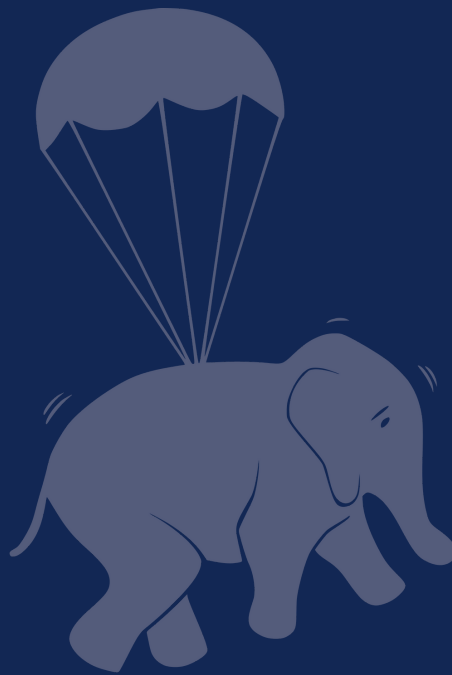


Biannually

SOSYAL MUCİT ACADEMIC REVIEW

Economics, Society, Politics, Education, Institution

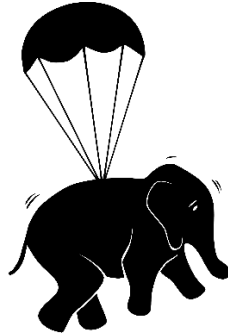


VOL: 1 - ISSUE: 1
2020

ISSN: 2718-1081

ARALIK / DECEMBER - SAYI / ISSUE: 01 - NO / VOL: 01 - e-ISSN: 2718-1081

SOSYAL MUCİT ACADEMIC REVIEW



SOSYAL MUCİT ACADEMIC REVIEW
SMAR®

Sosyal Mucit Academic Review Smar©

6 Aylık Hakemli Dergi • Biannual-Reviewed Academic Journal

Aralık/December 2020 • Sayı/ Issue: 01 • No/ Vol: 01 • e-ISSN: 2718-1081

İmtiyaz Sahibi • Owner

Erhan Aydın

Baş Editör / Editor-in-Chief

Erhan Aydın

Yardımcı Editörler / Associate Editors

Şakir Güler

Mushfiqur Rahman

Saowanit Lekhavat

Abdulaziz Elwalda

Dil Editörleri / Language Editors

Tuğba Erhan

Asistan Editör / Asistant Editor

Yusuf Alparslan Dibek

Yayın Danışma Kurulu / Editorial Advisory Board

Aidan Mckearney, London South Bank University, United Kingdom

Akarawat Jatuphatwarodom, Rajamangala University of Technology Thanyaburi, Thailand

Chompoonut Amchang, Burapha University, Thailand

Ciarán Mcfadden, Edinburgh Napier University, United Kingdom

Çağrı Bulut, Yasar University, Turkey

Çiğdem Karış, Trabzon University, Turkey

Emir Özeren, Dokuz Eylul University, Turkey

Juthathip Suraraksa, Burapha University, Thailand

Mustafa Özbilgin, Brunel University London, United Kingdom

Serap Sap, Abdullah Gul University, Turkey

Zeynep Kurnaz, Karabük University, Turkey

Tasarım / Design

Şakir Güler

Malton London Yönetim Organizasyon Danışmanlık

Adres / Address: • İstiklal Mah. • 2. Cad. Tarmen 21 B/B, • Menemen/İzmir

Tel / Phone: +90 553 913 43 35

e-posta / e-mail: sosyalmucit@hotmail.com

web sayfası / web pages:

<https://www.sosyalmucit.com/>

<https://dergipark.org.tr/en/pub/smar>

<https://twitter.com/JournalSmar>

Sosyal Mucit Academic Review (SMAR), yılda iki kez yayınlanan (Haziran ve Aralık) çift kör hakemli uluslararası hakemli bir dergidir. Derginin ilk sayısı Aralık 2020 tarihinde yayınlanmıştır. Bu derginin kapsamında özellikle toplum, ekonomi, politika, eğitim ve kuramlar ile ilgili kavramsal, kuramsal ve nitel çalışmalara yer verilmesi hedeflenmektedir. Bunun temel nedeni, SMAR'ın sadece akademisyenler, yüksek lisans ve doktora öğrencileri değil aynı zamanda toplumdaki bireylerin anlayabileceği makaleler yayınlayabilme amacından ileri gelmektedir.

Sosyal Mucit Academic Review (SMAR) is a double-blind peer review international refereed journal published twice in a year (June and December). The first issue published in December 2020. This journal aims at publishing conceptual, theoretical and qualitative studies related to society, economics, politics, education and institutions. The main reason for this aim stems from publishing studies that are understood by not only academicians, graduate and PhD students, but also individuals and practitioners in society. In addition, quantitative studies within the scope of the journal have been accepted.

İÇİNDEKİLER / CONTENTS

Editörden

From Editor

Erhan Aydın.....v

The Relationship Between Economic Growth and Democracy: A Conceptual Approach

Ekonomik Büyüme ve Demokrasi Arasındaki İlişki: Kavramsal Bir Yaklaşım

Çiğdem Karış 1

Computer Program Development for Unloading Containers to The Warehouse

Konteynerlerin Depoya Boşaltılması İçin Bir Bilgisayar Programı Geliştirme

Kriangkrai Bandasak • Saowanit Lekhavat..... 15

Markaların Yönünü Belirlemeye Yardımcı Bir Pusula: Pazarlama Penceresinden Hipokampusu

Bakış

A Compass to Help to Determine the Brands' Direction: A View On Hippocampus from The Marketing Perspective

Derya Altıntaş..... 32

Commodity Fetishism in Computer Games: In-Game Item Consumptions of Counter Strike: Global Offensive Players

Bilgisayar Oyunlarında Meta Fetişizmi-Counter Strike: Global Offensive Oyuncularının Oyun İçi Eşya Tüketimleri

Aykut Tamir 45

Ülkelerin İnovasyon ve İtibar Düzeylerinin Sürdürülebilir Rekabet Üzerine Etkisi

The Effect of Innovation and Reputation Levels of Countries On Sustainable Competition

Tuğba Erhan • Seher Yastıoğlu..... 73

FROM EDITOR

Erhan Aydın

Dear Readers,

Sosyal Mucit Academic Review (SMAR) publishes the first issue and starts its publication life. “Sosyal Mucit” (in English: Social Inventor) refers to the individuals who have systematic perspectives to the challenges that societies face in the field of politics, economics, sociology, technology and environment. The main understanding of a “Sosyal Mucit” as an individual is to diagnose social problems and suggest potential solutions by creating a link between scholarly discussion and society. For this reason, SMAR aims at creating systematic knowledge by raising the critical questions and exploring the potential answers for the questions. I indicate the aforementioned questions as follows:

- 1) What is the problem?
- 2) Why is the problem important?
- 3) What is your suggestion to overcome the problem?

These questions guide the potential authors of the SMAR to structure their research. I emphasise them as critical questions because the clarity and the communication of a paper are important to reach more academic and non-academic individuals. I hope the SMAR journal will achieve its aims day by day.

In the first issue, the journal publishes five articles. In the first article, Dr. Çiğdem KARIŞ conducts conceptual research on the relationship between economic growth and democracy. In the second article, Mr. Kriangkai BANDASAK and Dr. Saowanit LEKHAVAT introduce a computer program development for efficiently unloading containers to the warehouse. In the third article, Dr. Derya ALTINTAŞ creates a view on Hippocampus from the marketing perspective. In the fourth article, Mr. Aykut TAMİR examines commodity fetishism in computer games and he provides some detailed examples to demonstrate in-game item consumptions. In the last article, Dr. Tuğba ERHAN and Dr. Seher YASTIOĞLU show the effect of countries' innovation and reputation levels on sustainable consumptions.

I hope you enjoy reading this issue and also, I look forward to seeing your contribution to the SMAR journal.

With kindest regards,

Assoc. Prof. Dr. Erhan Aydın

EDİTÖRDEN

Erhan Aydın

Değerli Okuyucular,

Sosyal Mucit Academic Review (SMAR) ilk sayısını yayınlamak için yayın hayatına başlamış bulunmaktadır. SMAR; politika, ekonomi, sosyoloji, teknoloji ve çevre gibi toplumsal konularda sistematik bakış açısına sahip bireyleri sosyal mucit olarak adlandırmaktadır. Sosyal Mucit'in temel hedefi, akademik tartışma konuları ile toplum arasında bir bağ kurarak toplumsal sorunları tespit etmek ve bu sorunlara karşı çözüm önerileri geliştirmektir. Bu bağlamda SMAR, sistematik bilgi oluşturmayı amaçlamaktadır. Bu amacı gerçekleştirebilmek için SMAR kritik sorunları gündeme getiren ve bu sorunlara çözüm önerisi sunan araştırmalara yer vermektedir. Söz konusu araştırmalara ait araştırma soruları şu üç ana kapsama odaklanmalıdır;

- 1) Problem nedir?
- 2) Bu problem neden önem arz ediyor?
- 3) Bu problemi aşmak için çözüm öneriniz nedir?

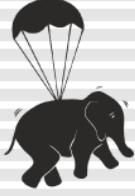
Yazar adayları bu araştırma sorularını rehber edinerek çalışmalarını yapılandırabilirler. Soruları özellikle vurguluyorum çünkü dergiye gönderilecek olan makalelerin yalnızca akademik camiaya değil aynı zamanda toplumsal tabana da ulaşmasını önemsemekteyiz. Umarım her geçen gün SMAR dergisi hedeflerine emin ve sağlam adımlarla ulaşır.

Bu amaç ve vizyon doğrultusunda SMAR'ın ilk sayısında beş makale yer almaktadır. İlk makalede Dr. Çiğdem KARIŞ ekonomik büyüme ve demokrasi arasındaki ilişkiyi kavramsal bir bağlamda inceliyor. İkinci makalede Bay Kriangkai BANDASAK ve Dr. Saowanit LEKHAVAT konteynerlerin depoya verimli bir şekilde boşaltılması için geliştirdikleri bilgisayar programını anlatmaktadır. Üçüncü makalede Dr. Derya ALTINTAŞ Hipokampus'e pazarlama açısından bir bakış açısı sunmaktadır. Dördüncü makalede ise Bay Aykut Tamir meta fetişizmini bilgisayar oyunları bağlamında inceliyor ve oyun içi eşya tüketimine yönelik ayrıntılı örnekler sunuyor. Son çalışmada ise Dr. Tuba ERHAN ve Dr. Seher YASTIOĞLU ülkelerin inovasyon ve itibar düzeylerinin sürdürülebilir rekabet üzerindeki etkisini incelemektedir.

İlk sayıyı okumaktan keyif almanızı diliyorum ve SMAR dergisine katkı sağlamanızı dört gözle bekliyorum.

En içten dileklerle,

Doç. Dr. Erhan Aydın



The Relationship Between Economic Growth and Democracy: A Conceptual Approach

Çiğdem Karış¹

Received/ Başyuru: 12.06.2020

Accepted/ Kabul: 15.07.2020

Published/ Yayın: 17.07.2020

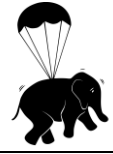
Abstract

The focus of this study is to reveal the relationship between economic growth and democracy conceptually. All countries want to increase their per capita income and the welfare of society through economic growth. In this context, another critical issue for countries is to ensure stable and sustainable economic growth. Numerous factors such as technology, human and physical capital, total factor productivity, domestic investment, saving, international trade and foreign direct investment affect economic growth. Democracy which is considered as an indicator of corporate governance, good governance and political stability is among the factors affecting economic growth. There is an opinion in this process that economic growth and democracy are closely related and that they will affect each other positively in terms of the relationship between them. In this context, the idea arises that democracy will develop in countries with a certain level of development and that democracy will positively affect economic growth by ensuring institutional control and strong institutional structures and by guaranteeing civil and property rights.

Keywords: Economic Growth, Democracy, Conflict Approach, Compatibility Approach, Skeptical Approach.

Article Type: *Research*

¹ Vakfikebir Vocational School, Trabzon University, 61335, Trabzon, Turkey, cigdemkaris@trabzon.edu.tr,
[Orcid: 0000-0002-7534-0494](https://orcid.org/0000-0002-7534-0494)



Ekonomik Büyüme ve Demokrasi Arasındaki İlişki: Kavramsal Bir Yaklaşım

Özet

Bu çalışmanın odak noktası ekonomik büyüme ve demokrasi arasındaki ilişkiyi kavramsal olarak ortaya koymaktır. Tüm ülkeler ekonomik büyüme yoluyla kişi başına gelir düzeylerini ve toplumun refah düzeyini artırmak isterler. Bu bağlamda, ülkeler açısından önemli olan diğer bir husus ise istikrarlı ve sürdürülebilir bir ekonomik büyümeyi sağlamaktır. Ekonomik büyüme üzerinde etkili olan birçok faktör bulunmaktadır. Ekonomik büyümeyi etkileyen bu faktörlerin arasında kurumsal yönetim, iyi idare ve siyasi istikrarın bir göstergesi olarak kabul edilen demokrasi yerini almıştır. Yaşanan süreçte ekonomik büyüme ve demokrasinin yakından ilişkili olduğu ve aralarındaki ilişki açısından birbirlerini olumlu yönde etkileyecekleri yönünde bir görüş bulunmaktadır. Bu bağlamda, belli bir gelişme düzeyine gelen ülkelerde demokrasinin gelişeceği ve demokrasinin de kurumsal denetimin ve güçlü kurumsal yapıların oluşmasını sağlayarak ve sivil haklar ve mülkiyet haklarını güvence altına alarak ekonomik büyümeyi olumlu etkileyeceği görüşü ortaya çıkmaktadır.

Anahtar Kelimeler: Ekonomik Büyüme, Demokrasi, Çatışma Yaklaşımı, Bağdaşma Yaklaşımı, Şüpheli Yaklaşım.

Makale Türü: *Araştırma*



1. INTRODUCTION

Many studies ([Kormendi and Meguire, 1985](#); [Barro, 1991](#); [Fischer, 1993](#); [Chen and Feng, 2000](#); [Chirwa and Odhiambo, 2016](#)) consider economic growths through exploring economic factors. However, non-economic factors can also affect economic growth and the literature related to these factors are scarce. For this reason, this research aims at adopting democracy as a non-economic factor that affects economic growth to provide evidence to demonstrate the role of non-economic factors for growth. Democracy can be considered amongst the critical factors that affect economic growth. Economists and political scientists are intensely examining the relationship between economic growth and democracy ([Lipset, 1959](#); [Heliwell, 1994](#); [Barro, 1996](#); [Rodrik, 2000](#); [Djezou, 2014](#)). With the increasing wave of liberalism in the 1980s, democracy was defined as one of the institutions of the free market economy. In this period, democracy, which became more popular with the concepts of corporate quality and good governance, was put forward as a prerequisite for a stable economic growth. Moreover, with the effect of the transformation of global democracy in the liberalization process in the 1980s, contrary to the idea that democracy is a result of economic growth, the idea that democracy is a prerequisite for economic growth was started to be accepted ([Adejumobi, 2000, p. 3-4](#)). At this point, a new debate has begun on whether democracy is the cause of economic growth and whether it is a factor affecting economic growth. Accordingly, there has been a growing interest in researching the relationship between economic growth and democracy has increased particularly since the 1980s. Therefore, the aim of this study is to reveal the approaches to explain this close relationship between economic growth and democracy.

The debates on the impact of democracy on economic growth date back to the 17th century ([Hobbes, 1967](#), [Harrington, 1656/1992](#)). Some scholars have argued that democracy contributes to economic growth, while the other have argued that democracy prevents economic growth. Lipset ([1959](#)) argued that democracy is effective on the economic growth of countries and is related to the level of economic growth, thus, it is possible to establish democracy in that society only after reaching a certain level of economic growth. Economic growth increases income, education and social communication, brings high and low income groups closer together, and expands the middle class, which increase the possibility of stable democratic governance ([Lipset, 1959, p. 73](#)). Lipset ([1959](#)) examined the relationship between economic growth and democracy and found that the relationship between economic growth and democracy was positive. This study leads many social scientists to examine the relationship between democracy and economic growth theoretically and empirically. In addition, the "third wave" in the democratization process stimulated the interest in the relationship between economic growth and democracy. Today, one of the main objectives of all countries is to improve the level of economic growth and democracy. It is therefore important to explain whether democracy affects economic growth, the nature of the relationship between economic growth and democracy, and whether democracy is necessary for economic growth. However, it is not possible to say that a full consensus has been reached in terms of the relationship between democracy and economic growth. While some studies have claim that the relationship between



economic growth and democracy, other studies claim a negative relationship or no relationship. For this reason, this study demonstrates three main approaches that discuss the relationship between democracy and economic growth. In this context, some economists ([Lipset, 1959](#); [Needler, 1967](#)) state that economic growth will lead to a social mobilization, which, they argued, would lead to a regime change in the direction of political mobilization and democracy. New ideas that emerge as a result of economic growth and / or industrialization lead to the formation of new social classes and strata that guide social transformation. Therefore, the transformation triggered by economic growth may affect democracy positively or adversely. On the other hand, other scholars have argued that the democratization process develops the economy in a short time ([Olson, 1983](#); [Przeworski and Limongi, 1993](#); [Leblang, 1996, 1997](#)) However, in democratic societies where individuals have legal rights and liberties, civil rights and liberties are secured, individuals can express themselves freely in the legal order and their different views freely. individuals are safe about their possessions, indicating that democracy promotes or prevents economic growth. However, some scholars claim that there is no systematic relationship between democracy and economic growth, so that democracy and economic growth are unrelated. Because of the two reasons: First, the democratization process being under the influence of many factors (civil rights and liberties, political stability, political rights, education, etc.), economic growth is not sufficient to ensure a more advanced democracy. Second, economic growth is also influenced by many factors (technology, human and physical capital, total factor productivity, domestic investment, foreign direct investment, international trade.), so that a democratic government can only affect economic growth to a limited extent ([Heo and Tan, 2001, p. 463](#); [Baum and Lake, 2003](#)). Due to many factors (human and physical capital, domestic investment, foreign direct investment, technology, civil right and liberties, political rights, education, etc.) affecting economic growth and democracy, it is claimed that democracy cannot be achieved only with economic growth or the existence of democracy alone is not sufficient for economic growth.

2. APPROACHES TO DEMOCRACY AND ECONOMIC GROWTH

There are three main approaches that explain the relationship between democracy and economic growth. These are “Conflict approach”, “Compatibility approach” and “Skeptical approach” ([Sirowy and Inkless, 1990](#)).

3. CONFLICT APPROACH

Conflict approach is based on the idea that democratic government hinders economic growth. Democracy and economic growth are incompatible. The presence of an authoritarian regime is necessary for achieving a successful and rapid economic growth. Authoritarian regimes can better achieve economic growth thanks to their high central powers. In addition, autocratic regimes can accelerate economic growth as they can easily limit consumption and pressure to increase savings, generate more income through taxes, dictators are more independent in policy making and can invest more productively ([Karakayali and Yanikkaya, 2006, p. 140](#); [Bhagwati,](#)



2002, p. 152). The supporters of this view assert three factors: First, it is argued that the dysfunctional consequences of a timeless democracy will slow economic growth. Second, democratic regimes cannot generally ensure the effective implementation of policies that will enable rapid economic growth. Considering the developments in the historical process, it turns out that state intervention is a necessity in the economic growth process (Sirowy and Inkeles, 1990, p. 129-130). One of the reasons that economic growth and democracy are incompatible with each other is that their success in the election prevents the elected ones from making sound decisions for the future (Comeau, 2003; Narayan, Narayan and Smyth, 2011), which makes them willing to fulfill the wishes of interest groups pursuing rent. For example, trade unions want employers to reduce their profits and, thus, economic growth slows down. Hence, democracy has a negative impact economic growth (Barro, 1996; Tavares and Wacziarg, 2001; Collier and Hoeffler, 2009; Aisen and Veiga, 2013; Rachdi and Saidi, 2015). On the other hand, Because autocratic regimes are more stable, isolated from redistributive politics, which allows them to enact policies conducive to long-term growth, do not carry out lobbying actions, autocratic regimes can lose their legitimacy in front of the public in the worsening of the economy and remain when the economy is good, and dictators have an interest in increasing economic growth (Comeau, 2003; Karakayalı and Yanıkkaya, 2006; Bardhan, 2004; McGuire and Olson; 1996), the conflict approach suggests that authoritarian regimes enable the implementation of policies suitable for long-term growth (Narayan, Narayan and Smyth, 2011, p. 901).

