their experiences in online social
channels.

Web 3.0, or in other words Semantic Web, represents the next great
step in putting information together. Semantic Web allows data to be
connected from one source to another and makes computers understand
the data to allow fulfilment of increasing more complex duties from our
point of view (http://www.cambridgesemantics.com/semantic-university/
introduction-semantic-web).

**Semantic web**

In an article they published in 2001, Berners-Lee, Hendler & Lassila
explained how Semantic Web would work with an example. According to
them, a person visiting a website of a clinic would not only see key words
such as “treatment, medication, physics and therapy,” but also view on
which days the physician would be in the clinic, access appointments
within a date range in day-month-year format and get appointments online. Within the 16-year period after said article, we have begun to see reflections of the Semantic Web gradually. Today people can get appointments online using websites of hospitals, which indicates that we experience reflections of the said period.

Semantic Web is an important field where intelligence and web technologies combine (Matsuo & Colomo-Palacios, 2013: 31). Artificial intelligence is now a part of many devices we use every day (Urwin, 2016). Artificial intelligence is the science of producing smart machines that can do operations better and faster than human beings can. Here, the mentioned intelligence is not the real one; rather, it bears a meaning with regard to solving problems, and solutions of artificial intelligence are always digital and computer-based (Harris, 2010: 6).

Semantic Web helps machines process metadata (data that define objects) on web pages; however, association of virtual world objects with metadata is required in order to do this. Metadata can be used to associate descriptions, prices, user manuals and many other areas of usage (Thompson, 2011: 64).

We observe that the Web consisted of sources and links before the Semantic Web (see Fig. 10-1). Mentioned sources are web documents that were targeted for human consumption, and which generally did not contain metadata which described their intended uses and their relationship with other web documents. Indeed, Semantic Web also consists of sources and links; however, such sources and links feature descriptions of concepts for machines. For instance, some links may indicate that a source is a model of another one or that a person or source is written by a source which identifies that it contains software connected to other software (https://www.w3.org/2001/12/semweb-fin/w3csw).
Figure 10-1. Resources and Links can have Types in Semantic Web
Source: Koivunen and Miller, 2001

Semantic Web can establish better connections among information blocks and facilitates software applications that can predict what we really want to learn or do (Murugesan, 2009: 6). Such applications can also be seen in the e-commerce sector and digital advertising field. For instance, a consumer visiting a shopping site can see similar item lists next to the item he/she is viewing with a note such as “customers who viewed this item also viewed,” when a consumer visits a website, advertisements on campaigns about the items that he/she previously viewed can be shown, or a consumer who has inquired about flight prices for a specific date can see flight offers for cities he/she viewed when visiting a website later.
Semantic Web can be defined as a sort of Web that can be read by machines. A Web that can be read by machines would facilitate human–computer cooperation. When appropriate and required, certain tasks may be assigned to machines and they become automatically operable (Domingue, Fensel & Hendler, 2011: 5). Indeed, iPhone's Siri application can be given as an example. By means of its voice recognition feature, Siri can understand what you say and perform tasks that you give through voice commands.

Machines can read the Web by means of formal ontologies (Matsuo & Colomo-Palacios, 2013: 32). Ontology is a philosophical thought that questions whether things exist or not, and the nature of existence. Today the ontology concept is being reformed in terms of computer science. In fact, although ontology questions the same thing, its purpose is different in terms of computer science. Ontology in computer science is attempting to develop machines which can be used by software programs or which are even capable of directly making logical deductions with the help of special software (Poli, Healy & Kameas, 2010: 1). Ontology is also defined as an abstract term of a type of dictionary which has been expanded and structured with a computer-based data dictionary, a thesaurus and a glossary or information specific to a certain field (Bille, Troyer, Kleinermann, Pellens & Romero, 2004).

Using ontology, a virtual world would be automatically explained with an ontology and therefore, it would fit exactly into the Semantic Web concept. In turn, this would cause search engines to discover the virtual world, drive information exchange among virtual worlds, and reveal many interesting opportunities that allow moving from a virtual world to another one (Bille et al., 2004). Therefore, the increasing number of ontologies would have an effect on the success of Semantic Web, which contributes to the formation of ontologies in various fields such as medical diagnosis, psychology and management (Matsuo and Colomo-Palacios, 2013: 32). Smart machines created by ontologies can read and understand data in the cyber medium, create associations and modify them as required. This process would allow adaption of them by different users or firms according to their own needs (Garrigos-Simon, Alcami & Ribera, 2012: 1883). In fact, ontology services can be used in not only the virtual life, but the real world as well. For example, it would be practical to use a mobile phone to check a nearby thermostat or to visit our virtual home to switch off our real oven (Thompson, 2011: 64).

Despite their small number, marketing ontologies have emerged by means of some marketing researchers and computer research centers, and they light the way to understanding millions of data points (Pinto,
Marques & Santos, 2009: 77). Yiqing, Lu & Chen (2010), who are among such researchers, have suggested an ontology with a management example in their study in which they analyzed the auto-reasoning mechanism of an ontology-based marketing strategy and explained it in detail. The researchers have reported the need for ontology to cover the sufficient amount of information so as to make the knowledge base effective in the reasoning process. From this perspective, generally customer data, good prices and sales details are considered as basic information for the marketing area. For instance, if demographics of the customers (such as age, education level, income) are to be used for market segmentation or if their purchasing behavior characteristics (such as purchasing amount, nature of the purchased good, purchasing frequency) are to be used for dividing the market, these attributes should be considered in creating ontology (see Table 10-1) (Yiqing, Lu & Chen, 2010: 515).

### Table 10-1. Domain Knowledge

<table>
<thead>
<tr>
<th>Issue of market strategies</th>
<th>Analysis technique</th>
<th>Knowledge</th>
</tr>
</thead>
<tbody>
<tr>
<td>market segmentation</td>
<td>statistics, cluster, decision tree, neural network</td>
<td>statistics characteristic or the purchasing behavior characteristic attributes for data mining</td>
</tr>
<tr>
<td>shopping cart analysis based on customer interests, bundle sale, and gift send</td>
<td>association rule</td>
<td>customer interest variable and marketing strategy attribute</td>
</tr>
<tr>
<td>customer loss rate</td>
<td>statistics</td>
<td>customer loss classification and strategy attribute</td>
</tr>
</tbody>
</table>

Source: Yiqing, Lu & Chen, 2010: 516

### Marketing & Semantic Web

The Web 3.0 marketing world is a place that brings the information you need all around the world wherever you are to your fingertips in a personalized manner (Tasner, 2010: 11). Semantic Web will classify data in a more personalized and usable way for humans. This will provide content in a better, more meaningful and more accessible way more than ever. That is, Semantic Web will be capable of transforming raw data into
real information. In this way, Web 3.0 will ensure control over marketing and personalization (Yung, 2013). This new technology offers listening, learning and cooperation opportunities to each consumer or stakeholder to allow them to behave differently based on their preferences (Garrigos-Simon et al., 2012: 1883).

Tasner (2010: 12) lists five basic components of Web 3.0 in terms of marketing as follows:

- **Microblogging:** Microblogging allows us to share our thoughts using a limited number of characters like Twitter. Since people are generally busy today, accessing stories of 140 or fewer characters is more attractive.

- **Virtual reality world:** Virtual reality worlds are the places where people from all around the world interact with others in a 3D medium. Meetings are held through such channels and virtual reality fairs take the place of trade fairs. Second Life is an example of this.

- **Customization/Personalization:** Customization allows visitors to create a more personalized experience. People are now expecting to see their names on their websites, e-mails and even advance payment options matching to their purchasing habits. As the Web becomes more intelligent, personalization will become a standard (norm). SendOutCards, Google and Amazon are examples of this.

- **Mobile:** Billions of people are using mobile phones in the world. The number of mobile phone users has exceeded the number of computer users. Consumers are surfing on the Internet and making purchases directly using their mobile devices. At the same time, they become instant journalists shooting the events around them. iPhone and Samsung are only two examples of mobile phone brands.

- **On-demand cooperation:** Users enter real-time interaction by examining documents, cooperating and making changes. Software as a service can be included in the on-demand category since it allows users to develop only web-based solutions. Google Docs, www.Slideshare.net etc. are examples of this.

Social media consists of web and mobile applications which allow people to create content easily, share information and sources, and interact with others online (Uy & Yu, 2015: 269). Using social media, companies are able to view posts, images etc. of consumers on the Internet about their experiences on products or brands and thus assess their participation. In
this way, electronic images and the reputation of products and brands can be controlled. Besides this, Semantic Web aims to help in the collection of such types of information and is a more effective usage of data (Ferrari, 2015: 309).

Today, companies must collect and use enormous quantities of data and information obtained from the Web, which is also called the Big Data (Ferrari, 2015: 309). After all, new technologies in this Web 3.0 era help easy collection of information before, during and after communication of companies with their customers by means of techniques such as information storage, data mining or customer relations management. Such information, which is obtained either by organizations, from social networks or from the Internet in general, is required for enabling instant cross-marketing and other applications for adapting and personalization of products, brands and services at any time according to the needs of different users or companies (Garrigos-Simon et. al., 2012: 1883).

As mentioned before, whereas companies reach their customers using one-way communication in Web 1.0, they found the opportunity for two-way communication in Web 2.0 (Ferrari, 2015: 309). As for Web 3.0, the technology has evolved from a static information-focused nature without interaction into a human-focused nature based on human-machine cooperation (Mistilis & Buhalis, 2012: 51). In Table 2, you can see the main differences between Web 2.0 and Web 3.0. Such advancements have shown parallelism with development of marketing. In the first stage, marketing, which was transaction-focused, attached importance to sales. In following stages, the importance of and need for establishing good relationships with customers were emphasized. The third stage, i.e. human-focused Marketing 3.0, has been transformed into a structure that invites customers to participate in product development and communication of companies. Regarding cooperative marketing as one of the basic building blocks of Marketing 3.0 (Kotler, Kartajaya & Setiawan, 2014) indicates that the focus is on cooperation like Web 3.0.
 Conclusion

Whereas we see Semantic Web applications in this period, on one hand, the strong effect of Web 2.0 social media tools such as Twitter, Facebook, Snapchat etc. is maintained, and on the other hand, we witness the development of smart devices that can move through voice commands and establish connections with humans. Based on these facts, we can say that we are in a transition period in which Web 2.0 and Web 3.0 intersect. We can observe reflections of these periods on Web 2.0 very clearly. For example, while consumers give their favorite products red-carpet treatment, they drag the ones they dislike through the mud. Consumers who are sensible to social issues may divulge a firm which employs child workers in social media and start a boycott campaign. Moreover, the effect of this initiative may go beyond being individual and become a global issue. A consumer in the USA may affect the opinions of a consumer in Turkey about a product or company.

We can say that Semantic Web is still in developing process, and its reflections on marketing are not so clear as they are in Web 2.0. However, shopping in stores without using money by the help of smart phones or

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**Table 10-2. Main differences between the Web 2.0 and the Web 3.0**

<table>
<thead>
<tr>
<th></th>
<th>Web 2.0</th>
<th>Web 3.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of interactions</td>
<td>Sharing of information between users</td>
<td>Sharing of information between computers</td>
</tr>
<tr>
<td>Sought results</td>
<td>Feedbacks from users</td>
<td>Targeted knowledge</td>
</tr>
<tr>
<td>Marketing Model</td>
<td>Relationship Marketing</td>
<td>Collaborative Marketing</td>
</tr>
<tr>
<td>Involved subjects</td>
<td>People, firms</td>
<td>People, firms, computers, systems</td>
</tr>
<tr>
<td>Base</td>
<td>Users’ participation</td>
<td>Users’ cooperation</td>
</tr>
<tr>
<td>Main components</td>
<td>User-generated Content, E-commerce, Social Media</td>
<td>User Generated Content, E-commerce, Social Media, Context, Vertical Search</td>
</tr>
</tbody>
</table>

Source: Ferrari, 2015: 310
easier shopping without using credit cards, the provision of personalized
details about products searched for by consumers as well as campaign
offers on online shopping sites, transferring money on time and in any
place with mobile banking systems using voice commands, and
consumers’ performance of their banking operations without being
dependent on the bank and business hours each indicate that Semantic
Web will play a more intense role in our lives.

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CHAPTER ELEVEN

THE DARK SIDE OF ONLINE CONSUMER BEHAVIOUR

FİLİZ EROĞLU

Introduction

For ages, the essential principle of economic discipline was Homo Economicus, meaning economic person, whose consumption behaviour is rational and whose consideration is to accomplish maximum benefit with limited resources. However, another kind of consumer behaviour has become crucial over the years, which is defined as “the dark side of consumer behaviour” because it has been found that consumers buy products not only to satisfy their physiological needs and wants, which means rationally, but also for other reasons like addiction, compulsion or impulsion. Although consumption behaviour is a normal activity of daily life, it can become an abnormal activity in case of addiction, compulsivity and impulsivity. For this reason, studying solely appropriate, functional and normal sides of consumption activities would provide an incomplete picture of consumer behaviour. As such, numerous research has been carried out for the last decades to examine this “dark side” of consumer behaviour, including addiction, compulsion and impulsion-related consumption, to get a more complete and accurate picture of it.

In the related literature, there’s a huge terminology confusion for addiction, compulsion and impulsion-related consumption behaviours among authors. Addictive buying, impulse buying and addictive gambling, with their various names, have usually been discussed under the topic of “the dark side of consumer behaviour”. Journal of Marketing Management, a distinguished marketing scientific journal, will release a special issue in early 2018 with the main topic “The Dark Side of Marketing” (jmnnews). Some of the topics of interest are forms of consumer or employee misbehaviour, such as counterfeiting, unethical behaviours, addictions and deviance on various topics. These behaviours
were described as unwanted and undesirable behaviours of marketing actors, which include unethical, aberrant, dysfunctional, illegitimate, and problematic behaviour, cited to Daunt and Harris (2012), Fisk et al. (2010) and Fullerton and Punj (2004) at the same resource. These behaviours are, similarly, named as “dysfunctional, unregulated or aberrant” consumer behaviours in the literature. LaRose (2001) mentioned an “aberrant” form of consumer retail behaviour, named as “unregulated buying” which referred to impulse buying, compulsive buying and buying addictions. At that point, it should be made clearer what types of issues are addressed by “dark side” or “dysfunctional consumption.” Present research includes just compulsive, addictive and impulsive buying and addictive buying in the frame of the dark side of consumer behaviour.

Growing availability of internet and online consumption opportunities with technological developments make the aforementioned dysfunctional consumption behaviours more practicable, easier and widespread. It is not surprising that the dark sides of consumer behaviour are triggered by developments in communication technologies. This is because access, convenience, affordability and confidentiality are remarkable factors that make online context-feasible for the development of dysfunctional consumption habits.

Nowadays, numbers of consumers all over the world are regretfully damaged because of their online addictive, compulsive or impulsive consumption habits due to their negative consequences like financial ruin, disassociation from friends and family, divorce, being mentally unstable, or even suicide. This is because the online zone offers numbers of opportunities for consumers to realize their negative consumption habits in easier ways. From the information search stage to the after-purchase stage, the Internet provides convenience, availability of products of interest and opportunity to compare products easily.

They can also realize their condemned consumption behaviours confidentially through the online environment. Griffiths, Pontents and Kuss (2016) stated that these behaviours have potential to provide short-term comfort, relief, excitement, and/or distraction for users. Moreover, the National Institutes of Health stated that using online technology provides users multiple reward levels like relieving unpleasant feelings such as anxiety, depression and loneliness.

Online addictive buying, online impulse buying and online addictive gambling are relatively recent topics in marketing. These addictions are also called “technological addictions” (Griffiths, 1995) that can be considered derivative of behavioural addictions, too (Marks, 1990), like online games, exercise, sex or work addictions. New technologies have the
ability to affect subjective experiences very strongly to make them potentially addictive activities (Orford, 2006).