Hobbes (1967) is the first known advocate of this approach. Hobbes (1967) argued that authoritarian regimes are more likely to increase public welfare because that is the only way for authoritarian regimes to protect their interests. Huntington (1968) also argued that democracies have weak and sensitive political institutions and would allow fulfillment of the demands that would please the public at the expense of profitable investments (Doucouliagos and Ulubaşoğlu, 2008, p. 63). Democracies create pressure for more consumption, which reduce investment and adversely affect economic growth (Przeworski & Limongi, 1993, p. 51). In contrast, in autocracies, current consumption can easily be reduced, and thus savings can be increased more easily (Şanlısoy, 2010, p. 195). According to this approach, democracy is a less effective aid in ensuring a long-term stable economic growth. Because in democracies, the presence of unions and lobbying activities and the desire to maximize the success of the elected make them vulnerable to the wishes of those seeking rent and special interest groups such as unions (Krueger, 1974; Olson, 1982). This situation prevents the elected ones from making sound decisions for the future and slows down the economic growth (Narayan, Narayan and Smyth, 2011, p.901). Social and political stability indirectly provided by the authoritarian regime accelerates economic growth due to the separation of external influences and focusing on purpose (Sirowy and Inkeles, 1990, p. 130). Therefore, according to the conflict approach, what is initially necessary for the development of the country is discipline rather than democracy. Democracy leads to undisciplined and disorganized behavior that hinders economic growth. At this point, there is a “cruel dilemma” between democracy and economic growth.



Economic growth can only be achieved by waiving democracy (Bhagwati, 2002). Therefore, the existence of autocracy is necessary for countries to reach a certain level of economic growth. Democratic institutions should be established and developed after the economic growth reaches a certain level.

4. COMPATIBILITY APPROACH

The Compatibility approach offers an opposing view to the Conflict approach in terms of the relationship between democracy and economic growth. This approach emphasizes the necessity of political pluralism, institutional controls and balances in order to protect against predatory behavior or systematic violations associated with authoritarian management (Narayan, Narayan and Smyth, 2011, p. 901). Freedom of expression and association, the existence of multi-party elections, the rule of law, the protection of human rights and separation of powers, which emerge as a result of democracies, constitute the necessary institutional conditions and processes for economic growth. However, democracies positively affect economic growth by creating an environment that provides more innovation and facilitates the venture process, by facilitating the transfer of economic authority, and ensuring a stable investment environment and efficient use of resources (Adejumobi, 2000, p. 4-5; Bhagwati, 2002). According to North (1993), well-regulated and compulsory property rights are necessary conditions for economic growth, and they become stable when political and civil rights are secured. Otherwise, there is always a threat of arbitrary violation. In addition, contrary to the confrontational approach, this approach claims that rent-seeking may be limited due to the existence of audits and balances that occur with democratization (Narayan, Narayan and Smyth, 2011, p. 901). Mancur Olson (1983), one of the important representatives of this approach, suggested in his study "Rise and Fall of Nations" that the institutional structure of the political system has a definitive effect on economic growth. Democracy is better suited for economic growth than preventive autocracies (Olson, 1993). Olson (*ibid*: p. 573) "While experience has shown that relatively poor countries will grow at an extraordinary rate under the direction of a strong dictator, such growth only occurs during the management of one or two dictators. It is not a coincidence that all countries that have reached the highest growth level and have performed successfully throughout generations are managed with a stable democracy". Olson (1993) claims that the reason for the superior economic performance of democracies is based on their commitment to protect property rights (Heo and Tan, 2001). Based on the Compatibility approach, democracy and economic growth work in a very harmonious way, supporting each other. Authoritarian rules may produce economic growth more rapidly in the short term in some cases, but democratic rule provide further opportunities to achieve sustainable, sector-balanced and fair growth in the long term (Sirowy and Inkeles, 1990, p. 134).

5. SKEPTICAL APPROACH

Finally, the skeptical approach suggests that there is not a systematic relationship between democracy and economic growth. The main reason is to ensure stability and effective



implementation of policies rather than the type of regime (Comeau, 2003, p. 2). This approach emphasizes the variability in the level of economic performance in more autocratic and more democratic regimes (Clague et al., 1996; Adejumbi, 2000; Friedman, 2014). As a result of this variability, rather than the existing institutional arrangements and the determined government strategies, the focus should be how such factors as political party system that can change independently of the democratic feature of a system (single or multi-party system), the level of state intervention in the economy, the way of industrialization (labor or capital intensive), and cultural environment can be harmonized with the development goals such as economic growth and democracy. In this context, the direct relationship between democracy and economic growth is disrupted by the effects of these factors (Sirowy and Inkeles, 1990, p. 134). In other words, according to the skeptical approach, since the democratization process is under the influence of many factors, economic growth is not sufficient to ensure a more advanced democracy. Likewise, since economic growth is under the influence of many factors, a democratic administration can have a limited impact on economic growth.

From the well-known article of Lipset in 1959 onwards many researchers (Banks, 1970; Barro, 1996; Rodrik, 2000; Piatek, Szarzec and Pilc, 2013) have started to examine the relationship between economic growth and democracy. Since the 1980s, research on the relationship between economic growth and democracy has developed both theoretically and empirically. In some of the studies conducted to reveal the relationship between democracy and economic growth, a positive relationship between these two variables was displayed (Lipset, 1959; Cutright, 1963; Adelman and Morris, 1967; Cutright and Wiley, 1969; Banks, 1970; Dasgupta, 1990; London and Williams, 1990; Chatterji et al., 1993; Bhalla, 1994; Leblang, 1996, 1997; Feng, 1997; Nelson and Singh, 1998; Przeworski et al., 2000; Rodrik, 2000; Heo and Tan, 2001; Yay, 2002; Dollar and Kraay, 2003; Fidrmuc, 2003; Arslan and Doğan, 2004; Kriekhaus, 2006; Narayan and Smyth, 2006; Papaioannou and Siourounis, 2008; Başar, Güllüce and Yıldız, 2009; Rock, 2009; Başar and Yıldız, 2012; Benhabib, Corvalan and Spiegel, 2013; Jaunky, 2013; Knutsen, 2013; Piatek, Szarzec and Pilc, 2013; Djezou, 2014; Saaticioglu and Karaca, 2015; Şahin, 2017). While some of the studies on this subject put forward a negative or weak relationship between economic growth and democracy (Cohen, 1985; Landau, 1986; Grier and Tullock, 1989; Persson and Tabellini, 1994; Barro, 1996; Tavares and Wacziarg, 2001; Kurzman, Regina and Burkhart, 2002; Tang and Yung, 2008; Yang, 2008; Collier and Hoeffler, 2009; Narayan, Narayan and Smyth, 2011; You, 2011; Aisen and Veiga, 2013; Rachdi and Saidi, 2015), the other studies display no relation between these two variables (Marsh, 1988; Levine and Renelt, 1992; Barro and Lee, 1993; Heliwell, 1994; De Haan and Siermann, 1995; Alesina et al., 1996; Heo and Tan, 2001; Yay, 2002; Butkiewicz and Yanikkaya, 2006; Doucouliagos and Ulubasoglu, 2008).

The idea that economic growth was the main target for countries (especially third world countries) and that democracy would be ensured after the economic growth was prevalent in the 1960s and 1970s. In the 1980s, in many countries, the transition to democracy began with the transition to a free market economy. Experience in this transition period showed that



economic growth should be supported not only by transitioning to a liberal economy but also by supporting it with democracy. As a result of these developments, contrary to the previous idea that democracy was the result of economic growth, the idea that democracy is necessary for economic growth started to prevail. In this context, although there are different approaches to explain the relationship between economic growth and democracy, it is possible to gather these approaches in three groups as the Conflicting approach, the Adaptation approach and the Skeptical approach (Sirowy and Inkeles, 1990). According to the Conflicting approach, economic growth and democracy are incompatible; when one increases, the other decreases; that is, economic growth and democracy cannot happen at the same time. According to the Adaptation approach, which claims the opposite of this approach, economic growth and democracy cannot be considered separately; they are compatible and support each other. There is a positive relationship between economic growth and democracy. Finally, the Skeptical approach suggests that the relationship between economic growth and democracy is not clear and there is no relationship between these two variables.

The existence of an accountability mechanism, the rule of law, the participation of society in management and the change of administrators who cannot manage well, corporate quality and good management, freedom of expression and association, guaranteeing property rights, civil rights and freedoms, protection of human rights, separation of powers and competitive political policies are in question in democracies. Today, it can be said that societies are increasingly demanding these elements, which are the result of democracy. As a result of these factors, democracy has caused the efficient use of resources and increased productivity in production, increased investments, political stability, increased education level of individuals, individuals leading a peaceful life and increased income per capita and, thus, it can be said that there is a direct or indirect positive interaction between economic growth and democracy.

6. CONCLUSION

Economic growth is the main economic goal of countries to achieve better living standards. Economic growth increases the welfare level of societies in many ways by providing more employment opportunities, increasing per capita income and stimulating the economy, etc. It is important that sustainable and stable growth should be achieved as well as ensuring economic growth. At this point, besides the economic factors (Technology, human and physical capital, investments, industrialization, etc.) affecting economic growth in order to ensure stability in economic growth, Democracy, which is necessary for the formation of corporate good management, civil and political rights, strong institutional structures, property rights, social satisfaction and political stability, comes to the fore, as well. Therefore, it can be said that there is a strong and close link between economic growth and democracy.

There are many theoretical and empirical studies expressing the positive relationship between economic growth and democracy (Lipset 1959; Cutright 1963; Adelman and Morris, 1967; Banks, 1970; Dasgupta, 1990; London and Williams, 1990; Chatterji et al. 1993; Bhalla, 1994;



Rodrik, 2000; Papaioannou and Siourounis, 2008; Jaunky, 2013; Saatcioğlu and Karaca, 2015). On the one hand, it can be said that democracy will be established when countries reach a certain level of economic growth; on the other hand, democracy will have a positive impact on economic growth by ensuring political pluralism, institutional control and balance, property rights along with political and civil rights, by establishing stronger institutions in managing economic crises, of democracy, and. It is revealed that it will have a positive impact on economic growth, and by providing a stable investment environment. In addition, democracy is necessary to achieve long-term and sustainable economic growth. Therefore, it can be said that economic growth and democracy supply each other positively. As a matter of fact, economic growth and democracy are widely believed to have a positive effect on each other.

References

- Adejumobi, S. (2000) ‘Between democracy and development in Africa: what are the missing links?’, Available at: http://documents.worldbank.org/curated/en/143061468741593788/820140748_200404140000401/additional/28762.pdf (Accessed: 21.06.2020).
- Aisen, A. and Veiga, F.J. (2013) ‘How does political instability affect economic growth?’, *European Journal of Political Economy*, 29, pp. 151– 167.
- Arslan, Ü. and Doğan, C. (2004) ‘Demokrasi ve ekonomik büyüme’, *Mustafa Kemal Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 1(1), pp. 1-13.
- Adelman, I. and Morris, C. T. (1967) *Society, politics and economic development*. Baltimore, MD: Johns Hopkins University Press.
- Alesina, A., Ozler, S., Roubini, N. and Swagel, P. (1996) ‘Political instability and economic growth’, *Journal of Economic Growth*, 1(2), pp. 189–211.
- Banks, A. S. (1970) *Political handbook of the World*. New York: McGraw-Hill.
- Bardhan, P. (2004) ‘Democracy and development: a complex relationship’, Available at: <https://eml.berkeley.edu/~webfac/bardhan/papers/BardhanDemoc.pdf> (Accessed: 21.06.2020).
- Barro, R. J. (1991) ‘Economic growth in a cross section of countries’, *The Quarterly Journal of Economics*, 106(2), pp. 407-443.
- Barro, R.J. and Lee, J. W. (1993) ‘Losers and winners in economic-growth’, *NBER Working Paper Series*, No. 4341, pp. 267-97.
- Baum, M. A. and Lake, D. A. (2003) ‘The political economy of growth: democracy and human capital’, *American Journal of Political Science*, 47(2), pp. 333–347.



- Barro, R. J. (1996) 'Democracy and growth', *Journal of Economic Growth*, 1(1), pp. 1–27.
- Başar, S., Güllüce, A. Ç. ve Yıldız, Ş. (2009) 'Effects of Economic Growth on democratization in transition economies: a panel data approach', *Sosyoekonomi*, 2009(1), pp. 87-101.
- Başar, S. ve Yıldız, Ş. (2012) 'İktisadi Büyümenin Demokratikleşmeye Etkisi Üzerine Bir Araştırma', *Kafkas Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, 3(3), pp. 9-38.
- Benhabib, J., Corvalan, A. and Spiegel, M. M. (2013) 'Income and democracy: evidence from nonlinear estimations', *Economics Letters*, 118(3), pp. 489-492.
- Bhagwati, J. N. (2002) 'Democracy and development: cruel dilemma or symbiotic relationship', *Review of Development Economics*, 6(2), pp. 151-162.
- Bhalla, S. (1994) 'Freedom and economic growth: a virtuous cycle?' in Hadenius A. (eds.) *Democracy's victory and crisis*. Cambridge: Cambridge University Press, pp. 195-241.
- Butkiewicz, J. L. and Yanikkaya, H. (2006) 'Institutional quality and economic growth: maintenance of the rule of law or democratic institutions, or both?', *Economic Modelling*, 23(2006), pp. 648-661.
- Chirwa, T. G. and Odhiambo, N. M. (2016) 'Macroeconomic determinants of economic growth: a review of international literature', *South East European Journal of Economics and Business*, 11(2), pp. 33-47.
- Chatterji, M., Gilmore, B., Strunk, K. and Vanasin, J. (1993) 'Political economy, growth and convergence in less-developed countries', *World Development*, 21(12), pp. 2029–2038.
- Chen, B. and Feng, Y. (2000) 'Determinants of economic growth in China: private enterprise, education, and openness', *China Economic Review*, 11(2000), pp. 1-15.
- Clague, C., Keefer, P., Knack, S. and Olson, M. (1996) 'Property and contract rights in autocracies and democracies', *Journal of Economic Growth*, 1(2), pp. 243–276.
- Cohen, Y. (1985) 'The impact of bureaucratic-authoritarian rule on economic growth', *Comparative Political Studies*, 18(1), pp. 123–36.
- Collier, p. and Hoeffler, A. (2009) 'Testing the neocon agenda: democracy in resource-rich societies', *European Economic Review*, 53(3), pp. 293-308.
- Comeau, L. (2003) 'Democracy and growth: a relationship revisited', *Eastern Economic Journal*, 29(1), pp. 1–21.
- Cutright, P. (1963) 'National political development: its measures and analysis', *American Sociological Review*, 28, pp. 253–264.



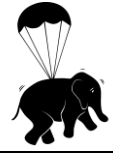
- Cutright, P. and Wiley, J. A. (1969) 'Modernization and political representation, 1927-1966', *Studies in Comparative International Development*, 5(2), pp. 23-41.
- Dasgupta, P. (1990) 'Well-being and the extent of its realisation in poor countries', *The Economic Journal*, 100(400), pp. 1-32.
- De Haan, J. and Siermann, C. L. J. (1995) 'New evidence on the relationship between democracy and economic growth', *Public Choice*, 86(1-2), pp. 175-98.
- Djezou, W. B. (2014), 'The democracy and economic growth nexus: empirical evidence from Côte d'Ivoire', *The European Journal of Comparative Economics*, 11(2), pp. 251-266.
- Dollar, D. and Kraay, A. (2003) 'Institutions, Trade and Growth', *Journal of Monetary Economics*, 50, 133-162.
- Doucouliağos, H. and Ulubaşođlu, M. A. (2008) 'Democracy and economic growth: a meta-analysis', *American Journal of Political Science*, 52(1), pp. 61-83.
- Feng, Y. (1997) 'Democracy, political stability and economic growth', *British Journal of Political Science*, 27(3), pp. 391-418.
- Fischer, S. (1993) 'The role of macroeconomic factors in growth', *NBER Working Paper*, No. 4565, pp. 1-36.
- Fidrmuc, J. (2003) 'Economic reform, democracy and growth during post-communist transition', *European Journal of Political Economy*, 19(3), pp. 583-604.
- Friedman, B. M. (2014) 'Kapitalismus, Wirtschaftswachstum und Demokratie', in von Müller C., Zinth CP. (eds) *Managementperspektiven für die zivilgesellschaft des 21. Jahrhunderts*. Springer Gabler: Wiesbaden, pp.3-15.
- Grier, K. B. and Tullock, G. (1989) 'An empirical analysis of cross-national economic growth, 1951-1980', *Journal of Monetary Economics*, 24(2), pp. 259-276.
- Harrington, James. (1992) *The commonwealth of oceana and a System of politics*. Ed. John G. A. Pocock. Cambridge: Cambridge University Press. (original work published 1656).
- Heo, U. and Tan, A. C. (2001) 'Democracy and economic growth: a causal analysis', *Comparative Politics*, 33(4), pp. 463-473.
- Heliwell, J. F. (1994) 'Empirical linkages between Democracy and growth', *British Journal of Political Science*, 24(2), pp. 225-248.
- Hobbes, T. (1967) *Leviathan*. Ed. Macpherson, Crawford B. Harmondsworth, UK: Penguin. (original work published 1651).



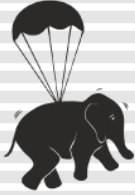
- Huntington, S. (1968) *The political order in changing societies*. New Haven, CT: Yale University Press.
- Jaunky, V. C. (2013) ‘Democracy and economic growth in Sub-Saharan Africa: a panel data approach’, *Empirical Economics*, 45, pp. 987-1008.
- Karakayalı, H. and Yanıkkaya, H. (2006) ‘Kurumsal faktörlerin ekonomik büyümeye etkileri’, in Aktan, C. C. (eds) *Kurumsal iktisat kuralları, kurumlar ve ekonomik gelişme*, Ankara, Turkey: SPK, pp.135-170.
- Knutsen, C. H. (2013) ‘Democracy, state capacity, and economic growth’, *World Development*, 43, pp. 1-18.
- Kormendi, R. C. and Meguire, P. G. (1985) ‘Macroeconomic determinants of growth: cross-country evidence’, *Journal of Monetary Economics*, 16(1985), pp. 141-163.
- Krieckhaus, J.(2006) ‘Democracy and economic growth: how regional context influences regime effects’, *British Journal of Political Science*, 36(2), pp. 317-340.
- Krueger, A. (1974) ‘The political economy of the rent seeking society’, *The American Economic Review*, 64(3), pp. 291–303.
- Kurzman, C. Regina, W. and Burkhart, R. E. (2002) ‘Democracy’s effect on economic growth: a pooled time-series analysis, 1951–80’, *Studies in Comparative International Development*, 37(1), pp. 3–33.
- Landau, D. (1986) ‘Government and economic growth in the less developed countries: an empirical study for 1960–1980’, *Economic Development and Cultural Change*, 35(1), pp. 35–75.
- Leblang, D. A. (1996) ‘Property rights, democracy and economic growth’, *Political Research Quarterly*, 49(1), pp. 5-26.
- Leblang, D. A. (1997) ‘Political democracy and economic growth: pooled cross-sectional and time-series evidence’, *British Journal of Political Science*, 27(3), pp. 453–472.
- Levine, R. and David Renelt, D. (1992) ‘A sensitivity analysis of cross-country growth regressions’, *American Economic Review*, 82(4), pp. 942–963.
- Lipset, S. M. (1959) ‘Some social requisites of democracy, economic development and political development’, *American Political Science Review*, 53(1), pp. 69–105.
- London, B. and Williams, B. A. (1990) ‘National politics, international dependency, and basic needs provision: a cross-national analysis’, *Social Forces*, 69(2), pp. 565-584.



- Marsh, R. M. (1988) 'Sociological explanations of economic growth', *Studies in Comparative International Research*, 13(4), pp. 41–77.
- McGuire, M., and Olson, M., (1996) 'The economics of autocracy and majority rule: the invisible hand and the use of force', *Journal of Economic Literature*, 34(1), pp. 72–96.
- Needler, M. (1967) 'Political development and socioeconomic development: the case of Latin America', *American political Science Review*, 62(1967), pp. 889-897.
- Nelson, M. A. and Singh, R. D. (1998) 'Democracy, economic freedom, fiscal policy, and growth in LDCs: a fresh look', *Economic Development and Cultural Change*, 46(4), pp. 677–696.
- Narayan, P. K., Narayan, S. and Smyth, R. (2011) 'Does democracy facilitate economic growth or does economic growth facilitate democracy? An empirical study of Sub-Saharan Africa', *Economic Modelling*, 28, pp. 900-910.
- Narayan, P. K. and Smyth, R. (2006) 'Democracy and economic growth in China: evidence from cointegration and causality testing', *Review of Applied Economics*, 2(1), pp. 81-98.
- North, D. (1993) 'The paradox of the west' Available at: <http://dlc.dlib.indiana.edu/dlc/bitstream/handle/10535/4158/9309005.pdf> (Accessed: 28.03.2020).
- Olson, M. (1982) *The rise and decline of nations*. New Haven: Yale University Press
- Olson, M. (1983) *The rise and decline of Nations: economic growth, stagflation and social rigidities*. New Haven, CT: Yale University Press.
- Olson, M. (1993) 'Dictatorship, democracy, and development', *American Political Science Review* 87(3), pp. 567–576.
- Papaioannou, E. and Siourounis, G. (2008) 'Democratisation and Growth', *The Economic Journal*, 118(532), pp. 1520-1551.
- Persson, T. and Tabellini, G. (1994) 'Is inequality harmful for growth?', *American Economic Review*, 84(3), pp. 600–621.
- Piatek, D., Szarzec, K. and Pilc, M. (2013) 'Economic freedom, democracy and economic growth: a causal investigation in transition countries', *Post-Communist Economies*, 25(3), pp. 267-288.
- Przeworski, A., Alvarez, M. E., Chieub, J. A. and Limongi, F. (2000) *Democracy and development: political institutions and well-being in the world, 1950-1990*. New York: Cambridge University Press.