Examining the dark side of online consumer behaviour is important because the whole community is negatively influenced by its severe consequences, both socially and economically. The Internet has become an irrevocable part of our lives more and more as time progresses. Therefore, having a detailed understanding of online aberrant forms of consumer behaviour is important to develop correct solutions. This chapter aims to improve readers’ understanding of the dark side of online consumer behaviour and provide a general overview of online compulsive, impulsive, addictive buying and online gambling addiction.

**Online vs offline environment regarding the dark side of consumer behaviour**

Internet World Stats data shows that an estimated 3,739,698,500 of the world population are internet users as of March 31, 2017, which addresses approximately half of the world population (Internet World Stats). Furthermore, 40 percent of internet users practice online shopping all over the world, and some experts forecasted that the total value of e-commerce will exceed $2 trillion in the next few years. Furthermore, consumer culture, in general, has also been extremely influenced by developments in communication technology as well as technological improvements in recent years. Tablet PCs, laptops, and mobile phones have become usual objects in our lives which make the Internet available everywhere all the time. For this reason, consumer behaviour researchers have paid close attention to the online consumer behaviour field as well as other marketing practitioners and theoreticians so online consumer behaviour has become a crucial topic in the marketing literature.

Over the years, more consumers have preferred online shopping to offline shopping due to some reasons. There are some remarkable drivers that lead consumers to buy online rather than offline. A study summarized these drivers into four categories: convenience, information, available products, and cost and time efficiency (Katawetawaraks and Wang, 2011). They revealed that there are some remarkable drivers that lead consumers to buy online, which are convenience, information, available products and cost and time efficiency. Easy searches, variety, best prices, time saving, promotions, recreation and impulse (Khatibi, Haque and Karim, 2006) are defined as the factors that lead to online shopping.

Actually, there are also some important differences regarding the buying decision process between online and offline environments. In
general, the traditional buying decision process includes need awareness, information search, evaluation of alternatives, deciding to buy, and post-purchase behaviour stages (Kotler and Armstrong, 2012). However, this process may change in offline communication. Laudon and Traver (2009)’s framework provides general points of both online and offline buying decisions. According to their work, online promotional ads attract consumers’ attention, so they buy something spontaneously, and promote impulse buying tendency. After they search for alternative products via search engines and get enough information, they compare alternatives in the online zone in an easier, faster and more comfortable way. During the purchasing stage, consumers do not need to wait in long queue, tolerate a sulky cashier or other customers’ curious and inquisitive looks on the Internet. Especially for shy, introverted consumers with low self-esteem, or consumers who don’t want to go out shopping or consumers who cannot go out due to a disability, online purchasing presents a more favourable shopping experience than offline shopping. Payment methods such as credit card, cash on delivery, PayPal or bank transfer are the factors which make internet shopping more practicable. Return and exchange services become crucial at the post-purchase stage (Liang and Lai, 2002).

All these factors make online consumption more convenient when compared to offline consumption. While popular online shopping sites have implications to decrease self-regulation like extending the search and evaluate stage with search engines with shopping carts to contain products before buying (so there is time to consider); showing past buying history to make consumers be aware of their buying behaviour; advertising pop-ups, timed sales offers, interactive graphical displays of products, or “just one click” purchase perception encourage the buying process and weaken self-regulation of consumers (La Rose and Eastin, 2002)

For this reason, increasing numbers of consumers have preferred online contexts to carry out almost all their aberrant consumption habits. These habits found an appropriate zone to grow because the virtual world provides numbers of convincing factors to stimulate the dark side of consumer behaviour. There are many other kinds of dysfunctional issues within aberrant consumer behaviours but compulsive, addictive, impulse buying and addictive gambling are commonly researched topics in the online environment due to their outcomes’ importance and prevalence among consumers.
Online compulsive, impulsive and addictive consumer behaviours

Throughout history, human beings have suffered from different kinds of out-of-control consumption behaviours. Although there are some explicit differences among specific terms, it could be easily deducted from the related literature that the terms are used interchangeably in studies. Regarding consumer behaviours, they are usually associated with addiction, compulsion and impulsion.

Many researchers stated their opinions about compulsive, impulsive and addictive behaviour and their relations regarding consumption. Hirschman (1992) stated that there is no explicit difference between compulsive and addictive buying so these two terms have been used interchangeably in the literature. LaRose (2001) like Hirschman, noted that there’s no specific difference between compulsive and addictive buying. Znidersic, Grubor and Maric (2014) revealed that compulsive and impulsive buying behaviour are two contiguous and general issues in marketing research, which deviate from usual consumer behaviour. LaRose and Eastin (2002) labelled impulsive, compulsive and addictive buying as different forms of unregulated consumer behaviour. Larose (2001) suggested that impulsive and compulsive buying represent various degrees of deficient self-regulation. Rose and Dhandayudham (2014) dubbed compulsive, impulsive and addictive buying as problematic buying behaviour. Lejoyeux and Weinstein (2010) reported that there are some similarities between compulsive buying and addiction regarding their clinical features.

While some authors declare the similarities and normality of using the terms interchangeably, some researchers refer to their differences. Scherhorn (1990) asserted that there is a substantial difference between addictive and compulsive behaviour; there is a pleasure for addictive behaviour whereas compulsive behaviour occurs just to decrease or eliminate anxiety. Sussman, Lisha and Griffiths (2010) also remarked an explicit difference between compulsive and addictive behaviour in terms of their characteristics as an individual spends a lot of time to start the behaviour so intense preoccupation emanates in addiction; alternatively, in compulsive behaviour, there is a need to eliminate anxiety promptly, and the individual is unable to predict when the behaviour may appear, how long it will continue and when it will stop.

Rose and Dhandayudham (2014) assumed that an addiction is a disorder which is characterized by a loss of control and negative outcomes for the individual psychologically, physically or socially. Additionally,
Sussman et al. (2010) add that it involves both impulsivity and compulsivity. According to Benson (2008), impulsive behaviours have two distinctive characteristics: (1) the inability to resist an impulse, drive or temptation, (2) a period of tension or arousal prior to the act and regret or guilt after the act, (as cited in Rose and Dhandayudham, 2014). Edwards (1993), on the other hand, noted that these consuming behaviours range from normal behaviour -where buying occurs regarding a consumer’s needs and wants- to addictive form –with a severe lack of control.

Actually, psychiatrists and psychologists are really seen to be interested in the differences among these behaviours, especially in the pathological cases. Marketing academicians, on the other side, are generally interested in common features of the behaviours like uncontrolled, excessive amounts of purchases or money spent, ignoring the results or post-purchase guilt that may be associated with marketing functions and efforts. Therefore, researchers do not care about the terminology so much. Present research uses “online compulsive buying” as a title for both online compulsive and addictive buying behaviours, but; in order to adhere to the original reference, the term addictive buying behaviour is employed in some places.

**Online compulsive buying**

Compulsive buying has been analysed by psychiatrists, psychologists and economists since the 1920s, initially under the names of buying mania or oniomania. Just after the 1980s, marketing researchers have took this untouched field into consideration when it started to become a severe problem for numbers of consumers all over the world. It was initially defined as “chronic, repetitive purchasing that becomes a primary response to negative feelings and that provides immediate short-term gratifications, but which ultimately causes harm to the individual and/or others” by Faber and O’Guinn (1992, p.459). Another definition is consumer’s tendency to be preoccupied with buying that is revealed through repetitive buying and a lack of impulse control over buying (Ridgway, Kukar-Kinney and Monroe, 2008).

Compulsive buying has many other names like shopping addiction, pathological buying, buying addiction, unregulated buying, dysfunctional buying and shopaholism in the literature, which are indeed different terminologies. Trotzke and his friends (2015) also used pathological buying to describe the same phenomenon like Mueller and his friends (2015). Although there are differences among these terms, authors usually
use these terms interchangeably. Authors have examined its causes and results as well as its structure in various studies. Depressive and anxious moods (Valence et al., 1988; Sohn and Choi, 2012), materialistic values (DeSarbo and Edwards, 1996; Xu, 2008; Rasool et al., 2012), seeking ideal-self (Dittmar, 2005; Yurchisin and Johnson, 2004), fashion orientation (Park and Burns, 2005; Johnson and Attmann, 2009) and biological factors (Hirsman and Stern, 2001; Gwin et al., 2005; Raab et al., 2011) are found to be significantly relevant with compulsive buying tendencies. Low self-esteem (Ridgway, Kukar-Kinney and Monroe, 2008; Moore, 2009, Davenport, Houston and Griffiths, 2012) is a factor which is usually associated with compulsive buying in the literature. This is because compulsive buying is an attempt to relieve feelings of low self-esteem (Jacobs, 1986). Faber (1992) noted that self-esteem is a determining factor in the etiology of disorders and as a driver for compulsive buying. On the other hand, DeSarbo and Edwards (1996) stated that self-esteem is only a trigger for internal compulsive buyers trying to relieve internal psychological states like anxiety or stress, but not only for external compulsive buyers, who are affected by external situations. Another study (Lejoyeux and Weinstein, 2010) stated that compulsive buying is related to many kinds of disorders like depression, eating disorders, obsessive-compulsive disorders, substance use disorder and personality disorders.

Together with other pathologies, such as gambling, internet, food and sex addiction, compulsive buying is a part of the new "addictions – behavioural addictions" that have taken over the world (Bighiu, Manolica and Roman, 2015). One of the most important issues about compulsive buying is self-regulation. Some researchers state that specific factors disrupt self-regulation, and dysregulation may cause compulsive buying. For example, DeSarbo and Edwards (1996) noted that anxiety may directly damage self-regulation and influence self-esteem too. In other words, depression or anxiety and negative psychological states may be former grounds that contribute to both faulty self-regulation and low self-esteem, and then drive compulsive buying. Faber and O’Guinn (1989) remarked that compulsive buyers’ compulsivity may reflect a general weakness for behavioural addictions, such as sex, work or exercise addictions, which are also reported by compulsive buyers, indicating general lack of effective self-regulation across behavioural realms. Moreover, diagnostic criteria for compulsive buying (McElroy et al., 1995) revealed that a maladaptive preoccupation with irresistible shopping urges occurs - purchasing products which are not needed or affordable,
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shopping for longer than intended and accompanied by signified distress or interference with social, occupational or financial functioning.

Compulsive buyers usually shop alone (Lejoyeux et al., 1999), at night, by phone (Rook and Hoch, 1985), or through home shopping channels (Lee, Lennon and Rudd, 2000), so they avoid being caught by their families or friends who might provide reminders of normative standards for buying. Many of them may prefer the company of sale clerks (McElroy et al., 1994). This is confirmed that compulsive buying is inversely related to conscientiousness, a cardinal personality characteristic addressing general organization and efficiency (Mowen and Spears, 1999). Additionally, compulsive buyers had higher scores than normal buyers on obsessive-compulsiveness (Faber and O’Guinn, 1992). Actually, compulsive buyers are not really obsessive-compulsive individuals because they have enjoyment from the behaviour; however, obsessive-compulsives feel compelled to fulfill unpleasable duties (American Psychiatric Association, 1994). As written before, there is actually a big confusion around whether or not the consumer is obsessive-compulsive if the consumer has enjoyment, so the behaviour may be an addiction rather than compulsion.

Compulsive buyers sometimes do something to curb their bad habits; they leave their credit cards at home or use cash (Glatt and Cook, 1987), avoid visiting a shopping mall, promise themselves or others to restrain spending (Hoch and Lowenstein, 1991), impose time limits on shopping (Rook and Fisher, 1995), shop without purchasing something and even destroy their credit cards (McElroy et al., 1994) and learn to recognize the triggers of the behaviour (Young, 1998). Postponing the purchase decision, distracting oneself when buying urges occur (Hoch & Loewenstein, 1991), controlling their emotions, or selectively processing marketing stimuli (Dholakia, 2000) may work on some compulsive buyers to decrease the behaviour. However, some compulsive buyers were recorded as unable to stop the behaviour despite really wanting to.

Compulsive buying provides positive compensation, such as stress relief or release from an emotional negative feeling (Sohn and Choi, 2012) like anxiety or depression. Hiding purchased items, returning or giving them away or selling an unwanted purchased product are common behaviours that compulsive buyers do (Black, 1996). Interestingly, compulsive buyers may engage in product research and comparison among product alternatives (Lejoyeux et al., 1999). However, their search behaviour may be a different form rather than a rational or functional behaviour to minimize search and transaction costs because literature
show that compulsive buyers mostly do not care about the product type, colour or style.

Although there is numerous research for offline compulsive behaviour, online compulsive behaviour is a relatively new topic for marketing discipline. O’Guinn and Faber (1989) noted that the view of compulsive buying is shaped by how this behaviour is perceived by society. It’s seen as a crime or just a bad habit. This reason is also facilitating factor for online compulsive buying. Compulsive buying is more common among Internet addicts than the general population of Internet users (Black, Belsare and Schlosser, 1999) so it is plausible that those “addicts” continue their unregulated buying on-line. Online commerce may alleviate unregulated purchases by weakening the mechanism of self-regulation by contradicting self-control strategies of normal, self-regulated consumers (LaRose, 2001). The characteristics of online commerce sites may thus defeat self-regulation by engaging its sub functions in ways that reduce purchasing restraint.

Lee and Park (2008) assumed that on line buying is claimed as the best shopping form for consumers with a compulsive buying tendency. Rose and Dhandayudham (2014) noted seven drivers of online shopping addiction which are low self-esteem, low self-regulation, negative emotion, enjoyment, gender, social anonymity and cognitive overload. Online compulsive buyers have some common characteristics too. They don’t check product information in detail, and they are less concerned about over-spending triggered by credit card usage than non-compulsive shoppers (Lo and Harvey, 2012). It’s found that materialistic individuals trying to enhance their emotions and identity via buying goods online show the strongest tendencies toward compulsive buying on the Internet (Dittmar, Long and Bond, 2007). Widespread credit card use also triggered growth of online compulsive buying because using credit card instead of cash is creating an illusion of not actually spending money.

Lee, Lee and Park (2012) mentioned the increase in e-commerce activities which have negative and positive effects on consumers and they added that the ease of reaching a broad assortment of goods and services may contribute to compulsive buying behaviour. Online compulsive buying has loss of control and motivations, and overall financial and time-consuming impacts (Duroy, Gorse and Lejoyeux, 2014). Social normative and comparative shopping motivations are found to effect on online compulsive buying while gender and age doesn’t affect it (Zeren and Gökdalğı, 2017). Other research conducted among Turkish consumers reveals that hedonic drives, technological factors like cheap price, variety, comparing advantage and promotions as well as psychological factors like
stress and boredom are the main factors that make people compulsive buyers in an online environment (Güncü and Doğan Keskin, 2016).

Vicedan, Chapa and Santos (2007)' study explores the effects of compulsive buying tendencies through sales promotions and bargains in an online environment among Hispanic Americans. Results show that people with a higher tendency to buy compulsively are more prone to promotions and are more likely to use online sales promotions. Moreover, people with higher tendency to use online sales promotions will have a greater likelihood of using online bargains, and subsequently have a greater incidence of shopping online. Another study (Lee and Park, 2008) aimed to explore the relationship between conformity in virtual communities and online compulsive buying tendency and also developed an online compulsive buying scale based on Faber and O'Guinn (1992)'s Compulsive Buying Scale.

Compulsive buying behaviour may be influenced by many factors: biological, social and promotional. For all factors, compulsive buyers will want to enjoy the opportunities of the Internet. In any case, virtual life offers a wonderland to compulsive buyers. It’s difficult to develop precautions for them to inhibit their behaviours.