- Przeworski, A. and Limongi, F. (1993) 'Political regimes and economic growth', *Journal of Economic Perspectives*, 7(3), pp. 51-69.
- Rachdi, H. and Saidi, H. (2015) 'Democracy and economic growth: evidence in MENA countries', *Procedia Social and Behavioral Sciences*, 191(2015), pp. 616-621.
- Rock, M. T. (2009) 'Has democracy slowed growth in Asia?', *WorldDevelopment*, 37(5), pp. 941-952.
- Rodrik, D. (2000) 'Institutions for high-quality growth: what they are and how to acquire them', *Studies in International Comparative Development*, 35(3), pp. 3-31.
- Saatcioğlu, C. and Karaca, O. (2015) 'İktisadi kalkınmanın demokrasi Üzerindeki etkisi: panel veri analizi', *Atatürk Üniversitesi İİBF Dergisi*. 29(4), pp. 775-796.
- Sirowy, L. and Inkeles, A. (1990) 'The effects of democracy on economic growth and inequality: a review', *Studies in Comparative International Development*, 25(1), pp. 126-157.
- Şahin, D. (2017) 'Geçiş ekonomilerinde demokrasi ve ekonomik büyüme ilişkisi: panel veri analizi', *Muş Alparslan Üniversitesi Sosyal Bilimler Dergisi*, 5(1), pp. 45-57.
- Şanlısoy, S. (2010) 'Politik istikrarsızlık-ekonomik süreç politikaları etkileşimi', *Sosyoekonomi Dergisi*, 13(13), pp. 191-214.
- Tang, S. H. K. and Yung, L. C. W. (2008) 'Does rapid economic growth enhance democratization? Time-series evidence from high performing Asian economies', *Journal of Asian Economics*, 19(3), pp. 244-253.
- Tavares, J. and Wacziarg, R. (2001) 'How democracy affects growth', *European Economic Review*, 45(8), pp. 1341-1378.
- Yang, B. (2008) 'Does democracy lower growth volatility? A dynamic panel analysis', *Journal of Macroeconomics*, 30, pp. 562-574.
- Yay, G. G. (2002) 'İktisadi gelişme ve demokrasi ilişkisi üzerine bir sınama', *İstanbul Üniversitesi İktisat Fakültesi Mecmuası*, 52(1), pp. 27-54.
- You, J-S. (2011) 'Democracy, inequality and corruption: Korea, Taiwan, and the Philippines compared', *SSRN*, Available at: <https://ssrn.com/abstract=1903420> (Accessed: 23.04.2020).



Computer Program Development for Unloading Containers to The Warehouse

Kriangkrai Bandasak¹ Saowanit Lekhavat²

Received/ Başyuru: 20.06.2020 Accepted/ Kabul: 15.07.2020 Published/ Yayın: 17.07.2020

Abstract

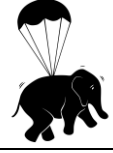
The research aims to develop and create a computer program capable of managing inbound low-priority containers that take up lots of spaces in the unloaded area that are unnecessary for production. This makes it impossible to utilize high-priority inbound containers. Hence, it grows increasingly harder to continue the production lines due to shortages of inputs. As the consequence expenses such as demurrage and unloading costs. The contribution of this study is to apply heuristics technique that are First Come, First Served (FCFS) and Early Due Date (EDD) to accommodate continuous production without waiting for necessary inputs by using Microsoft Excel VBA to develop the algorithm for incoming containers. The outcome of this study reveals that after implementing the program, it helped to reduce the planning time of containers up to 99.5%. According to data obtained from March 2020, the framework successfully mitigates the issue of a lack of inputs that are still loaded in the port. Furthermore, additional expenses are reduced up to 86.6%, with demurrage downed by 87.9%, as well as increasing the unloading capacity by 31%. Finally, this framework proves to be resilient and flexible against changes in production plans.

Keywords: Operation Management, Heuristics, VBA

Article Type: *Research*

¹ Faculty of Logistics, Burapha University, Mueang, Chonburi, 20131, E-mail: os.ki.marine@gmail.com,
Orcid: [0000-0002-1006-0811](https://orcid.org/0000-0002-1006-0811)

² Faculty of Logistics, Burapha University, Mueang, Chonburi, 20131 E-mail: saowanit.le@go.buu.ac.th,
Orcid: [0000-0002-6926-0770](https://orcid.org/0000-0002-6926-0770)



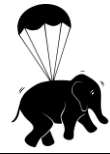
Konteynerlerin Depoya Boşaltılması İçin Bir Bilgisayar Programı Geliştirme

Özet

Bu araştırma; yükleme alanına gelen, üretim için gereksiz olan ve çok fazla yer kaplayan düşük öncelikli konteynerları yönetebilen bir bilgisayar programı geliştirmeyi amaçlamaktadır. Bu gereksiz konteynerlar yüksek öncelikli olarak gelen konteynerların kullanımını imkansızlaştırmaktadır. Dolayısıyla, girdi kıtlığı nedeniyle üretim hatlarının devam etmesi giderek zorlaşmaktadır ve aynı zamanda bu sonuç bekleme süresini ve yük boşaltma maliyetini de artırmaktadır. Bu çalışma, Microsoft Excel VBA sayesinde, gelen konteynerlara yönelik bir algoritma geliştirerek, gereksiz girdileri beklemeksizin sürekli üretimin temin edilmesi adına, İlk Gelene İlk Hizmet (İGİH) ve Erken Teslimat Tarihi (ETT) esaslarına “buluşsal tekniklerin” uygulanması yönüyle katkı sağlayacaktır. Çalışma bulguları sonucunda görüldüğü üzere, programın uygulanması konteynerların planlama süresinin uzunluğunun %99.5 oranında azalmasını sağlamıştır. 2020 Mart ayının verilerine göre, bu sistem limandaki yetersiz girdi meselesini başarıyla azaltmıştır. Ayrıca, ek masraflar %86,6'ya kadar azalırken, bekleme süresi %87,9 oranında azaldı ve boşaltma kapasitesi %31 artırıldı. Son olarak, bu sistem üretim planlarındaki değişikliklere karşı kolay adapte olabilen, esnek bir yöntem olduğunu kanıtlamıştır.

Anahtar Kelimeler: Operasyon Yönetimi, Sezgisel Tarama, VBA

Makale Türü: *Araştırma*



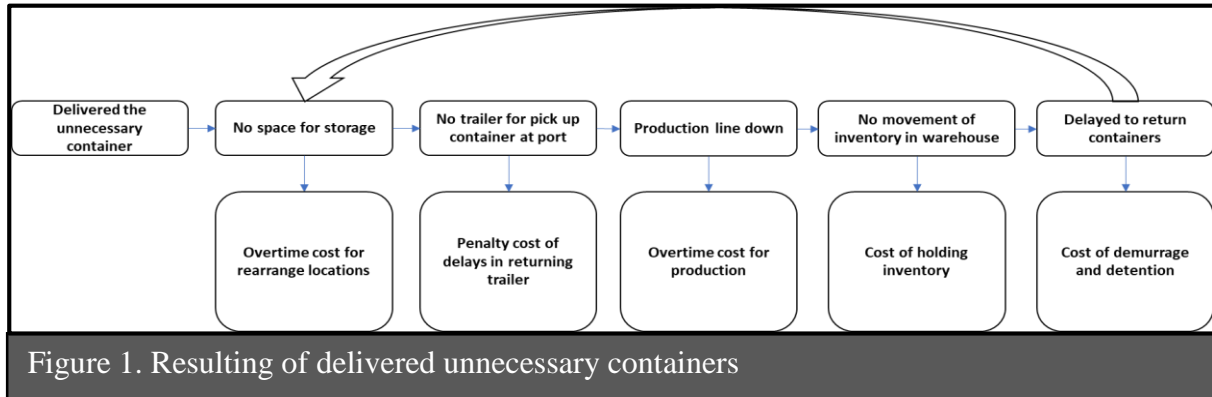
1. INTRODUCTION

In order to create economic connectivity with global for increasing employment rates in Thailand, Thai government has issued announcement investment promotion in free zone area which will be granted incentives free duty for import material, therefore, making many companies interested to invest in Thailand free zone due to this privilege especially companies that need to import raw materials from abroad to use in production the free zone area will allowing the company to reduce the cost of custom duty and VAT on purchase or importation of raw materials. In addition, Thailand has relatively lower labor costs and more skilled labor as well. Besides, Thailand has the infrastructure suitable for investment, especially the port that will help to support the companies that need to import material for production because the port will be a seaborne transport point. Sea transportation is considered to be the most important and most popular transportation due to the low transportation cost and the ability to transport huge volumes of products at a time that made economies of scale. Most forms of sea transportation today are container box systems that products will be stuffed into containers and the containers were transported by special vessel calling container vessel. The vessel also needs a seaport that has a facility suitable for containers loading and unloading which Thailand has this kind of port called Laem Chabang port located at east of Thailand. Another thing that those companies need to consider is warehouse management because warehouse is stored imported raw materials without tax under the customs regulations which are more special than regular storage that means the cost of operation and lead time and uncertainty of sea mode both are also the critical variables to consider for suitable of warehouse management for resulting in systematic operations worthwhile for investment, quality control of storage picking products, preventing the loss of operating to ensure the lowest operating costs and taking full advantage of the area. To summarize, the high objective is to reduce total costs to the most economical but still maintain quality and service level.

The company researcher has studied a premium grade motorcycle manufacturing company targeting the specific groups of customers and the company located in the duty-free zone in Rayong province. The proportion of parts imported for production from the United States is 74 percent, Mexico 10 percent, China 5 percent, Thailand 5 percent, Vietnam 3 percent, India 2 percent and others 1 percent. Due to 95 percent of importing parts, there are containers arriving port up to 8 to 14 containers per day or 150 to 400 containers per month but capacity of unloading have only 5 to 6 per day. In December 2019, there are 255 containers exited at the port waiting for delivery to company's warehouse for unloading and some of the containers that arrived at the port did not arrive in order of shipping scheduled date due to uncertainty of sea mode that means some containers were shipped from origin port in the first date may arrive after containers were shipped at the fifth date, so it is not mean first come first served. The company's logistics department has made a delivery plan by first come first served: FCFS for priority containers at the port to deliver at warehouse follow with capacity of unloading without considering there are parts going to shortage soon inside the container or not, that is why some



containers were shipped by unnecessary. And the resulting of delivered unnecessary containers as figure 1.



The resulting of delivered unnecessary container that will adversely affect each other in a chain.

The first issue of the resulting that the company is faced with no space in warehouse for storage part and no space for unloading part from container to warehouse this causes of the warehouse to stop unloading and re-arrange area in the warehouse for making space for unloading and storage it is lost time and increase the cost of overtime payment.

1.2. After the issue of stopping unloading but the delivery plan of containers still continue until the supplier of trailer no trailer for picking container at the port the next issue is no parking area for the truck and trailer containers what next is the delay in returning the trailer to supplier and there is penalty cost of delaying 1500 THB per day per trailer.

1.3. When the unloading and the delivery plan have stopped, the necessary container also stuck at port due to no space, no trailer, it affects the production line stop and made downtime recording. The production needs to work overtime for covering backlog order and resuming to a normal situation that means lost time and increased cost.

1.4. After production stopped no consuming part from warehouse no movement and no finish goods produced from the part at the warehouse, that means no space clearing for unloading and extend holding inventory cost.

1.5. While waiting for re-arrange and solving space issue, the time is not waiting still continue, that means the free time after containers arriving port be consumed every day until the time runs out it will increase the cost calling container demurrage and if delay after container moves out from port calling detention. From recording in December2020 the company have been paid the extract cost of delivery containers 1,756,900 THB (Not including overtime)

As discussed above, the root cause is from delivery unnecessary containers regarding inappropriate containers delivery plan that considered only first come first served method but did not consider the shortage date of each parts inside the container because it is difficult and need to spend time around 3000 minutes for manual calculation to find the shortage date of



each part and priority containers to delivery with first come first served method. Therefore, the researcher has developed a computer program with Microsoft VBA for implement the program of priority containers for unloading by applies the principle of heuristics to quickly and effectively. The outcome of this study reveals that after implementing the program, the researcher found out that it helped reduce the planning and sorting time of containers up to 99.5%. According to data obtained from March 2020, the framework successfully mitigates the issue of a lack of inputs that are still loaded in the harbor. Furthermore, additional expenses are reduced up to 86.6%, with demurrage downed by 87.9%, as well as increasing the unloading capacity by 31%. Finally, this framework proves to be resilient and flexible against changes in production plans regardless of the number of containers.

2. LITERATURE REVIEW

2.1. Port Operation

Klompere, (2000) studied the international trade in Thailand mainly depends upon sea transport mode. The port is the main gateway to the country. As is widely accepted, containerization has risen rapidly; in Thailand Bangkok Port is one of the major ports who plays a very important role as the logistic platform for Thai economy. According to the government policy to limit the number of container throughput via Bangkok Port at one million TEUs/year, hence, Bangkok Port has to emphasize on the increment of its efficiency of operations and services instead of expansion. Recently, Bangkok Port has improved its performance tremendously. However, the port still has problems creating inefficient operations and service systems. Based on the analysis, the major problems are long berthing time, low occupancy ratio, low productivity, high cost, congestion, dangerous conditions and inadequate cargo security. These problems are caused by both internal and external factors, for instance the economic crisis of the country, lack of proper plan, shortage of some equipment, shortage of skilled labor and know-how in the new system and deficient management.

2.2. Warehouse Management

Warehouse management is the art of movement and storage of materials throughout the warehouse. Warehouse management monitors the progress of products through the warehouse (Charlotte, 2011). It involves the physical warehouse infrastructure, tracking systems, material handling and communication between product stations. Warehouse management deals with the receipt, storage and movement of goods usually finished goods and includes functions like warehouse master record, item/ warehouse cross-reference lists and such things as on hand, allocated, transfers in process, transfer in process, transfer lead time, safety stock, fields for accumulating statistics by location.

A warehouse manager needs to perform several crucial functions such as overseeing and recording deliveries and pickups, loading and unloading materials and supplies, maintaining inventory records and tracking system, determining appropriate places for storage, rotating



stock as needed and adjusting inventory levels to reflect receipts and disbursements. A manager needs to have knowledge about inventory control and warehousing systems, loading and unloading procedures, risky, materials storage and mathematical knowledge.

A warehouse management system is a critical component of an effective overall supply chain management system solution. The warehouse management system is performed as a system to control the movement and storage of materials within a warehouse. Today it even incorporates tasks such as light manufacturing, transportation management, order management, and entire accounting systems.

2.3. Heuristic Method

The scheduling of production with heuristics method is the easy way for finding satisfying results but it is not proof that the answer is the best outcome. The method can find the answer that is huge information with simple calculations and do not waste the time (Baker and Trietsch, 2013)

The priority dispatching rules is the priority following condition that the popular criteria as below.

- i. SPT (Shortest Processing Time) is the rule that considers the condition of the job with the shortest processing time to be processed ahead of all other waiting jobs. The use of this rule for sequencing will minimize the average time a job spends at the work center.
- ii. LPT (Longest Processing Time) is the rule of considering the condition of the jobs by their processing time. If processing time longest, it will be assigned first.
- iii. FCFS (First Come First Served) is the simplest scheduling simply queues job that considers the job arrives first will be executed first and the next job starts only after the previous.
- iv. EDD (Early due date) is the rule consideration of the due date by choosing the job that is due beforehand to do first.

We apply hybrid heuristics method by selecting FCFS and EDD. The reason is sorting port arrival with first come first served (FCFS) method will consider on the condition of demurrage. This means that it will help to reduce the cost of charging from the liner and early due date (EDD) method for considering the shortage date of parts inside the containers. This method will help to find the necessary containers for unloading.

(Phatapipong et al., 2018) used hybrid heuristics method for production schedule of the precast slab the paper presents the heuristic approaches such as Earliest Due Date (EDD), First Come First Serve (FCFS), Shortest Processing Time (SPT), Minimum Slack Time (MST), Critical Ratio (CR), and determines products list for finished goods inventory and they developed new method is Shortest Processing Time (SPT) + Slack Time1 (Slack1) and found out that SPT+Slack1 is the number of tardy jobs decreased from 170 to 95 (decreased 44.12%) and



finished goods inventory decreased from 5,085 to 4,164 sheets/day (decreased 21.32%) then utilization of warehouse 52.96% and save total cost 1,278,938 baht/year (decreased 8.34%)

Butdee and Tangchaidee, (2010) considered the relation between production and transportation system is considered as a core process in order to provide good service according to time frame constraints. To cope with these problems, the combination of production and transportation scheduling algorithm is proposed in order to optimized lead times from received order until the product reach to a customer site. The heuristic rules are applied consists of EDD, SPT and LPT. The hybrid heuristic is to select two shortest times order resulted from the heuristic rule and then production schedule is created. The transportation routing related to such a plan is defined using best-first search rule. Finally, the final plan is created by connect the production and transportation plan.

2.4. Microsoft Excel VBA

Phaophuree (2011) applied heuristics algorithm for fuel vehicle routing problem with multiple products, multiple fleet sizes and multiple compartments. The heuristics tool was developed on Microsoft Excel by coding a Visual basic for application the program. The program could quickly find a good solution and be customized to add or reduce the number of delivery locations by the user.

Lumjuan et al (2014) developed a decision support system for production scheduling in sheet metal stamping section: a case study of an automotive part industry. This decision-support system is developed with computers, using Visual Basic for Application (VBA) Language to process data on Microsoft Excel. In this research, the integrated heuristic methods e.g., EDD-SPT, EDD-LPT, EDD-WSPT, SPT-EDD, LPT-EDD and WSPT_EDD are chosen for process scheduling with the number of tardy jobs as the major indicator and mean tardiness as the minor indicator. From the results scheduling production with this decision-support system by using past production data, it shows that number of tardy jobs and means tardiness time decreased 31.82% and 25.79%, respectively compared with computing results from the original method. That is this decision support system for production scheduling is efficient and easy to use.

3. METHOD

This research uses quantitative method for analysis of computer program development for unloading containers to the warehouse. It applies the design science in information systems research (Hevner et al., 2004). It is the high-quality design-science research that describes the performance of design-science research in information systems via a concise conceptual framework because it focuses on how to build and evaluate the program to meet the business need. This study follows the design science framework as shown in Figure 2.

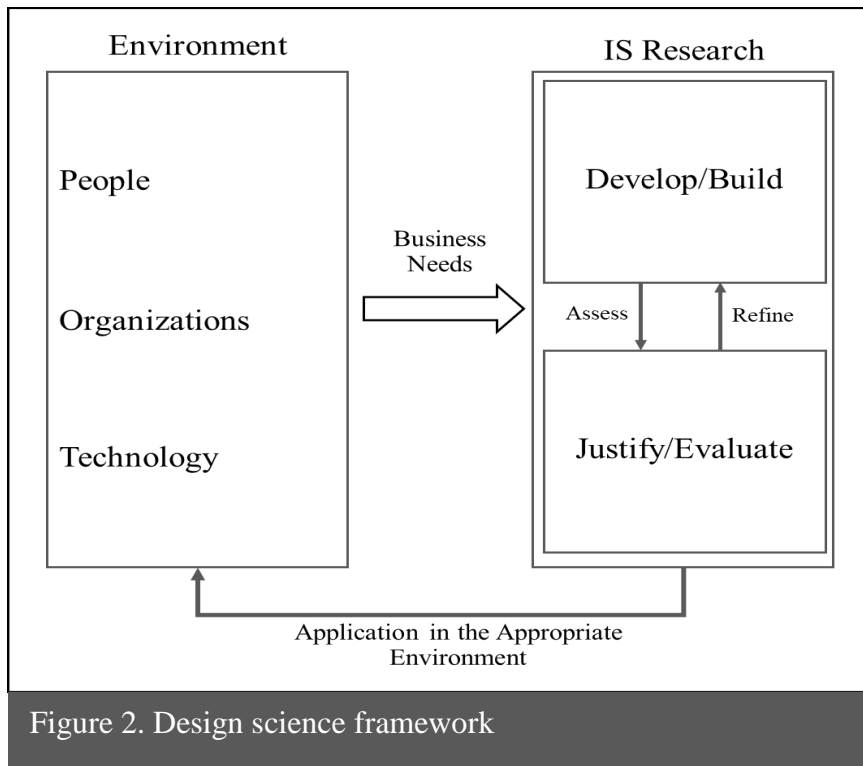
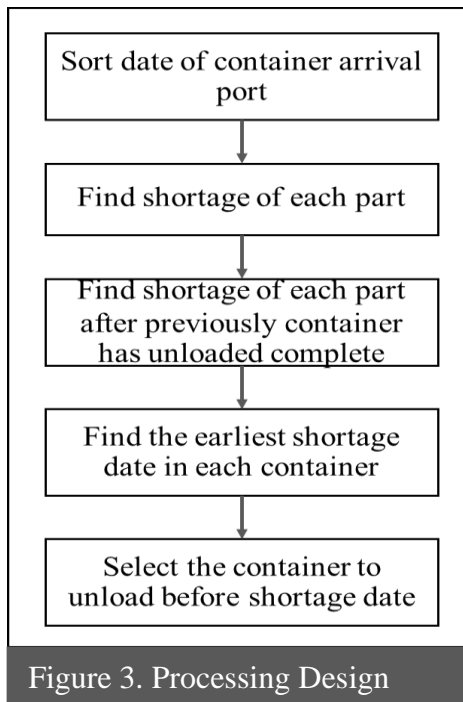


Figure 2. Design science framework

From figure 2. the framework shows how to conduct research from the design science framework to meet the needs of the business. The input factors related to this are people, organizations, and technology. These factors help develop or build the artefact. After it was built, it is evaluated whether it is applicable for the real world system.