**Online impulse buying**

To date, few researchers have provided theoretical frameworks for impulse buying in an online environment. LaRose (2001) was one of the first researchers to work on online impulse buying and his contribution was to provide an explanation of online dysfunctional buying. Another research was performed to examine the factors that lead to online unplanned purchases (Koufaris, Kambil and LaBarbera, 2002). Rook and Hoch (1985) defined impulse buying as the desire to buy abruptly, including loss of reasoning and emotional consciousness. It is a kind of unconditioned reflex due to a specific drive, which lacks cognitive evaluation. It’s described as less deliberate and more arousing and irresistible compared with planned buying behaviour (Kacen and Lee, 2002).

Consumption culture enables people to yield to buying something spontaneously and without thinking about its consequences. Impulsive buying was initially presented in the marketing literature more than fifty years ago (Clover, 1950). Rook (1987) defined impulsive buying as unexpected buying which is not planned before entering the retail store and results in a rapid, sudden buying decision of a product or service. Its other short definition is a consumer’s sudden irresistible urge to buy (Solomon, 2002). Due to the inadequacy of the terms to explain impulsive
The Dark Side of Online Consumer Behaviour


1. Unplanned buying
2. Response to a stimuli
3. Deliberately planned to benefit from offers
4. Thrill seeking
5. Decision made on the spur of the moment
6. Result of a deliberation process
7. Not a response to a precious problem
8. No prior buying intentions
9. Sudden and spontaneous desire to act
10. State of psychological disequilibrium
11. Psychological conflict and struggle
12. Reduction of cognitive evaluation
13. No evaluation of consequences

After stating these dimensions, Piron defined the term: “impulse buying is a purchase that is unplanned, the result of an exposure to a stimulus, and decided on-the-spot. After the purchase, the customer experiences emotional and/or cognitive reactions” (Piron, 1991:512). Impulsive buying occurs automatically when consumers have no prior intention to buy as well as no perception about its negative consequences (Znidersic, Grubor and Maric, 2014).

Impulse (or impulsive) buying is an issue which has received substantial attention from marketing academicians. Wells, Parboteeah and Valacich (2011) assumed that impulse buying has been researched regarding two sides: 1) the statement of mind created by the shopping environment, and 2) a specific personality trait. Many research studies show that several factors influence impulsive buying behaviour. The behaviour has been made easier by credit cards, telemarketing or home shopping networks (Rook, 1987). Consumers’ moods and emotional status (Rook and Gardner, 1993; Donovan et al., 1994) have significant effect on their impulse buying behaviours. Dawson and Kim (2009) noted that there is a positive correlation between a person’s emotional state and online impulse-buying behaviour. Although impulsive buyers are found to buy in negative moods, consumers’ positive moods are found to contribute more to impulsive buying behaviour than negative feelings (Rook and Gardner,
Different studies show pleasant emotions led to growing impulsive buying behaviour (Donovan et al, 1994; Beatty and Ferrell, 1998).

Research shows that impulsive buyers are more likely to be sensitive to external stimuli such as advertisements or promotional gifts than non-impulsive buyers (Youn and Faber, 2000). Because retailers realize the crucial power of impulsive buying in consumer behaviour, they organize all product packaging, instore promotions and store layouts to get consumers buy in the store (Dholakia, 2000). Koufaris, Kambil and LaBarbera (2002) used the environmental psychology literature, information systems and marketing research to study the factors that lead to unplanned purchases.

Weinberg and Gottwald (1982) mentioned three elements of impulsive buying process; which are reactive, affective and cognitive elements. It includes a reactive aspect because consumer shows a specific response to a stimulus. When he/she is exposed to stimuli, consumer feels an irresistible urge to buy a product because he/she is driven highly by emotional forces. Thus, it includes an affective and emotional aspect. As a result, the consumer has very low conscious control over the buying decision. Therefore, this is cognitive.

Younger people were found to be more impulsive than older people (Bellenger, Robertson and Hirschman, 1978). Additionally, individuals who gets high scores on the materialism scale tend to be more impulsive (Richins and Dawson, 1992). In terms of the concept of self-discrepancy (Higgins, 1987), the higher the discrepancy between how a consumer sees him/herself (meaning actual self), and how he or she would ideally want to be, (meaning ideal self), the more the consumer is prone to use material goods to compensate for the discrepancy, so the more likely it is for him or her to be impulsive (Dittmar, Beattie and Friese, 1996).

All these mentioned studies support impulse buying literature in a traditional context. A positive correlation was found between a person’s impulsive buying tendency and his/her online impulsive buying behaviour (Dawson and Kim, 2009). In parallel with mass use of internet, impulse buying behaviour moved to the online zone. As is known, online shopping offers consumers more convenient, easier, faster, and relatively cheaper shopping experiences. The availability of 24-hour retailing through the Internet has brought an increase in online retailing and an increase in impulse buying (Parboteeah, 2005). On the other hand, the Internet serves a new marketing means which may trigger buying impulsiveness. Donthu and Garcia (1999) stated that online shoppers can be more impulsive than traditional shoppers. The impulsive buying behaviour problem concerns more and more people today, demonstrated by the increasing number of
studies done on the topic in the last few years (Bighiú, Manolica and Roman, 2015).

Consumers can compare the prices easily among several online web shops and find the best deal for them. Since price has been found to be a crucial factor in impulse buying (Zhou and Wong, 2003), this quick and profitable price comparison opportunity serves impulse buyers an irresistible purchase experience. Literature revealed that internet shoppers are more impulsive and they have more positive attitudes towards advertising and direct marketing than non-shoppers do (Donthu and Garcia, 1999).

Product attractiveness, enjoyment and online store communication style which is mediated by consumers’ emotions has significant effects on online impulsive buying behaviour (Verhagen and Dolen, 2011). Wells, Parboteeah and Valacich (2011) found a strong evidence that website quality is a crucial factor which influences the impulsiveness stimuli to buy in online context. Koufaris, Kambil and LaBarbera (2002) and Floh and Madberger (2013) have used the S-O-R (stimulus-organism-response) framework to examine online impulse buying. Research results show that design and navigation - two dimensions of online atmospheric cues – have a significant positive effect on online impulse buying.

One of the characteristics of impulse buying in an offline environment is immediate gratification after the product has been bought. However, product delivery often occurs in numbers of days in online context. This situation is not favour of impulse buying behaviour. However, LaRose (2001) suggested that a consumer may fulfil his/her need to buy impulsively rather than actually possessing the product. It means that solely the buying behaviour itself may be important for impulsive buyers rather than actually possessing the products. This eliminates the disadvantage of online impulse buying regarding the need to have the product immediately. Also, online shoppers are more impulsive and less risk averse than non-shoppers, seek more variety and less brand and price-conscious (Donthu and Garcia, 1999), and their characteristics are consistent with urge-driven impulsive purchasing behaviour. Sun and Wu (2011) noted that emotional instability and materialism positively affects online impulse buying.

Virtual life offers so many opportunities for impulsive buyers to engage in unplanned buying behaviours. On one side, online commercial web sites are looking for new tactics to be more seductive for the consumers to make them buy more and more, and on other side, impulsive consumers are thinking about their over-budgeted credit card receipts and how to overcome this problem. There is a very thin line between
companies’ profit seeking efforts and impulsive buyers’ increasing bills. Some ethical issues for the companies, and self-control and planned purchase habits for the consumers, come into play at that point. As long as the Internet is present in our lives, impulsive buying-inclined consumers should pay extra attention to their buying behaviours for themselves because marketing efforts seem to last with acceleration.

**Online gambling addiction**

Gambling actually has a long history. The first registered casinos emerged in the beginning of the 17th century in Europe, and after a century, they appeared in America (Manzin and Miloslavo, 2008). Wood and Williams (2007) reported that three important developments set the stage for the emergence of internet gambling in the 1990s. The first was the small Caribbean nation of Antigua and Barbuda creating a free trade zone in 1994 that effectively allowed U.S. bookmakers to accept bets by phone on horse racing and sports. The second was the development of gambling software by Microgaming in 1994/1995 and the third was the development of encrypted communication protocols by CryptoLogic in 1995 that allowed secure online money transfers.