3.1. Design as an Artifact

The purpose of this paper is to develop a computer program with Microsoft VBA by using the heuristic method. Regarding the studied company is the company located at the free zone area at Rayong that has to import part more than 95% for production and there are a lot of containers exiting at a port on queue for delivering at warehouse need to prioritize for delivering to the warehouse for unloading because all containers cannot be shipped all at once due to the capacity of unloading and limit of space for storage, if ship all containers without considering the date of requirement for production and the date of arriving port or ship the unnecessary container. It will create a lot of problems in a chain that means it will increase total cost in the supply chain. So, the program should prioritize containers exiting at the port to deliver to a warehouse under the criteria FCFS (First come First Served) + EDD (Early Due Date) both criteria of heuristic will sort necessary containers that need to deliver to the warehouse for unloading to avoiding production line down and create the problem in supply chain and of the process to find the early shortage date as below.



3.2. Formulation Design

In order to find the required date or the due date of each part in each container for delivering, it needs to calculate by taking the remaining quantity of each part in the warehouse to deduct with demand until shortage date after that find the first container of each part and identify the first shortage date and take the remaining of shortage date plus with the quantity of each part in the container for finding the next shortage date.

Set variable as below

S = Stock

D = Daily Demand

L = Daily Delivery Quantity

a = Number of dates

P = Product

c = Number of containers

3.2.1 Daily ending balance

$$S_{pn} = S_{p(n-1)} - D_{pn}$$



3.2.2. Finding the shortage date each part in each container

$$Spn = Sp(n-1) - Dpn$$

If $Spn < 0$ then

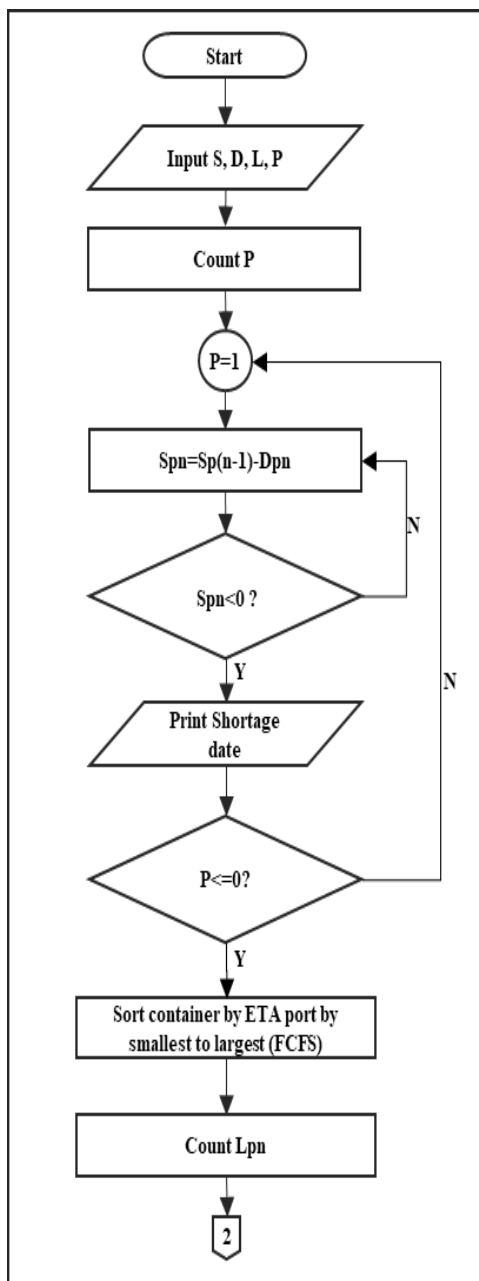
Print shortage date

Else

$$Spn = Sp(n-1) - Dpn$$

End if

3.3. Algorithm Design



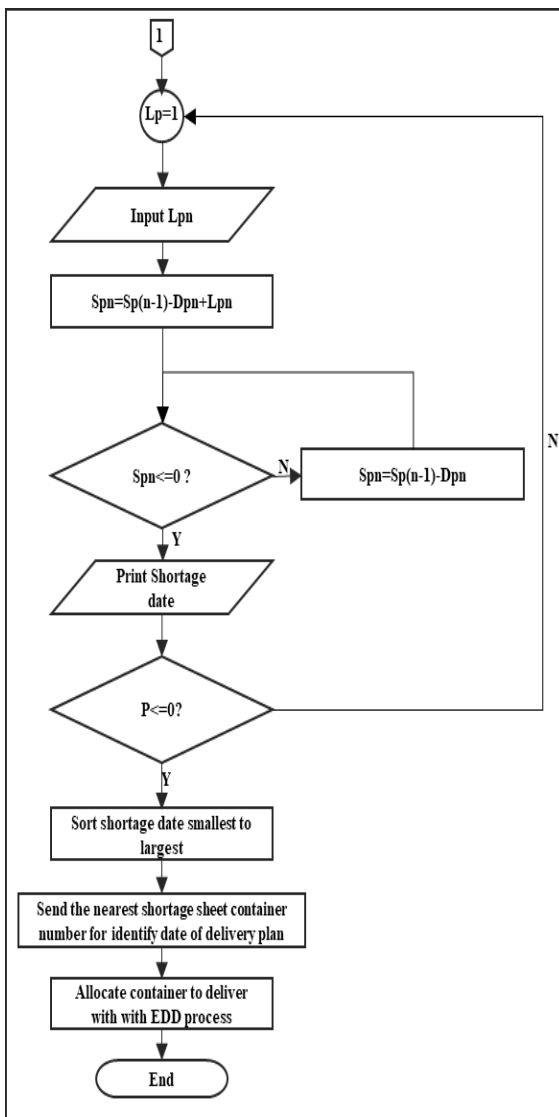


Figure 5. Algorithm page 2

3.4. Excel Sheet Design

This program will use an excel spreadsheet for input raw data and calculation that need to set up 2 format temple sheets for the storage database.

3.4.1. Sheet balance

This sheet will be a calculation sheet to find the shortage date of each part for sending shortage to sheet priority container for identification shortage date on each part and it will show data of daily demand, inventory remaining at the warehouse, and formula for finding shortage date as below formula

$$Spn = Sp(n-1)-Dpn$$



If Spn < 0 then

 Print shortage date

Else

 Spn = Sp(n-1)-Dpn

End if

3.4.2. Sheet priority container

This sheet shows shipping information mainly data using for calculation is container number, the part number inside the container, quantity of part and estimate arrival date. The program will take quantity in each container back to sheet balance for calculation and get the result of the shortage date to identify on the part number in each container; after that, the program will sort early shortage date of each part and summarize the delivery plan.

3.5. VBA Coding

```

Microsoft Visual Basic for Applications - Priority Container.xlsm - [Module2 (Code)]
File Edit View Insert Format Debug Run Tools Add-Ins Window Help
Ln 34, Col 7
Project - VBAProject
VBAProject (Priority Container.xlsm)
  Microsoft Excel
    Sheet3 (Bal)
    Sheet5 (Priv)
    Sheet6 (Prio)
    ThisWorkbook
  Forms
    UserForm1
  Modules
    Module1
    Module2
    Module3
  VBAProject (Priority Container.xlsm)
  VBAProject (Priority Container.xlsm)
  VBAProject (Priority Container.xlsm)
  DownloadSAP
  (General)
  DownloadSAP

Sub DownloadSAP()
    Dim lMsgFilter As Long

    '////Open SAP
    Application.ScreenUpdating = False

    Dim objSheet, i, ColA, veloDelMsg
    Set objExcel = GetObject(, "Excel.Application")
    Set objSheet = objExcel.ActiveWorkbook.ActiveSheet

    veloDelMsg = 2
    quotes = Chr(34)
    sapSHShell = Shell("C:\Program Files (x86)\SAP\FrontEnd\SAPgui\saplgpad.exe", 2)

    Application.Wait (Now + TimeValue("0:00:05"))

    Set SapGui = GetObject("SAPGUI")
    Set App = SapGui.GetScriptingEngine
    Set Connection = App.openconnection("01D - SCM Production", True)
    Set session = Connection.Children(0)
    Application.Wait (Now + TimeValue("0:00:10"))
  
```

Figure 6. Example of VBA code

There are three modules of this program

3.5.1. Module1: Connect SAP for downloading daily demand and current stock.

3.5.2. Module2: finding a shortage date.



3.5.3. Module3: Sort and finding the earliest shortage date of the part in the containers.

Process	Input Data	Testing method
Down load data from SAP	<ul style="list-style-type: none"> - Start date of demand - End date of demand 	Take sample 2 part number for manual download from SAP and compare the result
Calculation shortage date	<ul style="list-style-type: none"> - Daily demand - Ending inventory at warehouse 	Take sample 2 part numbers for checking with MD04 in SAP that the result of shortage is the same or not
Calculation of identify shortage date of each part in each container	<ul style="list-style-type: none"> - Daily Demand - Ending inventory at warehouse - Shipping information 	Take sample 2 part number for finding shortage date every container of both part and compare with the result from program
Container delivery plan	<ul style="list-style-type: none"> - Shipping information - Shortage date of each part 	Take sample 2 part number and check the delivery date before real shortage date or not

Table 1. Program Testing Method

3.6. Program Testing

The purpose of this testing for making sure that every module runs smoothly without error and gets the correct result.

4. DISCUSSION

4.1. Time Reduction

Previously, when logistics department needs to calculate and priority container, there is a need to take 3 minutes per part number and there is average, 1000 parts number that existed at port need to calculate. this means that it will use around 3000 minutes for calculation, so it made them do not need to check the shortage date. They just use only the FCFS method that creates a lot of issues in the supply chain. The program takes around 16 minutes for processing to get the result of the container delivery plan or time, reducing 95.5%.



Before use program	
Job	Time (Minute)
Download date from SAP	10
Calculate shortage date	3,000
Priority container	5
Make delivery plan follow unloading capacity	10
Total (Minute)	3,025

Table 2. Operation time before use program

After use program	
Job	Time (Minute)
Download shipping information	1
Program processing	5
Priority container	0
Make delivery plan follow unloading capacity	10
Total (Minute)	16

Table 3. Operation time After use program

4.2. Production Downtime Reduction

The as-is process shows that there are the part shortages from the reason of part existing at port pending for delivery is 14 case from 22 case. However, after implementing the program, there is no issue of part shortage due to waiting for a delivery container at the port as presented in table 5 production downtime at March2020.



Production Downtime Report December 2019 (Before use Program)		
Root cause	number	Minute
Part shortage	22	1,440
Quality issue	9	846
Tooling Machine and system break down	2	576
Total minute		2,862
Total hour		47.70
Total shift		5.96
Total day		2.98

Table 4. Production Downtime at December 2019

Production Downtime Report March 2020 (After use Program)		
Root cause	number	Minute
Part shortage	5	480
Quality issue	3	720
Tooling Machine and system break down	0	0
Total minute		1200
Total hour		20
Total shift		2.5
Total day		1.25

Table 5. Production Downtime at March 2020

4.3. Cost Reduction

Regarding to the program, it can manage and make a delivery plan for container smoothly and also the program can plan to the delivery container before shortage 1 day, it reduces double handling, the operator can take part from container and send the part to the production line and regarding to the program can prioritize to deliver the necessary container first it makes production smoothly nonstop due to no part shortage that means the inventory at warehouse also consuming and there is free space for unloading on time without delay to return container. This is shown in the comparison in table 6 comparison delivery cost before use program at December 2019 and after use program at March 2020.



	Before	After	
Issue	Amount (THB)	Amount (THB)	Amount Reduction (THB)
Penalty of trailer	616,500	82,500	534,000
Demurrage	1,366,400	158,900	1,207,500
Detention	15,400	0	15,400
Total cost reduction			1,756,900

Table 6. Comparison delivery cost before (Dec2019) and after (Mar2020) use program

5. CONCLUSION AND RECOMMENDATIONS

This program can be used for solving the issue of delivery unnecessary container to the warehouse by using Microsoft Excel VBA for development program automatic calculation and use algorithm to for select containers by the concept of heuristics: First Come-First Served: FCFS and Earliest Due Date: EDD to prioritize delivery necessary container to the warehouse which results in a more efficient. After implement to use the program in full month at March2020 there is no case of production downtime due to waiting delivery part existed at the port or reduce 100% of the case, increase efficiency in unloading capacity from 9.75 containers per day in Decamber2019 to 12.8 containers per day in March2020, or an increase of 31% of unloading capacity, increase the productivity of the process of unloading containers from the previous 11.5 containers per person per month to 26.9 containers per person per month or an increase of 135% of productivity and reduce the cost of delay from 1,998,300 THB in Decamber2019 to 241,400THB in March2020 that reduced 1,756,900 THB or 87.9%. The program can work with all computers that have Microsoft excel programs without having to install additional and program development found that the first algorithm design makes program development easier.

From data collection for analysis of computer program development for unloading containers to the warehouse, we found that the demand for production is a very important factor because it determines the delivery date of the container. If the container does not arrive in time for production, it will cause the production line to stop because of no parts in the warehouse. When production stopped, this results in no space for storage because parts do not consume from the warehouse. This is the reason to consider the demand of production first. The second factor is the date that containers arrive at the port because if we do not consider this factor, it may need to spend the cost of demurrage and detention. But if considering these two factors, it will take a long time and production plan is constantly changing, it is impossible to consider both conditions by manual with our programing support. This paper has brought these two important

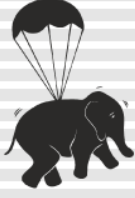


factors into the program for increasing work efficiency by arranging containers to unload with heuristics and just in time method to deliver the necessary container to the warehouse.

The limitation of this study is that the company only needs to import part from another country and there are a lot of containers pending at is waiting for delivery to unload at the warehouse and there is no enough space and capacity at a warehouse for unloading. This program also still has a manual process to input data of shipping information from the logistics team. Therefore, there is a room to further improve this program by linking the program with SAP software to import the data automatically.

References

- Baker, K. R. and Trietsch, D. (2013) *Principles of sequencing and scheduling*, John Wiley & Sons.
- Butdee, S. and Tangchaidee, K. (2010) 'Algorithm of an optimization route for collaborative 2 swarm robots', 2011IEEE International Conference on Industrial Engineering and Engineering Management, 2010. IEEE, 1962-1966.
- Charlotte, W. (2011) 'The importance of warehouse management', Worlifts Blog, 27 August. Available at: <https://www.worlifts.co.uk/blog/the-importance-of-warehouse-management/> (Accessed: 6 May 2020)
- Hevner, A. R., March, S. T., Park, J. and Ram, S. (2004) 'Design science in information systems research', *MIS quarterly*, 75-105.
- Klomperee, J. (2000) 'Improvement of port operation, service efficiency and competitiveness, in order to meet the logistical needs of clients: a case study of Bangkok port container terminals'.
- Lumjuan, N., Wicheer, J., Leelapat, P., Choochote, W. and Somboon, P. (2014) 'Identification and characterisation of Aedes aegypti aldehyde dehydrogenases involved in pyrethroid metabolism', *PloS one*, 9, e102746.
- Phaophuree, W. (2011) 'Heuristic Algorithm for Fuel Vehicle Routing Problem with Multiple Products, Multiple Fleet Sizes and Multiple Compartments'.
- Phatapipong, P., Sachakamol, P. and Treerattrakoon, A. (2018) 'Production Scheduling using Hybrid Heuristics Method: A Case Study of Ready-Mixed Concrete Plant'.



Markaların Yönünü Belirlemeye Yardımcı Bir Pusula: Pazarlama Penceresinden Hipokampusu Bakış

Derya Altıntaş¹

Received/ Başyuru: 18.06.2020

Accepted/ Kabul: 20.07.2020

Published/ Yayın: 22.07.2020

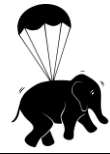
Özet

Son zamanlarda tüketici beyniyle ilgili çalışmalar daha önemli hale geldiği, tüketici kararlarını ve tüketici gözünden onların davranışlarını anlamamıza daha fazla yardımcı olduğu için nöropazarlama ile ilgili çalışmalar artmıştır. Bu tür beyin üzerine yapılan araştırmalarla elde edilen verilerin, kabul edilebilirliği ve ikna ediciliğinin anket çalışması gibi geleneksel araştırma sonuçlarından elde edilen verilere göre daha fazla olduğunu söyleyebiliriz. Başka bir ifadeyle, sadece teoride kalmış tüketici araştırmaları yanında insan beynini görüntüleme çalışmalarına ilginin arttığı görülmektedir. Ayrıca bu tür çalışmalar işletme sahipleri, pazarlama araştırmacıları ve reklam verenler gibi ilgili taraflarca gelecekte atılması planlanan adımlara yön vermek amacıyla kullanılan tahmin yeteneğini ve gücünü de arttırmaktadırlar. Bu noktada pazarlama faaliyetlerinin daha verimli gerçekleştirilebilmesi, iletişim süreçlerinin etkinliğinin artması ve verilen mesajların sonuçlarının daha sağlıklı bir biçimde değerlendirilebilmesi için tüketicilerin beyinlerinin çalışma mekanizmasının son zamanlarda araştırmacılar tarafından daha yakından izlenmeye başladığı da görülmektedir. Bu bağlamda çalışmanın amacı, beyin pusula görevini üstlenmiş ve daha da önemlisi epizodik (geriye dönük) hafıza ile ilgili olan hipokampus adı verilen kısmının, pazarlama mesajlarının hatırlanması açısından önemini kavramsal olarak inceleyebilmek ve pazarlama bilimine rehberlik edecek biçimde çıkarımlarda bulunmaktır. Sonuç olarak bu çalışmada tüketici çevresindeki gruplara, hipokampusu incelemenin ve pazarlama çalışmalarında hipokampusu dikkate almanın tüketici davranışlarını anlamaya yardımcı olacağı konusunda önerilerde bulunmaktadır.

Anahtar Kelimeler: Pazarlama, Hatırlama, Hafıza, fMRI, Hipokampus.

Makale Türü: *Araştırma*

¹ Trabzon Üniversitesi, Vakıfkebir Meslek Yüksekokulu, Trabzon, Türkiye, daltintas@hotmail.com,
Orcid: 0000-0003-1965-236X



A Compass to Help to Determine the Brands' Direction: A View On Hippocampus from The Marketing Perspective

Abstract

Recently, the studies related to neuromarketing have increased as studies on the consumer brain have become more important, helping us better understand consumer decisions and behavior through the eyes of the consumer. The results of data analysis that comes from such studies have been considered as more acceptable and trustworthy than the results of traditional research such as survey study. In other words, it is seen that there has been an increased interest in human brain imaging studies as well as consumer research that remains only in theory. Besides, this type of studies increase the ability and power to predict to guide future steps used by the related parties such as business owners, marketing researchers and advertisers. At this point, it is seen that the working mechanism of the consumers' brain has started to be more closely monitored by researchers lately in order to increase the efficiency of communication processes and evaluate the results of given messages better. In this context, the aim of the study is to conceptually examine the importance of the part of the brain called the hippocampus, which functions as the brain's compass, and more importantly, is associated with episodic (retrospective) memory, in terms of recalling marketing messages, and to make inferences in a way to guide the marketing science. As a result, it is suggested to groups around the consumer that examining the hippocampus and considering the hippocampus in marketing studies will help understand consumer behavior.

Keywords: Marketing, Recalling, Memory, fMRI, Hippocampus.

Article Type: *Research*

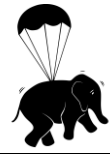


EXTENDED ABSTRACT

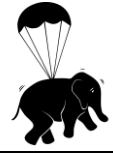
Background: The studies related to neuromarketing have increased recently since they help us understand the consumer decisions and behaviors from the consumer's eyes, and the studies on the consumer brain have been getting more important. The results of data analysis that come from such studies have been considered as more acceptable and trustworthy than those that only consider the results of traditional research such as survey study. Recalling and the memory concepts; the hippocampus, which is especially important for the long-term memory formation together with navigation, is a gray layer of the brain extending below to the lateral vertebral column, which is effective in transforming movements into behaviors. The hippocampus is effective in keeping a wide variety of information coming to short-term memory to be permanent in long-term memory (Yorgancılar, 2014, p.61). Klucharev, Smidts and Fernandez (2008), and Wise et al. (2008) suggested that the hippocampus played a significant role in the memory, and the memory about products also could be connected with the hippocampus (Lees, 2015, p. 24). At this point, it is necessary to try to understand what kind of activity is created in the hippocampus region of the brain with the messages sent to the consumer. The latest neuroimaging and neuropsychological data suggest that the mental processing lying under the perception of a person and an object can be provided by different brain regions. It is possible to directly research the neural activities causing behaviors by analyzing consumer decisions depending on the product and people's features with the help of fMRI imaging techniques (Yoon et.al., 2006, p. 32- 36).

Research Purpose: Psychophysiological criteria, which are used to analyze behavior and the processes lying behind them, can identify involuntary autonomic responses. Therefore, it is thought that the psychophysiological analysis of the brain provides quite a basic, unbiased, and sensitive way of assessment of the people's responses to the effects of stimuli. In the context of marketing activities, we may come across with these stimuli as concepts such as product, packaging, advertising, shelving system, store atmosphere, etc. In advertising researches, the ads used as stimuli vary depending on the media tool (TV commercial, radio advertising, print media advertising, internet advertising, etc.) or the content of the message (informative ads, ads with emotional content, etc.). Recent studies have been trying to identify the brain regions where information about these stimuli is processed. In this context, the aim of the study is to conceptually examine the importance of the part of the brain called the hippocampus, which functions as the brain's compass, and more importantly, is associated with episodic (retrospective) memory, in terms of recalling marketing messages, and to make inferences in a way to guide the marketing science.

Conclusion: Thanks to the neurological system researches, the process of updating the information about the brain and hippocampus continues rapidly. It is crucial to develop marketing activities for consumers in line with this updated information. In this study, general descriptions about the concept of marketing, the hippocampus and memory, the fMRI, which is one of the research techniques related to the human brain attracting attention in the social



sciences, and the limitations in the studies conducted by these techniques are presented. It should be kept in mind that contemporary customers are much more difficult to influence and persuade, and a lot more conscious compared to the past. With this study, it is suggested to groups around the consumer that examining the hippocampus and considering the hippocampus in marketing studies will help to understand consumer behavior. In future studies, other brain parts related to the region called the hippocampus in the brain, where the hippocampus transfers information to or receives information from can be the subject of research. Such an analysis will take a step closer to solving the mystery of the consumer mind and will also guide future researches on the brain.

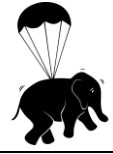


1. GİRİŞ

Geçmişte ürün ve satışın önem arz ettiği pazarlama anlayışından tüketicilerin istek ve ihtiyaçlarının önemli hale geldiği günümüz modern pazarlama anlayışına ulaşana kadar pazarlama kavramının yaşadığı tarihsel gelişim, yapılan ve yapılacak olan araştırmalarda, işletmeler ve tüketiciler arasındaki süreçlerde ve tarafların üstlendikleri rollerde yaşanan değişimlerin takip edilmesini gerekli kılmaktadır. Reklam uzmanı David Ogilvy'e göre, tüketicilere ulaşmada ki yetersizliğin ve eksikliğin önemli bir nedeni, tüketicilerin ne hissettikleri konusunda düşünmüyor, ne düşündüklerini söylemiyor ve söylediklerini de yapmıyor olmalarıdır. Bunun sebebi olarak ise davranışlarımızın, bilinçli farkındalık seviyesinin altında çalışan farklı süreçler tarafından yönlendirilmesi gösterilmektedir. Aslında açık ve doğrudan tüketici yanıtlarına (örneğin odak grupları veya anketler gibi) dayanan geleneksel pazar araştırması araçlarının bu önemli bilinçaltı etkilerini yakalayamaması, geleneksel çalışmaların tüketici davranışlarını tahmin etme konusunda yetersiz kaldıklarına dair kötü şöhretlerinin nedenini bizlere anlatmaktadır (Calvert ve Brammer, 2012, s. 38). Bu bağlamda işletmelerin müşterilerinin nelere ihtiyaçları olduğunu, neleri istediklerini, bu ihtiyaçlarını ne zaman ve nerelerde karşılanmasını talep ettiklerini anlayabilmek için geleneksel yöntemleri kullanmanın bir adım ötesine geçilerek tüketicilerin beyinlerine gönderilen mesajlara verdikleri tepkilerin gözlemlenmesi son yıllarda yapılan pazarlama iletişimi çalışmalarına konu olmaktadır. Mesajların kalıcılığı işletmelerin tercih zamanları geldiğinde ilk sırayı alabilmeleri için önem arz etmektedir. Başka bir ifadeyle pazarlama araştırmalarının insan beyni ile ilgili çalışmalarında kullanılan dikkate değer kavramlardan biri tüketici davranışları analizinde önemli bir yeri olan akılda tutma kavramıdır (Salman ve Perker, 2017, s. 39-40). Akılda tutma kavramı, ürün mesajlarının verildiği örneğin bir reklam filminin hangi kısımlarının hafızamızda yer ettiğinin ölçülmesine yardımcı olmaktadır. Özetle klasik yöntemlerle ölçülmesinin zor ve değerlendirme sonuçlarının tüketici beyanları doğrultusunda zaman zaman güvenilmez olabileceği düşünülen bu kavram, pazarlama araştırmalarında beynin incelenmesi ile ilgili çalışmalara yön vermekte ve ilgililere daha aydınlatıcı ve doğru veriler sağlamaktadır.

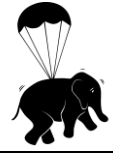
Plassmann vd. (2012, s. 19) zaman içinde marka tercihi oluşumu için gerekli aşamaları dört temel bileşene ayırmışlardır. Bunlar sırasıyla; (1) sunum ve dikkat, (2) öngörülen değer, (3) deneyimlenen değer ve (4) hatırlanan değer ve öğrenme. Benzer şekilde Özer (2008)'in çalışmasında da belirttiği üzere tüketicilerin, bir markadan haberdar olmaları, hakkında çeşitli yollarla bilgi elde ettikleri markaları hatırlamaları temel şartına bağlanmıştır. Böylece hatırlanan bu marka, tüketicilerin alışveriş sürecinde arasında seçim yapmak üzere oluşturdukları gruba dahil olma şansını da yakalayabilecektir.

Mehrabian ve Russel (1974) araştırmalarında kendiliğinden gelişen zihinsel bir durum olarak anlattıkları duygulanım sürecini memnuniyet, uyarılma ve baskınlık boyutlarından oluşan duygusal tepkilerle ilişkilendirmişlerdir. Bilişsel durum, geniş anlamda, tüketici zihninde bilgilerin toplanması, işlenmesi, saklanması ve tutulduğu yerden geri çağırılarak tekrar



kullanılmasıyla ilgili olan tüm süreçleri içine alır. Bu kavram tüketicilerin içsel zihinsel süreçlerini ve durumlarını tanımlar ve dikkatini, bilgisini, hafızasını, tutumlarını, inançlarını ve kavrayış şeklini açıklamaya çalışır (Eroğlu vd., 2001, s. 181). Bu bağlamda pazarlama faaliyetleri ve pazarlama iletişimi sürecinde farklı mesaj kanallarından uyarıcı olarak gönderilen iletiler de içerikleri yardımıyla tüketiciyi bazen duygusal çoğu zaman da bilişsel olarak etkilemeyi amaçlamaktadır.

Davranışların ve arkalarında yatan süreçlerin analizi anlamında kullanılan psikofizyolojik ölçütler istemsiz bir şekilde oluşan otonom tepkileri belirleyebilirler. Dolayısıyla insanların uyarıcıların etkisi karşısında oluşan tepkilerinin oldukça temel, tarafsız ve duyarlı bir şekilde değerlendirilmesini sağladıkları düşünülmektedir. Pazarlama faaliyetleri bağlamında bu uyarıcılar ürün, ambalaj, reklam, raf sistemi, mağaza atmosferi v.b gibi kavramlar olarak karşımıza çıkabilmektedirler. Reklam araştırmalarında da, uyarıcı olarak kullanılan reklamlar, medya aracına (TV reklamı, radyo reklamı, yazılı basın reklamı, internet reklamı gibi) veya mesaj içeriğine (bilgilendirici reklamlar, duygusal içerikli reklamlar gibi) bağlı olarak değişebilmektedir. Son dönemlerde yapılan araştırmalar yardımıyla yukarıda ifade edilenlere benzer uyarıcılara ait bilgilerin işlendiği beyin bölgeleri tespit edilmeye çabalanmaktadır. Bu tür araştırmalara göre örneğin reklam bilgisi, sol lobda uzun dönemli hafıza içinde kodlanmaktadır. Ancak reklam uyarıcısının içeriğine bağlı olarak beynin farklı kısımlarında işleme tabi tutulduğu, resimli öğelerin hafızada daha iyi yer ettiği tespit edilmiştir. Özellikle son 20 yılda sinirbilim çalışmalarında en çok kullanılan yöntem olan fMRI denilen işlevsel manyetik rezonans görüntüleme (Vatansever, 2019) tekniği yardımıyla yürütülen araştırmalar, reklam mesajı stratejisi ve reklam hafızası için önemli öngörüler sağlamıştır (Utkutuğ ve Alkibay, 2013, s. 169). Modern dönemlerde hipokampusun fonksiyonları üzerine ilk bilimsel çalışmalar 1957 yılında Scoville ve Milner'in hipokampusun insan hafızasında önemli rol oynadığını bulması ile başlamaktadır. Hayvanlar üzerinde yapılan deneylere bakıldığında hipokampusun hafıza ve yön bulmadaki rolüyle ilgili çalışmalar dikkat çekmektedir. Yapılan bu deneylerde, hayvanların yaşadıkları çevrede bildikleri yerlerden geçerken hipokampus bölgelerinde aktivite göstergesi olan sinyaller tespit edilmiştir (İzci ve Erbaş, 2015, s.291). Hipokampus bölgesindeki etkinliği, tıp biliminde nörolojik aktivitelerin incelenmesi için kullanılan fMRI makineleri yardımı ile gözlemlenmek son dönemlerde kullanılan en gözde yöntemlerden biridir. Bellek üzerine bu tekniklerle yapılan çalışmalar sonucunda hızla ortaya çıkan literatür, sadece nörobilişsel bellek teorilerine katkı sağlamakla kalmamakta, aynı zamanda hukuk, pazarlama gibi alanlar için de kayda değer etkiler göstermektedir (Uncapher vd., 2015, s.8531). Bu ve benzeri tekniklerin kullanımıyla ilgili en önemli kısıt olarak ise karşımıza maliyetler çıkmaktadır. Ayrıca fMRI gibi nörogörüntüleme teknikleri ile elde edilecek verilerin okunabilmesi ve yapılan araştırma konusu ile ilişkilendirilerek yorumlanabilmesi için uzmanlardan yardım alınması önemli bir kısıt olarak dikkate değerdir. fMRI veya benzeri makinelerle beynin tüketiciler hakkında verdikleri bilgiler değerlendirilirken bazı etik sınırlara dikkat edilmesi gerekliliği ise bir diğer önemli kısıttır. Özetle tüketicilerinin söylemediklerini de duyabilmek amacıyla onların beyinlerini incelemek,

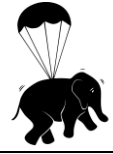


marka anılarının süregelen dinamik doğası ve pazarlama eylemleri gibi dış faktörlerin hatırlamayı nasıl etkileyebileceği konusundaki çalışmaları dikkatle gerçekleştirmek gerekmektedir.

2. HİPOKAMPUS

Hafızası en güçlü olan ve en fazla öğrenme becerisi olan canlılar insanlardır. Hafıza, kısa ve uzun süreli olmak üzere ikiye ayrılır. Kısa süreli bellek olarak da adlandırılabilen kısa süreli hafıza, bilgilerin birkaç saniye ile birkaç dakika kadar bellekte tutulmasıdır. Bir diğer adı çalışma hafızası olan kısa süreli bellek anlık işleri yapmak için kullanılır. Biraz sonra arama yapacağımız yeni bir telefon numarasını veya belki de sadece bir defa göreceğimiz birinin adını kısa bir süre aklımızda tutmak için bu kısa süreli hafızayı kullanırız. Kısa süreli hafızadaki bilgiler, onlara ihtiyacımız kalmadığında kaybolur, yani unutulur. Uzun dönem hafızaysa, bilgilerin birkaç ay veya ömür boyu bellekte tutulmasına denir (Güçlücan, 2012). Hatırlama ve hafıza kavramları; özellikle de uzun süreli bellek oluşumu ve bununla birlikte yön bulma için oldukça önemli olan hipokampus, hareketlerin davranışlara dönüşmesinde etkili olan lateral ventrikülün altına doğru uzanan beynin gri bir tabakasıdır. Hipokampus, kısa süreli belleğe gelen çok çeşitli bilginin uzun süreli bellekte kalıcı olmasında etkilidir (Yorgancılar, 2014, s.61). Hipokampus öğrenme, hafıza ve stres tepkisi için önemli bir beyin yapısıdır (Dryden, 2012). Stres hormonu olarak da bilinen CRH'nin, insan beyin yapısı ile ilgili araştırmalar sonucu öğrenme mekanizması üzerinde etkili olduğu belirlenmiştir. Hipofiz bezinden salgılanan bu hormon, beynin öğrenme ile ilgili bölgeleri olan amigdala ve hipokampusu uyarır. Bu doğrultuda optimum düzeydeki stres hormonunun zihni açtığını, dikkati arttırdığını ve öğrenmeyi hızlandırdığını söylemek mümkündür (Paker, 2014).

Medial temporal lobun parçası olan hipokampus, hafızada tutma fonksiyonunun gelişiminde ve elde edilen bilgilerin depolanmasında önemlidir. Hipokampus, bilinen tüm duyuşsal noktalarla doğrudan veya dolaylı bağlantılara sahip olup, alınan bilgileri ilgili alanlara taşıma yoluyla tüm neokortikal bölgelerle ilişki kurmaktadır. Dolayısıyla bu yapının fonksiyonel önemi, diğer yapılarla kurabildiği bağlantılardan da kaynaklanmaktadır (Ünal vd., 2010, s. 169). Bu bağlantılar sayesinde hipokampus, uyanıklık, dikkat, kısa dönem hafıza, davranış ve endokrin fonksiyonlar üzerinde önemli etkilere sahiptir (Başak, 2013, s. 17). Epizodik hafıza, hayatımız boyunca edindiğimiz yüzlerce tecrübenin kaydedildiği hafızadır. Hipokampus ve beyinde yerleştiği bölgedeki yoğun sinirsel bağlantı sisteminin, yüksek kapasiteli epizodik hafızaya etkisinin büyük olduğu bilinmektedir. Üzerinden çok uzun zaman geçmiş olsa bile bu depolanmış bilgiler geri çağırılabilir. Beynin hipokampus kısmında meydana gelen bozukluklar yeni hafıza oluşumunda zorluklara neden olmaktadır. Bu kısımda meydana gelen bozukluklardan önceden edinilmiş anılar da etkilenebilir. Ancak daha eski anıların bozulmaması, zaman içinde anıların hipokampustan beynin diğer kısımlarına transfer edildiği düşüncesini desteklemektedir. Beyin ve onun her bir biriminin çalışma mekanizmasıyla ilgili yapılan araştırmalarda, yönlerini belirlemeye çalışan insanların hipokampuslarının daha aktif çalıştığı belirlenmiştir. Üstelik örneğin çok yoğun bir biçimde yön bulma yeteneklerini

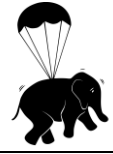


kullanmak durumunda olan şoförlerin hipokampuslarının ilgili kısımlarının daha büyük olduğu, bunun yanında yön ve yol bulma deneyimleriyle ilgili çabaları arttıkça bu büyüklüğün de arttığı tespit edilmiştir (İzci ve Erbaş, 2015, s. 292). Bütün bu bilgiler ışığında uzun süreli hafızadaki mesajların kalıcılığının öneminin anlaşılmasına başlandığı günden bugüne sosyal bilimlerdeki araştırmaların konusu olarak insan beyni ve hipokampus dikkatleri çekmektedir. Hipokampus üzerinde yapılan araştırmalar tüketici davranışlarının rasyonel bir biçimde öngörülebilmesini sağlayacaktır. İşletmelerin tüketici zihninde edindiği yerin en önemli temsilcisi olan markalar, tercih edilme zamanı geldiğinde başka bir ifade ile karar alma süreçlerinde rekabet avantajı sağlamak gibi çok önemli bir amaca hizmet ederler.

İleri düzeyde beyin işlevlerimizin ortaya çıkmasındaki gizem bağımsız nöral sinyallerin bir araya getirilmesi, değerlendirilmesi ve yorumlanabilmesidir. İnsanların **bu ileri düzey düşünme süreçlerinin var olması serebral korteks yardımıyla gerçekleşmektedir.** Hayvanlardan daha yüksek bir zekâyaya sahip olmamız, karar mekanizmamızın gelişmişliği, sesler aracılığıyla konuşabilmemiz ve sanatsal ürünler meydana getirebiliyor olmamız serebral korteksin gizemiyle açıklanmaya çalışılmaktadır (Taybaş, 2016). Bu bağlamda bir bellek yeniden her etkinleştirildiğinde, hipokampus serebral kortekste yeniden aktifleşmeye çalışan birtakım izler kodlar. Kodlanan izler sayesinde uyarılar tekrar öğrenildiğinde, daha iyi hatırlanır ve daha uzun süre korunur. Zhan vd. (2018) araştırmalarında, hipokampusun öğrenme deneyimi ve tutma aralığına bakılmaksızın ilişkisel bellek gelişimine katıldığını ifade etmektedirler. Çoklu öğrenmenin, hipokampusta aktivasyonu ve hipokampus ile diğer bölgeler arasındaki bağlantıyı önemli ölçüde arttırdığı ve başarılı ilişkisel bellek oluşumuna yol açtığı görülmektedir. Bu sayede hipokampusun bellek işleme ve geleceğe yönelik olarak depolamanın birincil odağı olarak hareket ettiği de söylenebilir (Shaw ve Bagozzi, 2018, s. 25). Dolayısıyla insan beynindeki hipokampusu içeren bir sinir sistemi sayesinde uyarılar ve olaylar arasındaki ilişkiler hakkında bilgi edinilebilir. Uyarılar arasındaki ilişkiler hakkında bilgilerin kullanımı sırasında gerçekleştirilmesi gereken görevleri yerine getirebilmek için beynin sağlıklı bir hipokampusun varlığına ihtiyacı vardır (McDonald ve White, 1993, s. 3-4). Ranganath'ın (2010) çalışmasında da önceki çalışmaları destekler şekilde hipokampusun, çeşitli bellek izleri arasındaki ilişkilerin oluşmasında ve tutulmasında anahtar rol oynadığı belirlenmiştir. Bunun yanı sıra, beynin bu kısmının benzer geçmiş deneyimler arasında ayırım yapabilme yeteneği açısından da dikkate değer olduğu tespit edilmiştir.

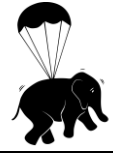
3. PAZARLAMA, HATIRLAMA VE HİPOKAMPUS

Sahibi olan işletme için markanın, tüketicinin satın alma sürecindeki kararlarını etkileyip şekillendirebilen, ürünlerinin rekabet ettiği diğer firmaların ürünlerinden ayırt edilmesine yarayan pazarlama ve pazarlama iletişimi faaliyetlerinin ana konusu olduğu söylenebilir. Başarılı ve güvenilir bir markanın tüketicisi için ise ürünler ile ilgili satın alma davranışı ve iletişim süreçlerinde onu memnuniyete götürdüğünü söylemek mümkündür. Dolayısıyla bir markanın müşterilerinin tüm hayatları boyunca elde ettikleri geçmiş bütün deneyimleri



kullanarak bu markayı tanımaya yöneldiklerini, marka sahiplerinin ise çabalarının pazarlama ve iletişim faaliyetleriyle markalarını hatırlatmak ve tanıtmak olduğu söylenebilir. Dahası pazarlama bakış açısıyla değerlendirildiğinde ürünler, mağazalar, mağazaların konseptleri, çalışanlar ve hatta yaşadığımız pandemi dönemi için düşünecek olursak sanal mağazalar ve uygulamaları, logolar, markalar, ambalajlar, reklamlar ve benzeri birçok iletişim çabasının sonuçlarını en doğru şekilde anlayabilmek için tüketici davranışlarını tahmin etmenin ötesine geçebilmek çok önemlidir.