With the growth of communication technologies and widespread internet usage, the gambling industry has also used the Internet to offer its services in an online environment. The fastest developing shape of gambling is undoubtedly online gambling. The term of online gambling is relatively new. “Internet gambling”, “online gambling”, “e-gaming”, “remote gambling” and “interactive gambling” are terms to name gambling which occurs through the Internet, interactive television or mobile phone (Williams, Wood and Parke, 2012). Online casinos grew into a multimillion dollar business, convincing a great number of gamblers all over the world (Young, online). Virtually-mediated casino games, slot machines, bingos, lotteries, sports wagering, horse race betting, and skill games are now easily available with the growing numbers of online gambling sites (Wood and Williams, 2007). There are two main types of gambling on the Internet: 1) gaming -casino style games, and 2) betting or wagering on racing and sports events. The common term ‘gambling’ refers to both types (Manzin and Miloslavo, 2008).

According to Nova Scotia Provincial (NSP) Lotteries and Casino Corporation statistics (Internet Gambling 2016), the world’s first online casino, Internet Casinos, Inc., launched in August 1995 with 18 different casino games. Ten years later, the number of online casinos reached between 2300 and 2500 sites (Clark, 2005; Ranade, Bailey and Harvey,
By August 2016, NSP Lotteries and Casino Corporation estimated that there are more than 2000 internet websites offering different online gambling options like casino games, poker, sports betting, lotteries, and bingo; and they expect that global online gambling market will reach 55.8 billion US dollars by 2018.

Gambling has various meanings regarding the cultural and historical context in which it is used. For example, in western communities, its definition was developed through an economic view, as ‘wagering money or something of material value on an event within an uncertain outcome with the primary intent of winning additional money or material goods’. Cabot (1999), on the other hand, defined gambling as any activity in which a person risks something of value in terms of a result of an uncertain event, in which the wagerer doesn’t experience any control or is determined predominantly by chance. (Manzin and Miloslavo, 2008).

Numbers of people may gamble as a normal part of their lives without any challenge or difficulties. However, addictive or pathological gambling may create severe outcomes. Gambling disorders are generally defined as persistent and recurrent gambling that disrupts personal, family or occupational functioning (American Psychiatric Association, 2000). Addictive gambling may negatively influence the personal, economic and social life of the gambler due to loss of relationships, stress-related medical problems, enhanced risk of suicide, criminal offences and financial problems (Hodgins, Stea and Grant, 2011).

The gambling process is different between online casinos and traditional casinos although there are some similarities as well. One of the most important similarities is the selection of games. Games like poker, blackjack and slot machines are selected in the same way in online casinos with an explicit difference which is that online casinos may offer higher quality graphics and special visual and sound effects. Online casinos also include other gamblers and casino rooms to create a real traditional casino (Manzin and Miloslavo, 2008). Therefore, gamblers experience the traditional casino excitement, which has so many attractive characters that seduce gamblers. Therefore, online gambling was found more addictive than offline gambling (McCormack and Griffiths, 2012). This is because online gambling features the same things with traditional gambling but it has more than that. Online gamblers just require internet access and appropriate software to play games. Then, online casinos offer some free gambling, other than playing with cash—a great way of familiarizing gamblers with the game offered by the online casinos and testing the games (Manzin and Miloslavo, 2008).
There are various factors that make online gambling addiction more alluring than destructive for consumers’ economic and social lives. 24-hour availability from home or even from a mobile phone is one of these crucial factors. The increasing number of people who use the internet and the growing consumer confidence in operating online financial transactions has led to a greater number of people willing to engage in internet gambling (Haried, 2014). The essential reasons for online gambling are stated as: 1) ease of access, 2) flexibility of use, 3) 24-hour availability, 4) “because friends do it”, 5) large variety of gambling choice, 6) successful advertising, 7) anonymity, 8) free play demonstration, and 9) “family members do it” by Griffiths and Barnes (2008). American Gaming Association research, in 2006, shows the reasons for betting online were because it was convenient; fun/exciting/entertaining; more comfortable, not required to drive; possible to win money and anonymous/private. Derevensky et al. (2006) noted that to relieve boredom and for excitement were the most common reasons cited by youth between 12 and 24 for online gambling.

Skyrocketing improvement of online gambling is a result of both technological development and the fact that it is possible to play from anywhere. This opportunity made many potential players real ones, and as a result, it expanded the market of casino services. Thus, the casino market removed its dependency of being geographically restricted only to a handful of countries and could now extend into infinite dimensions offered by the virtual market (Manzin and Biloslavo, 2008). McMillen (2003), on the other hand, listed the following factors attractive for investors to invest in online casinos: 1) Online casino market is a rapidly growing market yielding high earnings. 2) There are only few legislative restrictions on online gambling market entry, especially in the so-called ‘off-shore zones’, and 3) Costs of creating an online casino are low when compared with those of building a traditional casino.

Griffiths (2006) has identified multi-lingual gambling service, faster play speed, and the opportunity to pretend to be the opposite sex as outstanding advantages which online gambling offers. Females pretend to be a male in order to be taken more seriously and for a greater sense of security, and males pretend to be a female to give them a tactical advantage. Manzin and Miloslavo (2008) recorded that online gambling is possible via two technologies: the Internet and digital television, and it is characterized by three factors: 1) electronic operation, 2) service-based organization in the field of gambling, and 3) consumers (or buyers) of gambling services. Also, they described online gambling features which are different from traditional gambling. The clearest advantage is greater
convenience that allows gamblers to gamble anytime of the day from their home. The second one is that online venues tend to offer better deals, taking advantage of lower overheads, and because competition for patronage is much stiffer, gamblers can switch venues in the few seconds it takes to click a mouse.

The legality of internet gambling is a big challenge for both gamblers and owners of the online gambling websites. The legality of gambling is varied among countries, courts, even from year to year. Online gambling is evaluated as an unfair, illegal or irresponsible business practice (Williams, Wood and Parke, 2012). Due to the nature of online gambling as an unregulated industry, fair play practices are difficult to audit and verifying the fairness of gambling results is a problem (Haried, 2014). Ranada et al. (2006) pointed out jeopardies that have surfaced in the development of online casinos, unlikely possibilities and opportunities offered by the development of online gambling, three of which are: 1) problem gambling, 2) youth gambling, and 3) criminality. They defined gambling as ‘participation in gambling to the point where it causes serious harm to oneself and others’ (Ranade et al. 2006).

Gambling, with its old history, has been an opportunity to make a fortune since the early days of mankind. Or, it is just a tool to relieve the negative emotional feelings. Or, it’s just fun. For all cases, it may result in severely unfavourable consequences for gamblers and their families if they do not know their boundaries and ignore monetary limits. Online gambling seems more attractive for gamblers regarding its natural structure. All convenience which online gambling offers may mislead gamblers more than traditional casinos to disregard the behaviour’s awful outcomes. Gamblers should be more conscious and realistic about playing for fun.

**Conclusion**

The common consensus among people is that online shopping and related consumption behaviours are more convenient, cost-effective and easy. A comfortable consumption opportunity is a click away from individuals. Parallel to the technological improvements and mass use of internet, online consumption has become an ordinary issue of our lives. Statistics show that half of the people all over the world have access to the Internet and nearly half of them have already had online shopping experiences. Consumers buy products of interest or gamble without even going to another country anytime they want in very convenient way through an online context.
Consumption behaviour is one of the most ordinary function of life and, for sure, conscious consumers with self-regulation would benefit from utilities that online environments provide: they do not need to go a shopping mall or a supermarket to shop, they do not need to wait for a long queue, do not need to go from one store to another to compare prices or products’ features, they do not need to carry heavy bags for long hours, etc. They can get the best deal for the most appropriate product anywhere as long as they have an online connection and money to afford it in their bank account or credit cards, or cash, which would be necessary for paid-at-delivery service.

However, these irresistible opportunities that the virtual world offers may not be for the benefit of all consumers, for example the consumers with lack of self-regulation, and with addictive or compulsive consumption tendencies. All these conveniences, which is a risky combination of technology and the Internet provide together, seem to work to the detriment of addictive or compulsive buyers. This is because the online context makes most of the functions of the buying process easier and more convenient, which might indeed block the misbehaviours of addictive or compulsive buyers.