Bellek ve tercih arasında güçlü bir bağlantı olduğunu bildiren çalışmalardan biri olan McClure vd. (2004) araştırmalarında, marka bilgisinin iki farklı içecek markası için etkilerinin görüntüleme deneylerine yansıdığını ifade etmişlerdir. Bu çalışmada bir içecek markasına ait bir görüntü tüketiciye gösterildiğinde, hipokampus ve orta beyinde tüketicinin ürünün kendisini elde ettiği ana göre önemli ölçüde daha büyük bir beyin aktivitesi gözlemlenmiştir. Ayrıca çalışmada hipokampusun duyuşal bilgilerin işlenmesinde ve bildirimsel anların edinilmesi ve hatırlanmasında önemli rolü olduğu bulunmuştur. Sonuç olarak çalışmanın bulguları hipokampusun tercih kararlarına yön veren kültürel bilgileri hatırlamada etkili olduğunu göstermektedir. Bir başka çalışmada ise Schaefer ve Rotte (2007) deneklerin en sevdikleri markaları incelediğinde, hipokampusun aktivasyonunda bir azalma ve beyin ödüllendirilmeye ilgili bölgelerinde ki aktivasyonda bir artış olduğunu bulmuşlardır. Bu nedenle, bu çalışma hafıza ve tercih oluşumu arasında daha önce pozitif bir ilişki olduğu yönündeki önerilerde bulunan çalışmalara aykırı görünebilir. Bu aykırı durum Schaefer vd. (2006)'da yaptıkları çalışmada ortaya koydukları, insanların iyi bilinen bir otomobil markasını bilinmeyen jenerik bir otomobil markasına kıyasla hayal ederken daha fazla görselleştirme çabası harcanmalarından kaynaklandığı düşüncesiyle açıklanabilir. Bu araştırmalara ek olarak İzci ve Erbaş (2015) hipokampus ile ilgili son görüntüleme teknikleriyle yapılan araştırmalarda hipokampusun hem geçmişin hatırlanmasında hem de geleceğin hayal edilmesinde önemli bir rol oynadığı belirtilmiştir. Her marka etkinlik sırası ve öncesinde kısa bir süre için artan bir temel hatırlama düzeyine sahiptir ve bu oran etkinlikten birkaç hafta sonra ilk düzeyine yakın bir düzeye geri döner. Süre ve değişimin büyüklüğü marka sahibi işletmenin tüm iletişim çabalarına bağlıdır (Yılmaz, 2007, s. 592). Marka hatıraları tüketicilerin zihninde göze çarpan ve ikna edici ipuçlarıdır. Hafıza genellikle bilgiyi saklama ve alma yeteneği olarak tanımlanır; edinilen bu tüm bilgi ise tüketici tercihleri ve davranışları için kontrolör olarak görev yapmaktadır (Herz ve Brunk, 2017, s. 70). Klucharev, Smidts ve Fernandez (2008) ve Wise vd. (2008) hipokampusun bellekte önemli bir rol oynadığını ve ürünlerle ilgili hafızanın da hipokampus ile bağlantılı olabileceğini belirtmektedirler (Lees, 2015, s. 24). Bu noktada tüketiciye gönderilen mesajlarla beyin hipokampus bölgesinde nasıl bir etkinliğe sebep olduğunu anlamaya çalışmak gerekmektedir. Son nörogörüntüleme ve nöropsikolojik veriler, kişi ve nesne algısının altında yatan zihinsel işlemenin farklı beyin bölgeleri tarafından sağlanabileceğini düşündürmektedir. fMRI görüntüleme teknikleri yardımı ile ürün ve insan özelliklerine bağlı tüketici kararlarını inceleyerek, davranışlara yol açan sinirsel aktiviteleri doğrudan araştırmak mümkündür (Yoon vd., 2006, s. 32- 36).



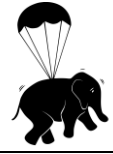
4. SONUÇ VE DEĞERLENDİRME

Bu çalışmada, pazarlama ile hipokampus ve hafıza kavramı ile ilgili genel tanımlamalar, günümüzde sosyal bilimlerde dikkat çeken insan beyni ile ilgili araştırma tekniklerinden biri olan fMRI ve bu kavramlar yardımıyla yapılan çalışmalardaki sınırlılıklar yer almaktadır.

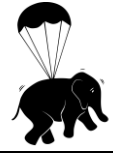
Günümüzde tüketicilerle yapılan anketler ve yüz yüze görüşmeler gibi klasik yöntemlerle bilgi elde etmeye çalışılan araştırmaların sonuçlarının yanı sıra, rekabette avantajlı hale gelebilmek için bilinçaltını açığa çıkarmaya ve etkilemeye yönelik nöropazarlama araştırmaları dikkate değerdir. Nöropazarlama, pazarlama uyaranlarına karşı beyinsel ve sinirsel tepkileri araştıran bilim dalı olarak tanımlanabilir (Öztürk vd., 2018, s. 144). Özellikle planlı satın alma karar sürecinde ise, tüketiciler kendileri için güvenli bir liman olan daha önceden bildikleri ve uzun süreli belleklerinde yer edinmiş markalara yönelmektedirler. Bunun yanı sıra tüketicinin markayı hatırlaması, uzun yıllardır marka gücünün değerlendirilmesinde en sık kullanılan kriterlerden biri olmuştur. Hatırlama, marka gücüyle ilişkilidir; yani, tüketicilerin güçlü markaları zayıflardan daha çok hatırladıkları söylenebilir (Cohen, 1996, s. 142). Çok çeşitli ve karmaşık mesajların gönderilmeye çalışıldığı günümüzde tüketicileri anlayabilme ve onların gerçek düşüncelerini öğrenebilme, insan beyniyle ilgili araştırmaların yapılmasına işletmeleri yönelten temel sebep olarak ifade edilebilir. Şüphesiz ki karar verme merkezi olarak işlev gören beyin ile beynin hangi koşullarda, ne şekilde çalıştığını inceleyen bilim dalı olarak sinir bilim, karar alıcılar ve aldıkları kararların sonucundan doğan ekonomik olayların açıklanmasında göz ardı edilmemelidir (Soydal vd., 2010, s. 218). Son olarak, ülkemiz tüketicilerinin nesilden nesile aktararak zenginleşen kültürel alışkanlıklarını ve davranışlarını, tüm tüketim alışkanlıkları ve davranışlarına yansıttığı düşünüldüğünde hipokampusunda içinde yer aldığı beynin hafıza ve hatırlama ile ilgili tüm kısımlarını dikkate alacak olan bilimsel çalışmaların, akademik ve ekonomik çevrelerin odak noktası olması gerektiği söylenebilir. Yapılan araştırmalar sayesinde beyin ve hipokampus hakkında bilgilerin güncelleşmesi süreci hızla devam etmektedir. Tüketicilere yönelik pazarlama faaliyetlerinin bu güncel bilgiler doğrultusunda geliştirilmesi çok önemlidir. Unutulmamalıdır ki günümüz işletmelerinin müşterileri, etkilemenin ve ikna etmenin çok daha zor olduğu eskiye göre çok daha bilinçli tüketicilerden oluşmaktadır. Gelecekte yapılacak çalışmalarda beyinde hipokampus olarak adlandırılan bölümlerle ilişki halinde olan, hipokampusun kendisine bilgi aktardığı ya da kendisinden bilgi aldığı diğer beyin bölümleri incelemelere konu olabilir. Yapılacak bu tür bir inceleme tüketici zihnindeki gizemi çözmeye işletmeleri bir adım daha yaklaştıracak ve gelecekte yapılacak olan beyin araştırmalarına da yol gösterici olacaktır.

Kaynakça

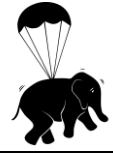
- Calvert, G. A. ve Brammer, M. J. (2012) Predicting consumer behavior: Using novel mind-reading approaches. *IEEE Pulse*, 3(3), pp. 38-41.
- Cohen, L. (1966). The level of consciousness: A dynamic approach to the recall technique. *Journal of Marketing Research*, 3(2), pp. 142-148.



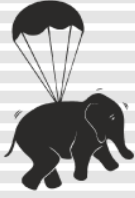
- Çakıcı Başak, N. (2013) *Deneyisel epilepsi modelinde prolaktin hormon düzeyinin hipokampus üzerine etkisi*. Hacettepe Üniversitesi Tıp Fakültesi Nöroşirurji Anabilim Dalı Uzmanlık Tezi, Ankara.
- Dryden, J. (2012). *Love and the hippocampus*. Washington University School of Medicine in St. Louis News, 30 January. Erişim: <https://medicine.wustl.edu/news/love-and-the-hippocampus/> (Erişim Tarihi: 25 Nisan 2020).
- Eroğlu, S. A., Machleit, K. A. ve Davis, L. M. (2001). Atmospheric qualities of online retailing: A conceptual model and implications. *Journal of Business Research*, 54(2), 177-184.
- Güçlücan, Z. (2012). *Hafıza ve öğrenme*. Nöropsikiyatri Portalı, 12 May. Erişim: <https://www.e-psikiyatri.com/hafiza-ve-ogrenme> (Erişim Tarihi: 20 April 2020).
- Herz, M. ve Brunk, K. H. (2017). Conceptual advances in consumers semantic and episodic brand memories: A mixed methods exploration. *Psychology & Marketing*, 34(1), 70-91.
- İzci, Y. ve Erbaş, Y. C. (2015). Hipokampus: Yapısı ve fonksiyonları. *Türk Nöroşir Dergisi*, 25(3), 287-95.
- Klucharev, V., Smidts, A., ve Fernández, G. (2008). Brain mechanisms of persuasion: how 'expert power' modulates memory and attitudes. *Social Cognitive And Affective Neuroscience*, 3(4), pp. 353-366.
- Lees, M. (2015). A review of product integration in digital games and why neuromarketing may be of value in future research. Helsinki Metropolia University of Applied Sciences Bachelor in Business Administration (BBA), International Business and Logistics Thesis, Helsinki.
- McClure, S. M., Li, J., Tomlin, D., Cypert, K. S., Montague, L. M., and Montague, P. R. (2004). Neural correlates of behavioral preference for culturally familiar drinks. *Neuron*, 44(2), 379-387.
- McDonald, R. J., ve White, N. M. (1993). A triple dissociation of memory systems: Hippocampus, amygdala, and dorsal striatum. *Behavioral Neuroscience*, 107(1), 3-22.
- Mehrabian, A. ve Russell, J. A. (1974) *An approach to environmental psychology*. The MIT Press.
- Özer, Â. C. (2008). *Gıda Sektöründe Marka İmajının Tüketici, Satın Alma Davranışı Üzerine Etkisi ve Bir Uygulama*. Muğla Üniversitesi Sosyal Bilimler Enstitüsü İşletme Anabilim Dalı, Yayınlanmamış Yüksek Lisans Tezi, Muğla.
- Öztürk, S. A., Yücel, N. ve Bayır, T. (2018). Beynimiz ve dilimiz aynı mı konuşuyor? Anket ve EEG yöntemlerinin karşılaştırılması: Marka kişiliği ölçümü açısından bir araştırma. *Pazarlama Teorisi ve Uygulamaları Dergisi*, 4 (1), 139-176.



- Paker, A. (2014). *Beynimizdeki bazı kimyasallara kısa bir bakış*. Evrim Ağacı, 25 September. Erişim: <https://evrimagaci.org/photo/tr/beynimizdeki-bazi-kimyasallara-kisa-bir-bakis> (Erişim Tarihi: 10 Mayıs 2020).
- Plassmann, H. & Ramsøy, T. Z., ve Milosavljevic, M. (2012). Branding the brain: A critical review and Outlook. *Journal of Consumer Psychology*, 22(1), 18-36.
- Ranganath, C. (2010). A unified framework for the functional organization of the medial temporal lobes and the phenomenology of episodic memory. *Hippocampus*, 20(11), 1263-1290.
- Salman, G. G. ve Perker, A. G. B. (2017). Dünya’da ve Türkiye’de nöropazarlama çalışmalarının incelenmesi ve değerlendirilmesi. *Avrasya Sosyal ve Ekonomi Araştırmaları Dergisi*, 4(3), 35-57.
- Schaefer, M., ve Rotte, M. (2007). Favorite brands as cultural objects modulate reward circuit. *Neuroreport*, 18(2), 141-145.
- Schaefer, M., Berens, H., Heinze, H. J. ve Rotte, M. (2006). Neural correlates of culturally familiar brands of car manufacturers. *Neuroimage*, 31(2), 861-865.
- Shaw, S. D. ve Bagozzi, R. P. (2018). The neuropsychology of consumer behavior and marketing. *Consumer Psychology Review*, 1(1), 22-40.
- Soydal, H., Mızrak, Z. ve Yorgancılar, F. N. (2010). Nöro Ekonomi kavramının iktisat bilimi içindeki yeri, önemi ve bilimselliği. *Sosyal Ekonomik Araştırmalar Dergisi*, 10(19), 214-240.
- Taybaş, Ç. (2016). *Serebral Korteks: Beynin en gelişmiş yapısı*. Sinirbilim, 23 Mart. Erişim: <https://sinirbilim.org/serebral-korteks/> (Erişim Tarihi: 19 May 2019).
- Uncapher, M. R., Boyd-Meredith, J. T., Chow, T. E., Rissman, J. ve Wagner, A. D. (2015). Goal-directed modulation of neural memory patterns: implications for fMRI-based memory detection. *Journal of Neuroscience*, 35(22), 8531-8545.
- Utkuğ, Ç. ve Alkibay, S. (2013). Nöropazarlama: Reklam Etkinliğinin Psikofizyolojik Tekniklerle Değerlendirilmesi Üzerine Yapılmış Araştırmalarının Gözden Geçirilmesi. *Hacettepe Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, 31(2), 167-195.
- Ünal, D., Aksak, S., Kara, A. ve Ünal, B. (2010). Östrojen ve Hipokampus İlişkisi. *Türkiye Klinikleri Journal of Neurology*, 5(3), 167-171.
- Vatansever, G. (2019). Fonksiyonel MR nedir? Nöroblog, 22 December. Erişim: <http://noroblog.net/2019/12/22/fonksiyonel-mr-nedir/> (Erişim Tarihi: 12 Mayıs 2020).



- Wise, K., Bolls, P. D., Kim, H., Venkataraman, A. ve Meyer, R. (2008). Enjoyment of advergames and brand attitudes: The impact of thematic relevance. *Journal of Interactive Advertising*, 9(1), pp. 27-36.
- Yılmaz, R. A. (2007). Marka farkındalığı oluşturmada sponsorluk ve rolü: Eskişehir Sinema Günleri'ne yönelik bir değerlendirme. *Anadolu Üniversitesi Sosyal Bilimler Dergisi*, 1, 587-607.
- Yoon, C., Gutchess, A. H., Feinberg, F. ve Polk, T. A. (2006). A functional magnetic resonance imaging study of neural dissociations between brand and person judgments. *Journal of Consumer Research*, 33(1), 31-40.
- Yorgancılar, F. N. (2014). *Tüketici Davranışı Nörolojisi: Nöroekonomi- EEG Yöntemi İle Nöromarketing Uygulaması*. Selçuk Üniversitesi Sosyal Bilimler Enstitüsü, İktisat Anabilim Dalı, Doktora Tezi, Konya.
- Zhan, L., Guo, D., Chen, G. ve Yang, J. (2018). Effects of repetition learning on associative recognition over time: Role of the hippocampus and prefrontal cortex. *Frontiers in Human Neuroscience*, 12, 1-14.



*Commodity Fetishism in Computer Games: In-Game Item Consumptions of Counter Strike: Global Offensive Players**

Aykut Tamir¹

Received/ Başyuru: 21.06.2020

Accepted/ Kabul: 20.07.2020

Published/ Yayın: 22.07.2020

Abstract

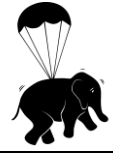
This research aims at exploring what is the motive behind computer game player's specific in-game item consumptions because game companies sell some in-game items which are not functionally helping the player. In older games like World of Warcraft, Knight Online, players would buy the in-game items to make their game characters stronger. Namely, those items had function in terms of better game playing. However, players of the Counter-Strike: Global Offensive buy some in-game items that are not useful for any purpose in the game. Thus, I wanted to conduct a research on the relation between commodity fetishism and consumption motives of gamers towards these items. In-game items became a significant case because digital markets in some games brought new in-game consumption cultures along. Some of these consumption cultures are examples to commodity fetishism approach. There are few studies exploring in-game items with no function in literature. This study explores these items in detail and uses a method that was not used for this purpose before. That is why this study is important and original. The qualitative descriptive analysis method was conducted to find out players commenting about in-game items on Steam&Reddit forums. As a result, I detected that game companies make more profit through these digital markets and gamers' consumption motives correlate with commodity fetishism. In the comments the players stated that in-game items provide them psychological boost, self-confidence and feeling better, and they even have associated items with the placebo effect.

Keywords: Commodity Fetishism, Game Studies, Culture Industry, Digital Media

Article Type: *Research*

* This article is based on the master's thesis of author which was published in 2019 and named "Computer games within the context of commodity fetishism: Counter-strike: Global offensive example".

¹ Erzurum Teknik Üniversitesi, Erzurum, Turkey, aykut.tamir@erzurum.edu.tr, Orcid: 0000-0001-7659-1167



Bilgisayar Oyunlarında Meta Fetişizmi-Counter Strike: Global Offensive Oyuncularının Oyun İçi Eşya Tüketimleri

Özet

Bu araştırma, bilgisayar oyuncularına ait oyun içi eşya tüketim güdülerinin ardında yatan nedenleri ortaya çıkarmayı hedeflemektedir. Bu amacı benimsemişim, oyun şirketlerinin oyuncuya işlevsel olarak herhangi bir katkısı olmayan bazı oyun içi eşyaları satmasıdır. World of Warcraft, Knight Online gibi oyunlarda, oyuncular oyun karakterlerini daha güçlü hale getirmek için sanal eşyaları satın almaktaydı. Yani, bu eşyalar oyunu daha iyi oynama açısından bir işleve sahipti. Ancak, Counter-Strike: Global Offensive oyuncuları, oyunda herhangi bir amaca hizmet etmeyen bazı oyun içi eşyaları satın almaktadırlar. Bu yüzden, meta fetişizmi ile oyun içi eşyalara yönelik tüketim güdüsü arasındaki ilişki üzerine bir araştırma yapmak istedim. Bazı oyunlardaki dijital pazarlar yeni oyun içi tüketim kültürlerini beraberinde getirdiğinden, oyun içi eşyalar önemli bir durum haline gelmiştir. Bu tüketim kültürlerinden bazıları meta fetişizmi yaklaşımına örnek teşkil etmektedir. Literatürde işlevi olmayan oyun içi öğeleri araştıran az sayıda çalışma vardır. Araştırma, bu öğeleri ayrıntılı olarak incelemekte ve daha önce bu amaç için ele alınmamış bir yöntem kullanmaktadır. Bu açıdan çalışmanın önemli ve özgün olduğu düşünülmektedir. Steam & Reddit forumlarında oyun içi öğeler hakkında yorum yapan oyuncuları bulmak için pasif analiz yöntemi, oyuncu yorumlarının hangi temalar altında toplandığını belirlemek için nitel betimsel analiz yöntemi kullanıldı. Sonuç olarak, oyun şirketlerinin bu dijital pazarlarda daha fazla kar elde ettiği ve oyuncuların tüketim güdülerinin meta fetişizmi ile ilişkili olduğu tespit edildi. Yorumlarda, oyuncular oyun içi eşyaların kendilerine psikolojik destek, özgüven ve daha iyi hissiyat sağladığını, hatta eşyaların plasebo etkisi oluşturduğunu ifade etmişlerdir.

Anahtar Kelimeler: Meta Fetişizmi, Oyun Çalışmaları, Kültür Endüstrisi, Dijital Medya

Makale Türü: *Araştırma*



1. INTRODUCTION

Media owners use media to influence the society for their own purposes (Qin, Strömberg and Wu, 2017) This situation is discussed not only through management and sovereignty, but also through many fields such as management, marketing and communication studies. Firat and Vankatesh (1995) argue that the effect of the media increased and the products that were not needed were imposed on the consumers through the media, especially in the late capitalism period. The difference between true needs and false needs disappeared, especially in the consumer society emerged after the birth of postmodernism (p. 249-250). The media can present some products and services as a prestigious tool and even though consumers do not need any products or services, they may have a tendency to buy them (Bergman, 2009: 17). Örmeci (2008) indicates that in such an environment, companies use the media and offer products that consumers are convinced they should buy even if they do not need them, and thus plays an important role in the increasing trend of consumption frenzy (p. 39). Today, computer games have become another media tool used for creating consumption cultures. Computer games were developed and spread all over the world as they have been advanced over years. Big game companies established and produced their world renowned games. However, that new generation games required big budgets was an important problem. The bigger budget means the less profit for companies. Even, this issue caused bankrupt of some companies. To survive, the game companies seeked a solution and they have come up with selling downloadable contents or in-game items for better profit. This study aims to explore in-game items are whether true needs or not. Thus, the motive behind consumption of these items is a matter of curiosity.

One of the content that attracts the attention of individuals who spend their time sitting at the computer usually, is computer games. In parallel with the latest developments in the field of computer software technologies, the consumption level of computer games has increased rapidly (Hadzinsky, 2014). With 3D technology, game companies produced much more realistic and costly games, and these games engage attention of many people across the world (Overmars, 2012). For example, a survey of America in 2019 showed the distribution of people playing computer games by age: 21% are 18 years old and under, 40% are between 18-35 years old, and 18% are 36 years old or older. Last %21 includes the players over the age of 50 years (Statista, 2020). The computer game that I consider in this study belongs to a large company called Valve, which has a voice in the game market. Founded in 1996, the company reaches millions of players worldwide today (Valve, 2020).

Companies started to make money not only by selling the game but also by selling virtual in-game items. This is an important development in the game industry. Now, the in-game items are valued as if they are real goods, they are sold to the players by the company that produces the game, and they are traded between the players for exchange or money (Yamamoto and Arthur, 2015). For example, Steam which is a game library (applications and websites where games can be bought and stored) has its own tab called "Steam Community Market" where



virtual games items for many games are traded (e.g. [Steam Community Market, 2020](#)). Under this tab, if a player wants to buy a virtual item, he/she will need to enter his/her credit card information and make purchases from the virtual market in the game. There are some strong effects that motivate consumers for some of these purchases ([Greene and Joseph, 2015: 9](#)). In the games, which have become a habit almost at the level of addiction (e.g. Teng, Li and Liu, 2014, p. 94), the players are motivated to purchase the expensive in-game items in the virtual markets offered to them, and thus the behavior that emerges can drag the individual to the consumption frenzy. Luxury spending is valid not only for the real market but also for games belonging digital universe. In this study, the expenses made for a computer game and the reasons why the players make this expenditure will be discussed within the framework of commodity fetishism of Adorno by considering the "Counter-Strike: Global Offensive" (CS:GO) pc game as an example. The aim of this study is to explore Adorno's theoretical approaches to the concept of commodity fetishism, to reveal whether the players of CS:GO tend to be affected by commodity fetishism. Adorno (2001) describes the commodity fetishism as false "happiness" created by the products of popular culture; These products are not needed actually; the consumers are forced to think that they are necessary by media owners.

In the study, I used passive analysis method to pick the comments of players of CS:GO. Passive analysis method allow researcher to collect data over internet, tv and web technologies ([Dholakia ve Zhang, 2004](#)). Then, the personal comments were analyzed on Reddit and Steam platforms by using the descriptive analysis technique. Descriptive codes were assigned to the "user comments" analyzed with descriptive analysis. After that, I determined in which themes the users tend to affected by commodity fetishism. While the findings indicate that users have commodity fetishism motives behind their consumptions, conclusion is that they feel privileged and special in "Psychological Boost", "Self Confidence" and "Feeling Better" themes. In this context, I can state that digital game platforms position the players as consumers, the in-game simulative universe is used as a profit making market by game developer, and in this simulative universe, the "existing setup" creates a need of feeling privileged in the players. The results of this study show us that the players were influenced by commodity fetishism in their in-game consumption. Commodities, which are a reflection of popular culture, hit stores in digital market of the game. In this regard, the phenomenon of "commodity fetishism", which constitutes the conceptual basis of the study, should be mentioned and in-game items should be explained with this phenomenon.

The study consists of five main sections. In the first section, there is the explanation of commodity fetishism approach by Adorno. Second section describes the CS:GO game and the market inside it. Third section includes the correlation between in-game items and the commodity fetishism. In the fourth section, I indicated the research method used for analysis, then stated the findings. In fifth section, I discussed the findings with regards to past studies in literature. Finally, I gave my suggestions and concluded the study.



2. COMMODITY FETISHISM THROUGH THE LENS OF ADORNO

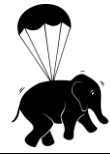
Although fetish is a psychological concept that was primarily examined by anthropologists, it has also taken its place in the approaches put forward by economists (Uçar, 2012). Adorno, one of the representatives of the Frankfurt School, explained the commodity fetishism together with the culture industry concept that he formed. Adorno mentioned that the individual who purchased commodities offered to him/her sees himself as a king in society (Adorno and Rabinbach, 1975). Based on the definition of Adorno (2001), the concept has been used for observing consumer behavior. I discussed the subject in this study with the approach of Adorno since it contains the fetishist relationship between the individual and the products.

For the detailed background of the culture industry concept, I can say the following;

The foundations of this concept were laid in the article of Adorno's *On the Fetish Character in Music and the Regression of Listening* in 1938. However, the work called *Dialectics of Enlightenment*, written by Horkheimer and Adorno, is considered to be the first time that the concept of culture industry was handled historically and philosophically. In this work, Horkheimer and Adorno see the culture industry of the capitalist society as an important factor in the self-betrayal of enlightenment and the social life of people is captured by an instrumental logic (Horkheimer and Adorno, 2002).

“The economic organization of modern capitalist society provides for this final realization of instrumental reason and self-destruction of Enlightenment. Under capitalism all production is for the market; goods are produced not in order to meet human needs and desires, but for the sake of profit, for the sake of acquiring further capital. While production for exchange rather than use is a feature of most economic forms, what uniquely characterizes capitalist economies is the tendential universality of production for exchange rather than use. This too is a procedure for making and treating unlike things as identical, for displacing the intrinsic properties of things for the sake of ends (capital accumulation) extrinsic to them. The domination of use value by exchange value thus realizes and duplicates the tendencies of enlightened reason: as enlightened rationality occludes ends-oriented rationality, so capitalist production occludes production for use; and as enlightened rationality subsumes particulars under universals indifferent and insensitive to sensuous particularity, so capitalist production subsumes the use value of things under exchange value. Enlightened rationality and capital production preclude reflection; Enlightenment’s irresistible progress in the domination of nature and the securing of the means for the possible realization of happiness come, in fact, to entail an irresistible regression.” (Adorno 2001: 6).

Horkheimer and Adorno (2002) used the concept of the culture industry to indicate the cultural forms entering into the process of commodification after the growth of monopoly capitalism. The culture industry plays a central role in linking its target audience to the status quo and turned the culture itself into the ideological media of sovereignty. However, culture has not served such a purpose from the very beginning, the meaning and function of art have changed in the historical context. In their work, they compare the libertarian potential of what they call 'autonomous' or 'genuine' with products produced by the culture industry for the opposite purpose. By addressing the social conditions that shape these two forms of art, they try to

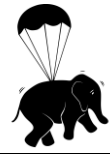


explain the effect of commodification on art itself, and hence the impact on society and our consciousness as a whole (Klinger, 2012). According to Horkheimer and Adorno (2002), the culture industry is the main event of late capitalism. From Hollywood movies to boring music playing in big shopping malls, all products are produced as light entertainment products. All these forms of popular culture are designed to satisfy the needs of the capitalist consumer group that needs the entertainment industry. While explaining the reason of using the concept of "culture industry" instead of "mass culture", Adorno mentioned that culture is not a culture that is naturally developed by the masses, but an artificial culture offered to them. The concept of 'culture industry' means the culture produced and presented to the audience (Adorno 2001). The products of the culture industry do not attempt to challenge our existing normative assumptions. Instead, it strengthens the status quo by showing the status quo in the society in a completely natural and unquestionable way. This is a kind of false reality and prevents the questioning of the existing social and economic order (Craib, 1992, p. 213). This false reality has reached to a point that "where it controls institutions, behaviour and class formation in such a way that it prevents the formation of any independent and critical consciousness" (Rose, 1978, p.48).

The representatives of the Frankfurt School (e.g. Horkheimer and Adorno, 2012), which adopted the Marxist critical structure, not only added a new interpretation to the political critique of the economy, but also addressed the concepts of alienation and commodity fetishism. Commodity fetishism is also an issue addressed with the culture industry (Kara, 2014, p. 52). Culture functions as an alienated world of commodities created to integrate, dominate and break the influence of subjectiveness mentally. While Adorno theorizes this, he examines the fetish theories of Freud and Marks and tries to formulate that the fetish character of commodities makes individuals to buy what is expensive rather than what they need (O'Kane, 2013, p. 131). This change of preference is a change that provides individuals in society to integrate, not differentiate and oppose existing social order.

Witkin (2004) points out that Adorno criticized all the art products produced by the culture industry very seriously. The media he criticized found his criticism excessive or claimed that his opinions do not have a firm basis or foundation. As mentioned before, he preferred the concept of "culture industry" instead of concepts such as "popular art", "popular culture", "mass culture" because in other concepts, the meaning of 'naturally coming from the human' lies. Adorno argues that the culture industry products do not come from people; these products do not correspond to an expression or appearance in the life processes of individuals or societies. Instead, these are products of interest that are produced and distributed to meet the needs of manufacturers and the market, they have been created to dominate mass consciousness and to manipulate this consciousness when necessary (p. 2).

Exchange value and use value of goods are the reasons why consumers buy them (Keen, 1993). Örmeci (2008) explains that the true needs which should be creativity and effective use of mind are prevented by the concepts of 'commodity fetishism, popular culture and standardization' coming with the culture industry: In the capitalist system, this is achieved by bringing the



exchange value of the objects to the forefront more compared to their use value. “Use value refers to the specific qualities of the product perceived by customers in relation to their needs...Exchange value refers to price. It is the monetary amount realized at a single point in time when the exchange of the good takes place” (Bowman and Ambrosini, 2000). In the free market economy, the value of people and commodities is determined by the principles of cost, constraint and popularity. While the water, which is the basic material required to sustain our lives, is sold at very cheap prices due to its excessive availability, the diamond used for showing is a rare material, so it can find buyers at rather fancy prices (Örmeci, 2008, p. 39). The reason why the difference between diamond and water is so high is due to the exchange value in the capitalist market. What is important in the eyes of the person is the price rather than the qualities of what she wants to have. “Nothing is more useful than water; but it will scarce purchase anything; scarce anything may be had in exchange for it. A diamond, on the contrary, has scarce any value in use; but a very great quantity of other goods may frequently be had in exchange for it.” (Smith, 1976). While a movie that has millions of dollars, although not of a quality, is watched in the cinema by a lot of people, films that are artistically beautiful are preferred by a small elite group. Popular culture is not shaped by criterias such as, creativity and artisticness, but by prices and balances in the market. The high-priced and popular products that we are forced to consume, although we do not need, are increasingly being brought into our eyes through the media. Consumers, who think that they can choose what they will consume in such an environment, are “like laboratory mice, whose personal rights have been taken away and acting in accordance with mandatory frameworks”. This understanding, dictated to the person who is happy by having the expensive things, causes the individual to see the commodity fetishism as a relief method (Örmeci, 2008, p. 40).

Deceiving consumers through the products it offers is the main concern of the culture industry. The delight promised by the images with glitzy plots is delayed like a promissory note having its maturity constantly extended: This show is treacherously a promise that will never be fulfilled. The people who want to escape from the stress and monotony of everyday life will suddenly forget about the escape plans when they see this promissory note. The praise of the colorless everyday life that they want to escape is put in front of the people in the desires evoked by all those bright names and images (Adorno, 2001, p. 72). The false “happiness” products produced by the culture industry keep people's perception constantly and prevent them from thinking differently. This happiness is related to the feeling of commodity fetishism that the individual feels in his inner world while consuming the products. In line with this idea, in-game items that have the urge to buy in computer games should also be handled. After all, virtual in-game items presented in the CS: GO game universe are items that do not promise any function, have no use value, and are consumed only because of their popularity and rareness.

Before moving to in-game items, introducing the game and steam community market is necessary. Explanation of the game details and the market allowing the game developer and players to trade in-game items are in the following section.



3. CS:GO AND STEAM COMMUNITY MARKET¹

Counter-Strike: Global Offensive or mostly known with its short name, the *CS:GO*, is a first-person shooter game released in 2012 by Valve and the continuation of *Counter Strike* series. First game of the series was released as a mode for the *Half-life* game in 1999 but later continued as a series on its own. The game, which generally includes team-based armed struggle, also includes game modes where players fight individually for specific duties ([Counter Strike Blog, 2020](#)).

Based on June 2020 data, number of all-time peak players (monthly) belonging to CS:GO players is over 1 million ([Steamcharts, 2020](#)). The game has made a name for itself with the records it broke in 2020. Firstly, by reaching the number of 916,000 peak players, the game broke its own peak player count record in February 2020, and this number increased to 1.1 million in March breaking February's record. However, the highest record for CS: GO came with 1.3 million in April, and long-standing 1.29 million peak player record of Dota 2 (another popular Valve game), was broken. Thus, CS: GO took the second place after the PUBG game, which is in the first place with a record of 3.2 million peak players ([Pcgames, 2020](#)).

In the competitive mode of the game, it includes the battle of two teams of five and there are national, international tournaments and leagues of this mode. These events are organized by companies related to computer games such as ESL (Electronic Sports League), Dreamhack. In the tournament held in the city of Los Angeles in March 2020, winning team has been awarded with the prize of \$1,000,000 ([Liquipedia, 2020](#)). These matches can be watched from within the game by clicking GOTV panel or can be watched live on some websites ([Hltv, 2020](#)).

Online shopping feature has been added to the game unlike the old ones. In the previous games of the series (such as *Counter Strike Source*, *Counter Strike 1.6*) there was no such opportunity. CS:GO has a button that says "marketplace" at the top right in the inventory section, when clicked, it connects players to steam community market tab -it can also be reached through steam platform directly without opening the game- so that they can sell or buy the items they choose. (e.g. [Steam Community Market, 2020](#)). It should be noted that this game is opened with a separate program called Steam that requires internet connection. Steam is a digital distribution platform developed by Valve Corporation and offers services such as digital rights management, multiplayer gaming, video streaming and social networking. Many games, add-on packages and programs related to games are sold on Steam and can be downloaded directly to the computer (e.g. [Steam About, 2020](#)).

Steam community market tab is not only specific to CS: GO game, it also includes the market sections of other games which has online shopping feature. There is a list of games on the right side of community market tab and players can connect the specific game markets that they want to shop from (e.g. [Steam Community Market, 2020](#)). The weapons and armors in CS:GO are

¹ This section is based on mostly steam website datas and researcher's observations.



made on the basis of real life, except for some of the gloves and knives. In fact, anti-terrorist teams are special forces or police units belonging to real-life states. When players buy the game, all items (except extras like stickers, or gift boxes) can be found as defaults in player's inventory in their original form. However, if players enter the market, they will be confronted with colored versions of these items. They are called *skins*. That is to say, the colored versions of the items are sold with money and this is where our study's problem begins.

Apart from that, there are stickers that can be adhered on these items, cases that contains *skins* but you do not know which of them to come out, the keys which are required to open these cases, "souvenir packages" that are presented with the name of past tournaments and contains different types of items related to the tournament, music kits which allows you to listen unique songs in game etc. are other items sold in this market. In addition, things like "operation pass" which allows players to play custom missions on the new maps or "name tags" to use for naming weapons are the items which appear on the main menu page of the game itself. If you want to buy any of these items mentioned, it is possible by adding money in your Steam wallet or by having them purchased directly from your credit card.

Some of these items serve a function visibly. For example, music kits let you listen extra songs that are not placed into original game that is why they have a price. However, *skins* do not serve a visible purpose. They do not add any bonuses to player in any manner. Only feature of the *skins* is their appearances being different from the default items that player already has in his/her inventory at the beginning. Therefore, I discussed that, in this digital market, there is a commodity fetishism case like in real-life market and I associated it with Adorno's approaches. This is because what drives the player to buy the *skins* is not the function of the item, but its rareness, its charm and its expensiveness. Having the rare item and becoming happy with it, the player ensures that the *skins* added to the market by game manufacturers serve their purpose. The market system of capitalism that Adorno mentioned and the products of happiness that capitalist system presents to people are the same system and products in the game.

In this context, it is necessary to understand the relationship between skins and commodity fetishism in detail. For this reason, I demonstrated the specific features and prices of skins and correlated them with the approach of Adorno in the next section.

4. THE CONCEPTUALISATION OF SKINS AND FETISHISM IN GAME STUDIES

Skins are exactly the same as the shape and function of the weapons that players already have as default; it only has a pattern on it. Only knives and gloves on the market have a different shape comparing to the existing knife and glove that the game originally gave you, but again these knives and gloves are no different from the default knife and glove functionally. What I mean by function is the damage these items inflict on enemy team because the goal in this game is to win the rounds by eliminating your enemies. *Skins* come out of the cases, they are not directly put on the market by Valve. These cases are released in the summer and winter periods, and tens of different cases have been introduced starting with "Arms Deal" update back in



August 13, 2013. There were no *skins* at the beginning of the game. Each cases contain one of the 15 or 18 items mentioned in its description. One of 15 or 18 different items, comes out of each of cases, surprisingly. It is essential to state that the cases can sometimes be given to the players randomly, when all rounds are over during the game modes as a gift. Normally, they are sold on market by Valve directly. Thus, those who play the game can get cases as a gift and then they can sell the cases on market or open them via keys to obtain skins. The interesting part is that *skins* are belong to certain quality categories.

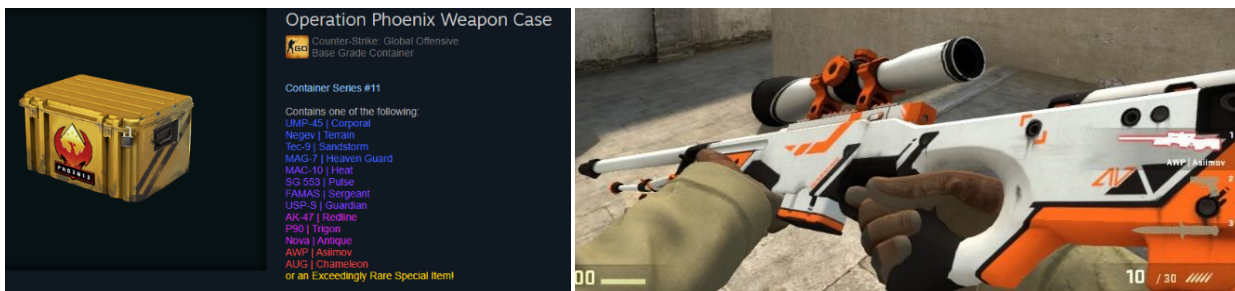
I can explain quality categories without mentioning their names as follows: 5 of the 15 different items within cases have blue colored name, 4 of them have purple colored name, 3 of them have pink colored name, 2 of them have red colored name and 1 of them have yellow colored name (in cases containing 18 different items, there are 6 blue name, 5 purple name, 4 pink name). This coloring is seen in the details of the cases and in the description of the guns located at the bottom right of the screen, while the gun is in the hands of the character in gameplay. This distinction has been the factor that determines the price of items in the market of this game. The rarity of items varies by color. While blue is the most common item, the yellow is the least common item in the game market. Even, yellow items' name written as "or an Exceedingly Rare Special Item!" in yellow color in case descriptions (see, [picture 3.2](#)) Rarity order is from least to most; yellow, red, pink, purple, blue. This means that when you open a case, the blue is more likely to come out rather than others. That's why most of the weapons on the market are blue. Almost one third of the weapons in the case, which consists of five different colors, have blue names. By the way, default weapons in the inventory has white colored names.

In addition to this distinction, there are two other features that affect market prices. These are how worn the weapon is (exterior feature) and the counter embedded on weapons that shows the total number of enemies eliminated by the player. This counter is called Stattrak and if there is this word at the beginning of a weapon name, it means that weapon has it. The worn level of the *skins* are categorised as follows: "Factory New", "Minimal Wear", "Field-Tested", "Well-Worn", "Battle-Scarred". These expressions are located in parentheses next to the weapon names shown on market. In other words, if the item coming out of a case is yellow, factory new and has a counter, I can say that it is a candidate to be the rarest item in the game.

We see that one of the most used weapons in the game is the sniper rifle named AWP ([Weplay, 2020](#)). The default version, which is dark green when you first buy the game, is available in our inventory. However, when we open the market tab and type to search bar, for example "StatTrak™ AWP | Asiimov", it is possible to see that there are orange-white colored AWP weapons are on the purchase list with prices above \$100. This weapon belongs to the red category mentioned above and is a rare item in the game (see, [picture 3.4](#)).



Picture 3.1. AWP weapon with its white icon on right side of screen, given to the player at the beginning



Picture 3.2 Operation Phoenix Case that includes AWP Asiimov & In-game display of AWP Asiimov (small AWP icon on the right indicates that it belongs to the red category skins)

As the picture 3.4 shows, the number in the quantity part of *field-tested Asiimov* is 33, that is, only 33 players out of hundreds of thousands sell this item. There is also a sales chart for this weapon, and since it has been released, it marks every moment it was sold as a point of its life time, indicating how many dollars it was on which day and at what time. For example, while it was sold for \$413 on March 14, 2014, the price decreased to \$265 by May 25, 2020 (see, [picture 3.3](#)). This means that every day, players are putting the AWP Asiimov which they obtained from the cases and put it on the market. Thus, the price of an item decreases in direct proportion to its rareness. This price decrease happens in the same way as the real-life market system. Exchange value of the items are determined by their rareness.



Picture 3.3 Sales chart of AWP Asiimov in the market (Showing the prices of March 14 2014 and May 25 2020)



Showing results for: Counter-Strike: Global Offensive "StatTrak™ AWP | Asiimov" Clear all

NAME	QUANTITY	PRICE
 StatTrak™ AWP Asiimov (Field-Tested) Counter-Strike: Global Offensive	33	Starting at: \$174.05 USD
 StatTrak™ AWP Asiimov (Well-Worn) Counter-Strike: Global Offensive	19	Starting at: \$117.81 USD
 StatTrak™ AWP Asiimov (Battle-Scarred) Counter-Strike: Global Offensive	45	Starting at: \$100.88 USD

Search for Items
StatTrak™ AWP | Asiimov
Show advanced options...

Picture 3.4 When you search for StatTrak™ AWP | Asiimov in the CS:GO's market (the price list and the quantity number of the weapon available on market).