Compulsive buyers need to go to a shopping mall or a market store to realize their buying behaviour and release their anxiety, stress or other negative emotions. However, online shopping opportunities make it unnecessary to go out but via clicking a key; consumers buy everything at home, at work, or at school. Moreover, shopping hours are limited in an offline environment, so a compulsive buyer cannot buy anything at 11:30 pm when his/her shopping binge comes. However, electronic shopping makes it also possible that consumers buy their product of interest 24 hours a day. Because of improving of technology in cellular phones, consumers do not even need computers for online shopping; their handles are also a facilitating factor to realizing their compulsive or addictive behaviour.

Another form of unregulated or dysfunctional buying is impulse buying. It’s defined as unplanned, spontaneous, deliberate and suddenly buying. Impulse buying is mostly influenced by external triggers. Today’s retailing sector has plentiful stimuli encouraging consumers to buy impulsively in an offline environment like shopping malls and superstores. Consumers enter a store to buy just one product of interest, but they get out with big bags in their hands. On the other hand, the online environment offers seductive opportunities to trigger impulse buying tendencies. Consumers, nowadays, spend lots of time on the Internet, and they are exposed to hundreds of advertisement pop-ups, several deals and
special campaigns. The only inhibiting factor may be that deliveries of the purchased products do not arrive at the same time as the purchase. Actually, common consensus about impulse buying is that impulsive buyers are stimulated by a stimulus suddenly to buy a product and when they buy it, a relief happens. However, the reason for relief may not be physically owning the product but just “purchase behaviour.”

Similarly, gambling behaviour is benefiting from the opportunities that the online environment offers. Gambling is so close to addictiveness due to its structure. Gamblers may not give up easily until they hit the jackpot or win more. For this reason, online casinos provide addictive gamblers a very attractive world in which they have no limits, like driving somewhere, maybe to a different country because of the fact that gambling is forbidden in many countries. Moreover, they can benefit from the online environment’s convenience 24 hours a day like other behavioural addicts.

Although the Internet offers many conveniences to trigger compulsive and addictive consumption behaviours, websites may also include disincentive factors for the behaviour to occur. As LaRose and Eastin (2002) stated, they have implications like extending the search and evaluate stage with search engines and shopping carts to contain products before buying, so there is time to consider, or showing past buying history to make consumers aware of their buying behaviour. Also, purchased products are not delivered at the time of purchasing behaviour but some days later. Some compulsive or addictive buyers may also enjoy spending time in offline shopping malls as a social activity. Furthermore, numbers of compulsive or addictive buyers, and addictive gamblers too, may not be internet users.

Whether the online environment is attracting these “bad” behaviours or not is important because of their severe results. Consumers face financial and social breakups resulting from their behaviour. They may end relationships with their families and friends, divorce, get fired from their jobs, lose all their money and experience bankruptcy, and even commit suicide. Compulsive, impulsive, addictive buyers or addictive gamblers do not think about the results of their dysfunctional consumption behaviours. Or, they may ignore it. Future research about related topics should be interested in precautions for each party to decrease the influence of the negative results as well as reasons that make online consumers addictive.

Although future research will find out more about the presence of these and other realities, it is clear the online environment offers convenience to consumers with compulsive and addictive behaviour tendencies to realize their binges. Present studies include online compulsive, addictive and impulse buying as well as online addictive gambling since these
consumption behaviours have been reported to be mostly affected by the growth of the Internet. It aims to provide a general view of these mentioned behaviours and how they are affected by the development of the online environment. It’s seen that an online context contains various attractive elements that trigger compulsive, impulse and addictive buyers and also addictive gamblers to perform their bad consumption habits. Companies and online casinos may naturally support this situation because they seek more profit. Ethical issues come into play at this point. An easy solution is that while profit-seeking companies are giving a chance to consumers to think about their behaviours for more than two seconds, consumers should control their consumption behaviours themselves. Negative consequences of this “dark side of online consumer behaviours” are devastating for both consumers and companies, and for the whole community as well. Unless each actor takes necessary precautions on his part to reduce the severity of the outcomes of these dysfunctional consumer behaviours, neither profit seeking companies nor compulsive, impulsive or addictive buyers would win this game; social deterioration would win this game; economic collapses would win this game.

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CHAPTER TWELVE

HOW TO CAPTURE THE VIRTUAL WORLD’S ONLINE BRAND LOYALISTS

ENES EMRE BAŞAR

Introduction

Today, the e-commerce volumes of fast moving consumer goods (FMCG) experience significant growth on a global scale. It is for sure not enough just to follow the developments in this important business line of the virtual world. Anticipating what is going to happen in the future with a proactive approach is the most important key to success in the virtual world.

Consumers’ virtual shopping experiences reshape their consumption behaviours. For instance, online FMCG shoppers want virtual shopping environments to be designed according to their likes and wishes.

With the blending of in-store and online shopping worlds, some fundamental differences between the needs and behaviours of in-store and online shoppers emerge. For example, consumers doing in-store shopping tend to decide upon what products they want to buy in the store. However, e-consumers know what they want to buy before going online.

Furthermore, in-store shoppers have more brand loyalty than online shoppers when they gain positive experiences with specific brands. Yet, e-consumers do more shopping on category basis and compare the products of more retailers. This enables a large number of online retailers to get a greater share from the cake. From this point of view, it can be said that finding a solution to an unmet consumer need is more important and more profitable than ever.

On the other hand, it is necessary to go beyond the virtual shopping basket in order to create brand loyalty in digital retailing. Useful product information, easy forms of payment, easy product return procedures and giving quick responses to the feedback provided by consumers are the
things needed for this. However, secure subscriptions and automatic fulfilment procedures play a vital role in creating consumer loyalty.

In this section, I explained how e-commerce businesses for fast moving consumer goods should direct consumers to their products and what factors influence customer loyalty.

**Finding new ways of buying for fast moving consumer goods**

Today, consumers are not only going online but also living online (Swinyard and Smith, 2003). Even "dating" or "discussing," some of the people's most analogous interactions, have begun to gain a digital nature with the connection of millions of people through mobile call applications. Hence, our purchasing behaviour also changes in accordance with this virtual reality.

For a long time now, digitization has been at the forefront of brands and retailers. In other words, we have proceeded to a digitally-driven life. The most obvious proof of this is the increase of online retail sales in contrast to the gradual decrease of in-store retail sales each year (Westerman et al., 2014). However, it cannot be said that this growth is evenly distributed among the product categories (Wallace et al., 2015). Today, it can be said that even though consumers easily buy everything online from tracksuits to bedspreads, they are not used to buying FMCG online yet (Ryan and Graham, 2014). Nevertheless, the results of many studies demonstrate that consumers are willing to buy online consumer products more (Mittal et al., 2016). According to a study made by Nielsen (2017), e-commerce usage rates of consumers for FMCG have tripled in the last three years. This clearly shows that digitalization is a great opportunity for the manufacturers and the retailers of fast moving consumer goods. However, it can also be said that digitalization brought a number of new challenges together with these opportunities. Digital platforms provide consumers direct access to the brands or stores, but, at the same time, it is getting harder to reach consumers efficiently because similar options have increased. E-commerce is never limited to a single player (Boone and Kurtz, 2013). People constantly strive to find the best product, service, brand or retailer with the right tools (Strauss, 2016). Furthermore, all brands and retailers do not only show growth in this new virtual world, but also use all the tools of digital retail sales to deepen their relationships with their consumers (Peppard and Ward, 2016). This situation brings a fierce competition with it.
Following the literature review we made with reference to the opportunities and difficulties mentioned above, we identified the following three key factors that can be used in order to succeed in the virtual world and create brand loyalty there: (1) overcoming consumer expectations, (2) personalizing experiences, and (3) engaging with consumers beyond the virtual shopping basket.

**Exceed consumer expectations**

Today, consumers are increasingly aware of what they want, especially in online shopping. Indeed, consumers shop online in far less departments than in-store shopping. However, this does not mean that opportunities for brands and retailers are getting smaller; consumers who shop online are now in a position to choose which brands, products or retailers are right for them.

On the other hand, in the literature, the results of recent studies made on the subject show that in all product categories, consumers are less likely to look for a particular brand in online shopping as compared to in-store shopping (Xie and Lee, 2015). This is seen at much higher rates in developed online product categories such as cosmetics (Burke and Leykin, 2014). Even if online shoppers are less likely to plan to buy a particular brand as compared to in-store shoppers, they are more likely to plan which product categories they are going to buy (Young, 2014). This means a unique opportunity to increase online sales if consumers are promptly directed to a specific product directly.

How can online shoppers be directed to a specific product and be made to put those products in virtual shopping baskets?

Of course, this can be accomplished by exceeding the high expectations of the consumers, which they have gained as a result of their online experiences.

It would not be surprising to say that the biggest expectation of online shoppers is the low price. In addition, the majority of consumers increasingly demand free shipping service (Liu et al., 2016). Beyond the price, consumers are also equally motivated by the convenience of online shopping and their overall experience (Huyghe, 2017). This creates a space for retailers to draw attention online (Kim and Mauborgne, 2014).

Consumers expect digital shopping to be time saving and easy. Namely, the ordering process has to be uninterrupted (Willems et al., 2016). The majority of consumers are motivated by factors such as easy payment, useful product information and online retail experience (Oliver, 2014). In addition to this, consumers of all age groups prefer online retail
areas such as coupons and mobile applications used in the virtual world (Ryan, 2016).

On the other hand, the quick delivery of online orders to consumers is also an important area to come to the forefront in the virtual world (Fernie and Sparks, 2014). Today, about 80 percent of online orders are covered by home delivery (Visser et al., 2014). However, major online retailers set the bar high for e-commerce with short delivery times in general. As a consequence of this, consumers expect delivery within an average of 3.8 days (Yakzan and Nelson, 2015).

**Personalizing experiences**

Even though online shoppers tend to head for a variety of brands, they do not want to encounter endless virtual shelves to choose a product. The reason for this is that product variety is the least motivating factor for online shopping when compared to price, value, convenience and experience. In other words, consumers want to gain online shopping experiences that reveal the right product for themselves and make personalized, namely tailor-made, research (Gilmore and Pine, 2007).

Of course, personalization is not as simple as it seems. The most important challenge to personalization is that there is not a uniform consumer segment shopping online. It seems that major online retailers have divided consumers into dozens of categories. These consumer segments represent millions of households and further diversify the concerns and expectations that need to be managed (Boone and Kurtz, 2013).

The main online consumer segments revealed in the report prepared by Nielsen (2017) are demonstrated in the table below.

**Table 12-1. Digital Shopper Segments**

<table>
<thead>
<tr>
<th>Segments</th>
<th>Share of Households</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology Averse</td>
<td>12%</td>
<td>Low trust, low tech savvy</td>
</tr>
<tr>
<td>Digital Reluctants</td>
<td>23%</td>
<td>Low trust, low tech savvy</td>
</tr>
<tr>
<td>Grab &amp; Go</td>
<td>9%</td>
<td>Low value seeking, Low shopping enjoyment</td>
</tr>
<tr>
<td>Non-Planners</td>
<td>12%</td>
<td>Low value seeking, Low shopping enjoyment</td>
</tr>
<tr>
<td>Tech Savvy- Value Seekers</td>
<td>19%</td>
<td>Research-driven and tech savvy</td>
</tr>
<tr>
<td>Researchers</td>
<td>10%</td>
<td>Research-driven and tech savvy</td>
</tr>
<tr>
<td>Digital Advocates</td>
<td>15%</td>
<td>Enjoy shopping</td>
</tr>
</tbody>
</table>
The consumer segments that spend the most on online shopping are Grab & Go, Non-planners and Digital Advocates, as seen in the table.

How will other consumer segments be motivated? Researchers always want to chase the best products. They are also highly influenced by promotions. On the other hand, Value Seekers want mobile applications of their favourite brands (brands should head for in-app campaigns for these consumers). Tech Averse consumers decide what to buy on the retail websites.

As is seen, each of these seven-different online shopping consumer segments represents millions of individual consumers with unique needs. Therefore, when determining the tools used in the virtual world, the correct determination of the needs of each consumer segment and the selection of digital tools for these needs are quite important.

On the other hand, it should be kept in mind that consumer expectations vary in each of these consumer segments depending on several factors like ethnicities, generations, geographical regions and consumer identities (Iacobucci, 2014). For example, a study found that multicultural households used more online shopping tools than average households (Anderson, 2014). According to other research results, Hispanic households are more influenced by social media, while African-American households are more influenced by online review comments in online shopping (Raghupathi and Fogel, 2015).

In short, online shopping offers businesses a chance to understand their customers' needs. As consumer relationships evolve on virtual platforms, businesses can truly understand their customers' needs and offer customized solutions tailored to them.

Establishing relationships with consumers beyond the virtual shopping basket

Online retail sales offer businesses the opportunity to move buying processes beyond the virtual shopping basket (Peppard and Ward, 2016). In recent years, while there has been a significant increase in the number of households conducting online research and purchasing following that, the number of households that do only research, but do not purchase, has decreased (Coibion et al., 2017). Hence, the way to grow online shopping sales is not only to win in virtual shopping baskets, but also to take into account all the elements involved in the buying process (Peppers and Rogers, 2016). This requires more user subscription and the analysis of more information about the users. Today, however, only 18% of online shopping is done by subscribed users. This indicates that a consumer
decides which brand and product to buy before placing an order. In order to influence the buying decisions previously made by the consumers, it is necessary to reach out to the consumer and establish a relationship before the consumer makes the buying decision.

What should be done if this relationship that needs to be established before the virtual shopping basket cannot be established through subscription?

Consumers are flocking to social media platforms to obtain more information about the products they will buy and to educate themselves. For example, one out of every three consumers who wants to share their knowledge of healthy living uses Instagram, and one quarter of the remaining uses Pinterest (Nielsen, 2017). Interestingly, both platforms offer the opportunity to create a richer engagement for retailers and brands based on highly visual and experiential media. As such, using the power of visual and experiential new media is the most attractive way of establishing relationships with consumers in the virtual world as no tool in the process of buying has had such rich accessories.

Conclusion

In this section, I explained how e-commerce businesses for fast moving consumer goods should direct consumers to their products and what factors influence customer loyalty.

Today, it is seen in almost all product categories that consumers who shop online look less for a specific brand. This shows that there is lesser brand loyalty in consumers who shop online. It is necessary to go beyond the virtual shopping basket in order to create brand loyalty in consumers who shop online. We think that the following three key factors will have influence on creating brand loyalty in consumers who shop online: (1) overcoming consumer expectations, (2) personalizing experiences, and (3) engaging with consumers beyond the virtual shopping basket.

In order to direct online shoppers to a specific product and make them put those products into virtual shopping baskets, it is necessary to exceed the high expectations of consumers, which they have gained as a result of their online experiences. The greatest expectation of online shoppers is of course purchasing the product they are looking for at a low price. However, factors such as free shipping, fast delivery, convenience of shopping, coupons and mobile applications also come to the forefront.

On the other hand, consumers want to gain online shopping experiences that reveal the right product for themselves and make personalized, namely tailor-made, research. However, personalizing
experiences is not as easy as you might think. The selection of appropriate digital tools is of vital importance to meet the expectations of many consumer segments and millions of households corresponding to them. If this is achieved, businesses can truly understand the needs of their customers and offer personalized solutions tailored to them.

Finally, it is necessary to go beyond the virtual shopping basket and take into account all the elements involved in the buying process in order to achieve growth in online shopping sales. This requires more user subscription and the analysis of more information about the users. If this relationship, which needs to be built before the virtual shopping basket, cannot be established through subscription, it will be useful for businesses to become active on social media platforms. Establishing a relationship with consumers by using the power of visual and experiential media is the most important value introduced by the virtual world appearing before us.

References


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