As I mentioned before, the default items given to the player at the beginning serve the exact purpose as same as *skins* that can be purchased from the market. So, they have the same use value. The weapons with *skin* or without *skin* inflict the same damage upon the enemies. Gloves with *skin* do not give any extra bonuses to player. However, having these side features that have nothing to do except showing off - having a *skin*, having a counter - and rareness in the market arouses the desire of players to obtain it. In fact, the *skin* do not matter too much, it is the feeling of having rare items in the game that evokes the desire. The feeling of the woman who has the diamond in daily life is similar to the feelings of the players who have the rare items in the game.

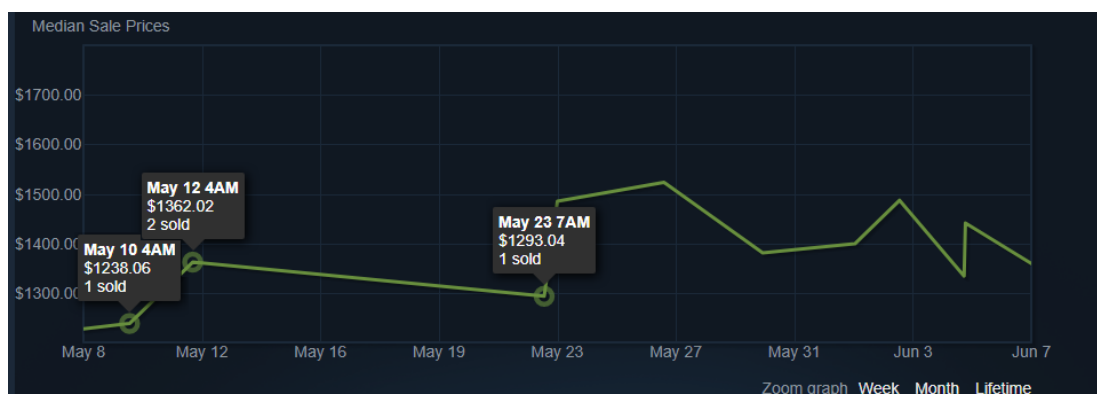
In terms of use value, diamond has no vital importance. But what is imposed on women who want to get married through the media and advertisements is that they must have a big and expensive diamond. The more expensive a diamond is, the more it will be envied by others. Adorno (2001), who put forward the concept of the culture industry, talks about how media owners impose buying popular and expensive goods upon people through media. A person who is unhappy in his monotonous life is believed to be happy only when he has popular and expensive things. The same situation goes for CS: GO. While **media** is the computer game, players are **consumers** who are directed to the consumption frenzy and Valve is the **media owner** who creates the consumption culture in the game¹. The success achieved in 2012 in the *Team Fortress* game (another Valve series) with the in-game items that did not have use value but have *skins* were sold with the prices in steam market, later adapted to the CS: GO. Therefore, the firm aimed for making profit with not only selling the game, but also with the in-game items. Valve sells items through steam market itself and also collects the mandatory fee from every transaction made between players (Varoufakis, 2012). One of the reason for this issue is that computer games have fought against pirated purchases for years, especially expensive games have been bought only by a certain percentage of players. The most impressive method

¹ see, Witkin's thoughts page 4.



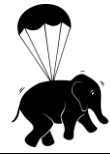
of companies that want to prevent this was in-game items and additional packages for games (Lizardi, 2012). Valve company designed the in-game market similar to the market in late capitalism period. It introduced market-oriented products and enabled them to be consumed as soon as possible.

In addition to these, the game has another feature that I have not mentioned so far, and it distinguishes the game from the old series. If player presses the "F" key on keyboard while playing the game, the game character performs the action of looking at the weapon and then examines it by showing from different angles (see, [picture 3.2](#)). The purpose of putting this action into the game is clear. It is to constantly inspect the items and create admiration in the player. Most of the players perform this action usually while moving on the map alone, except in moments of conflict, and constantly examine the item they have. Also in competitive mode, which is the most preferred game mode, when players die, they automatically enter the spectating mode in which they watch the alive team mates from their first person view. They stay dead until the round ends. This is an opportunity to show the weapon in hand to the viewer. In fact, players with a very rare and highly priced weapon are asked by other players about the price of that weapon or the rate of wear (factory new, field-tested etc.) in gameplay times. At the end of these questions, there is sometimes a demand for exchange or purchase. Even though the price of these rare items in the game increases above \$1000, they always find a buyer (see, [picture 3.5](#)). The researcher played the game for 1800 hours and also closely followed the international tournaments. The expositions mentioned are ultimately supported by participant observations of researcher (e.g. [Steam User Profile, 2020](#)). In qualitative researches, the researcher is the person who spends time in the field, knows the field closely, shares what is happening in the field and establishes a close relationship with the participants. In this case, the researcher's observations and comments can become important factors determining the results of the research (Yıldırım and Şimşek, 2016).



Picture 3.5 Minimum 3 prices of “AK-47 | Wild Lotus” so far (\$1238, \$1293,\$1362)

The popularity of *skins* has reached such high levels that players without purchasing power can be happy even if they at least temporarily acquire a popular *skin*. The player with *skins* has the



opportunity to give it to other teammates during the match or the *skin* of a dead player can be picked up and used. However, these uses are valid only for that match, weapons obtained in these ways are not added to the player's inventory. Still, there are players who want to reach such a temporary use. An example of this situation is the excitement of a Russian player in a video uploaded to youtube, when he notices his teammate has AWP Dragon Lore *skin* (a rifle with a price over \$1000 in steam market) in the warm-up round. In the video, it is seen that he shouts through his microphone saying, “Dragon Lore! Please give it to me! Dragon Lore!” and he follows his friend for this reason. The player who owns the item also enjoys this interest a lot (Youtube, 2020).

5. RESEARCH METHOD

5.1. Research Design

The research is designed as a *holistic single-case study*, one of the qualitative research methods. Qualitative Case Study approach explores a “bounded system” or case over time. QCS method uses detailed, comprehensive information gathering including various sources of knowledge. In other words, it is the disclosure of a case with the data obtained from the themes of a current situation. Scholars formed the QCS as a notionally related to tradition; it is difficult to distinguish the case from the context in which it occurs (Boblin, Ireland, Kirkpatrick and Robertson, 2013). The type of case study should be determined by the size of the case or the purpose of the research (Creswell, 2013). QCS has been the choice of scholars in many disciplines to contribute to the knowledge of individuals, groups, processes and relationships (Yin, 2009). Case studies aim to deeply analyze a situation or case that the researcher cannot control according to how and why questions (Yazan, 2015, p. 13; Yıldırım and Şimşek, 2016, p. 289).

In the case studies, the boundaries between the contexts related to phenomenon and phenomenon itself cannot be clearly separated. Therefore, the case to be studied is handled within the framework of the real life it belongs to (Yin, 2009). The main purpose of case studies is to demonstrate the results of an existing case without changing anything (Hancock and Algozzine, 2006). In holistic single-case study designs, there is only one case (an individual, an institution, etc.) to be analyzed. (Yıldırım and Şimşek, 2016, p. 300-301). In this study, I used passive analysis method to get the comments written by CS: GO players on internet forums (steam and reddit) will be examined.

5.2. Study Group

In order to investigate the subject thoroughly in case studies, the researcher should identify a small geographical area or a very limited number of people as samples (Margaret, 1995; Zainal, 2007, p. 1-2). Therefore, the study group of this research consists of individuals who leave comments on Reddit and Steam forums. Participants were selected considering the characteristics of individuals who are parties to the research problem within the *maximum*



variation sampling method. According to Margaret (1995) in the *maximum variation sampling*, which is one of the purposeful sampling types, the aim is to reflect the variety of the individuals to the maximum extent by creating a small sample group among the people who can be a party to the problem.

5.3. Analysis of Data

The data were collected from related forums using passive analysis method. In passive analysis method, data are collected over internet, tv and web technologies (Dholakia ve Zhang, 2004). The collected data were analyzed by descriptive analysis method. In the descriptive analysis method, collected data are summarized and interpreted according to the previously determined themes. Thematic analysis and qualitative content analysis are the categories of qualitative descriptive design. These techniques are the tools for elucidating theme and analysing textual data (Forman & Damschroder, 2008). The data can be determined in accordance with the researcher's initiative and the purpose of the study according to the themes corresponding to the research problem or questions (Yıldırım and Şimşek, 2016, s. 239).

6. FINDINGS

The comments were gathered under 2 categories by reviewing the comments in the relevant forums. These categories were named as positive and negative comments. As there are three themes under the positive category, the negative comments category consists of only one theme. Theme names were chosen in a way to cover all comments in line with the purpose of the research. Accordingly, under the category of positive comments; There are Psychological Boost, Self Confidence and Feeling Better themes.

6.1. Psychological Boost

There are player comments on a topic with the title "Skins make you play better" in the Steam forum (e.g. Steam Discussions, 2020). The person who opened the title stated that the *skins* affect the players psychologically and make them concentrate better. The player's comments and questions are as follows,

"Skins make you play better. Of course they do not effect your gameplay, but maybe its something psychological. When you have a nice skin you have a better feeling while playing and can maybe concentrate more (or something like this) and more concentration makes you play better. Or do they distract more? What do you think?" (llink007)

In the answers following the question, some players wrote comments in support of the psychological effect. One of them stated that he focusses on doing their best in order not to lose the *skins*, while another stated the *skins* give the player a feeling of pride and courage or there is player saying he turns into a monster while playing with the *skin* they love, that is, he plays



much better. There are even players who compare the psychological impact of these items to placebo. The comments are as below,

“when i play with someone elses asiimov i do my best because i want to keep the weapon :D” (SHAKY SHOOTER)

“Having a custom skin does give you a sense of pride and encouragement when playing although I can't make any claim that they may actually improve your overall performance. In fact, they may actually hurt your performance. There has been several occasions when I recalled noticing the barrels of people hiding in spots only because they were using some bright camouflage that did not match their surroundings. Defaults and camo's that match the type of maps they are used on are the only REAL possibility of gaining any sort of edge.” (\\'1do\\'M4keR)

“Confirming the psychological thing the OP said. Ever since I got my StatTrak AK Blue Laminate i've been a beast with it. Or maybe I learned to control it much better.. I don't know.” (mutzila20 Mercedes F1 AMG)

“Placebo effect man so sad.....” (WolfWallace)

“Bright colors have a phsycological effect on players and yes can make you play or perform better.” (henji)

A similar topic found on the Reddit forum, and there are comments showing similarities with those on the Steam platform (e.g. [Reddit, 2020](#)). The title is “Do skins really have an impact on performance in CS: GO?” and the page contains dozens of player reviews. The player who opened the title shared his feelings about the *skins* and mentioned that thanks to the *skins*, he became twice as much focused while playing the game. The comment of the player who questions whether he is alone or not to think that is as follows,

So playing Counter Strike for about 2 years now, I have never owned a knife, or any decent skins for that matter. However, I have had a knife and a couple nice skins that I was borrowing from a friend. Playing with these has made me realize that I feel 2X as focused when I have anything but default. I don't know how to explain it, I guess I feel like skins actually do improve you gameplay, even if they aren't supposed to. Is this normal? I don't desire expensive knives for flashy skins like some do, I just feel like if you want to become better/more focused, buying skins might not be a bad idea. Am I in the minority for thinking like this? (Kefjeuh)

Among the players who answered the question, there were those who indicated that this is a psychological factor. The placebo effect was also expressed on this forum. Below are the comments of the participants who accept the *skins* are affective in terms of psychological / mental aspects,



“This is a highly psychological issue, power of suggestion, sometimes power of your own fucked up mind, if you convince yourself, even without realizing it, that a nice skin makes you more comfortable whilst playing, you will play better, no denying that, but it is only ever mental.” (FuryanEU)

“Mentally, it might have. I'm so used to my skins that when i'm playing with the default ones for some reason i feel i'm a bit off. But i think it's just in my head, nothing actual tbh.”(kazakhh)

“It's a placebo. So technically you are playing better with skins because it's in your head that they are makong a difference, but in reality they don't do anything.” (JMS230)

6.2. Self-Confidence

In the answers reviewed on the Steam community forum, it was noticed by players that the *skins* increase the self-confidence and that is why they are preferred. As in all areas, self-confidence is an important factor in games. The increased self-confidence of the players affects their performance in the games. Therefore, I can say that some of the players who prefer *skins* use this way to increase their self-confidence. These types of players have expressed their views as indicated below,

“If you like the way your weapon looks, it may offer some minor boost in confidence which will result in better performance. Maybe.” (Sugoi)

“if i have good item it gives me confidence which makes me play betta” (Dougy)

“Skins can have a psychological effect in the sense of you enjoy them, this increases your enjoyment of the game and allows you to do better because you're in that zone and enjoying yourself. It will not directly affect your skill but it's kind of like getting something to really help you get on your game in some way. Like if you go bowling and actually get your own balls or shoes you'll feel better and typically do better because you enjoy it more and gives a boost of confidence and ♥♥♥♥ like that.” (Luftwaffle)

“i dont think it makes you play better but maybe more confident about playing but then i guess the hype of your new skin just wears of after a while”(わがままバカ)

There are similar answers to the question on Reddit forum. Players noted that they find the increase in self-confidence with the use of *skin* in direct proportion. The comments of the players who think that they are performing much better with the increased self-confidence provided by *skins* are given below,

“Skins can give you confidence and make you feel bad ass when i got my howl i became a much better player”(Jakeskics)



“I can't even shit you on this. I noticed every time I played. If there was an aquamarine revenge on the ground I'd pick it up and go off with it. Got a field tested one and I feel like I play better.”(acequake91)

“Illusion. Only thing skins might do is somehow giving you a confidence boost which plays a HUGE role in performing well.” (Sphexator)

6.3. Feeling Better

The players who commented on Steam question stated that playing with *skins* makes them feel better and comfortable. The statements of the players who thinks that they feel the effects such as increased motivation and better aiming with the *skins* are as below,

“I moisturise my skin a lot. It makes me more comfortable when playing.”
(KaMing)

“When you hold something you like.. you'll aim better.. xD haha... looking forward for new skin / Gun” (Roronoa Ray)

“You might tend to use it more and get better with it, imo.” (Bulleta©™®)

“i tend to do better with camos(skin)”(Sippin' sake with my posse)

“its wierd but true when i use someones howl i do great but when i use mine or a default i do bad.” (notwaffle)

“Skins substantiate your position to play, can have a positive effect on motivation and social processes but can be looked upon as total useless at the same time. But i has a giant influence on the whole progress.” (Rampensau)

Some of the participants who answered the question on Reddit also expressed the case of feeling better that comes with the *skins*. Their comments are as follows,

“People will play placebo and write you off like your post is worthless, but I've noticed the same thing. It just feels better to have a nice looking skin rather than a crappy or default one. It doesn't give a huge improvement, but it does change my game a bit...” (AmChayChay)

“Purely placebo- maybe stattrak skins give you more incentive to get frags?”
(TopHatsAreRad)

“When u pick up that dlore you feel like a monster” (ankadia)

“maybe when you use a skin that you like you feel more motivated and therefore play better ? but i think its a placebo :)” (HalpImNoob)



“It kinda does for me. I awp / have better movement with certain knives, guess it just makes it more fun to play.” (xPekerim)

6.4. Adverse Comments

Although there are players who praise the *skins* in terms of psychological boost, self-confidence and feeling better themes, there were also participants who did not feel these effects on them and even commented that the *skins* decreased the performance of their gameplay because *skins* might distract them. Comments of these players as noted below,

“Skins makes you play worse. You'll spend more time looking at your e-peen than the angle you're supposed to hold.” (fluffy)

“skin != skill

All they make you do is waste time inspecting them.

CT 1 : "He's behind that wall, be careful!"

CT 2 : "LOOK AT MY COLORFUL GUN! LOOK AT IT!" (Keba)

“never used skins. still rekt most ppl..” (did he dead?)

“I have an asiimov and still suck /thread”(BananaMan)

“Oh please you silvers...Please quit CS if you can't perform better without pixels.”
(Cat)

“I can see where you are coming from but if the player is good they will play good no matter what skin is on the gun” (deez-Rand)

“Some make worse. The ones with 4 stickeers I always drop them for default guns. I can't look at it.” (МММ, тортик v2.0)

Similarly, in adverse comments on Reddit, it was emphasized that the *skins* cause players to play worse, and between the *skins* and the weapons given at the beginning to player are no different from each other. Moreover, a comment indicates that the players tend to play with *skins* because of the professional CS: GO players prefer playing with them. Thus, this is a free advertising campaign for the Valve company. Comments on these issues are as follows,

“Im opposite of that. When i had normal awp skin I would do good but when I got my man o war I tried doing stuff noone could do and i started playing more stupid.”(FadezGaming)

“A Dragon Lore is still just an AWP man.”(xynnnn0r)



“Maybe because pros play with nice skins, so if you play with nice skins you play like a pro. Free ads for valve” (deleted user)

7. CONCLUSION AND DISCUSSION

This study explores the underlying motives for the in-game item consumptions of CS: GO players. Within the context of in-game items, only items called "skin" have been handled, other in-game items have been excluded from the research. By adhering to the purposeful sampling method, the comments that were appropriate for the purpose of the research were collected from the related forums using passive analysis method, and lastly the comments were analyzed by the descriptive analysis method. Findings have shown that psychological boost, self-confidence and feeling better themes are effective for in-game item consumption.

The *skins* I handle in terms of “use and exchange” value within the scope of the study were examined with Adorno's approach of commodity fetishism. There is no benefit that these products add to the player in terms of use value. The *skins* and the default weapons given to players at the beginning free are functionally same because they have the exact same property values (damage, recoil control, armor penetration etc.). However, in the game market created by Valve, a capitalist market system similar to real life has emerged by determining the prices of *skins* according to their quality (color classes), wear (exterior classes) ratios and having counters. All of these features serve to item's rareness in the market. The items that reach high prices and become popular in terms of exchange value have turned into items that players dream of owning. Past research also emphasizes that the steam community market has turned into a capitalist marketplace (e.g. [Greene and Joseph, 2015](#)) and additional packages of the game as well as in-game items are consumed with the motive of commodity fetishism ([Lizardi, 2012](#)).

Greene and Joseph (2015) explained the steam market with Marxist crisis theories and Harvey's spatial fix theory. They interpreted the desire of the capital to spread to different geographies due to economical crisis via digital markets, namely the Steam market. With digital server-based markets, they associated the annihilation of time by space and the ability to reach anywhere in the world simultaneously with the spatial fix theory. In addition, by explaining the tax collected from the trades between players with Marx's theory of ground rent, they compared Valve to the capitalist farmer and the players to the workers who worked under them and paid taxes.

Lizardi (2012) similarly examined the DLC (downloadable content) of the games in terms of the commodification process. After purchasing the game, consumers are constantly offered DLC packages and the game continues to be sold in pieces. The game companies determine this as their new strategy and thus the players enter into the perpetual cycle of commodification. In this respect, my study findings support the research of Lizardi (2012).

Yamamoto and Arthur (2015) have examined the steam community market section of CS: GO in their studies and explained how players try to make money through these *skins* through Real



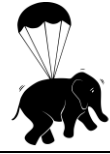
Money Trade method or betting websites. They also emphasized that there was a significant change in the in-game economy with the StatTrak counters. The researchers, who associate the economy of game with the real life economy, stated that there is a serious difference between them and that is the Valve company can change the in-game economy any way it wants. Accordingly, it is thought that my current research findings will contribute to the literature in terms of revealing the emotional factors related to in-game purchasing behavior. All in all, past studies have generally designed their studies by making comparisons over the real market and the steam market or they explored player's way of making profits through betting websites or trade in steam market. However, they did not include the emotional in-game item consumption motives of the players.

It is necessary to open a parenthesis about player's way of making profits through betting websites or trade using in-game items. The player can bet the *skins* in his hand and earn more of them in return. This is the reason why some players buy *skins*. Websites like CSGO Empire, CSGOFast, CsgoBounty, CSGO-Case are just a few of these dozens of these betting sites. There is also the opportunity to make a profit by purchasing the items in the market and then selling them more expensively. So these consumption types are out of this study's scope. It is obvious that not all purchases of items will be with a fetishistic consumption motive.

The players, who purchased *skins* in order to satisfy their motives of commodity fetishism, built a culture of consumption within the game. Therefore, in order to understand the consumption culture within the game, the conceptual basis of the study, Adorno's culture industry concept should be mentioned. Adorno (2001) considered commodity fetishism as the imposition of products produced by the culture industry to people, and that people think they will be happy by consuming these products. Advertising of expensive products and directing towards the expensive is the basic point in the culture industry theory. Of course, this expensiveness means that there rare and popular goods in the market. This has been seen in the *skin* comments of the players I have discussed above. The players who questioned why they spend money on these *skins* have put forward ideas such as psychological boost, self-confidence and feeling better, and have associated it with the placebo effect.

The design-oriented items without any use value (function) that Valve company first introduced with Team Fortress game (e.g. Greene and Joseph, 2015, p. 236) and then adapted to the CS: GO game, served their creation purpose (making profit). The fact that some *skins* are rare compared to other items and therefore become popular did not prevent them from being purchased regardless of their prices. As I reviewed in the Steam market, some *skins* found buyers at very high prices (see, picture 3.5).

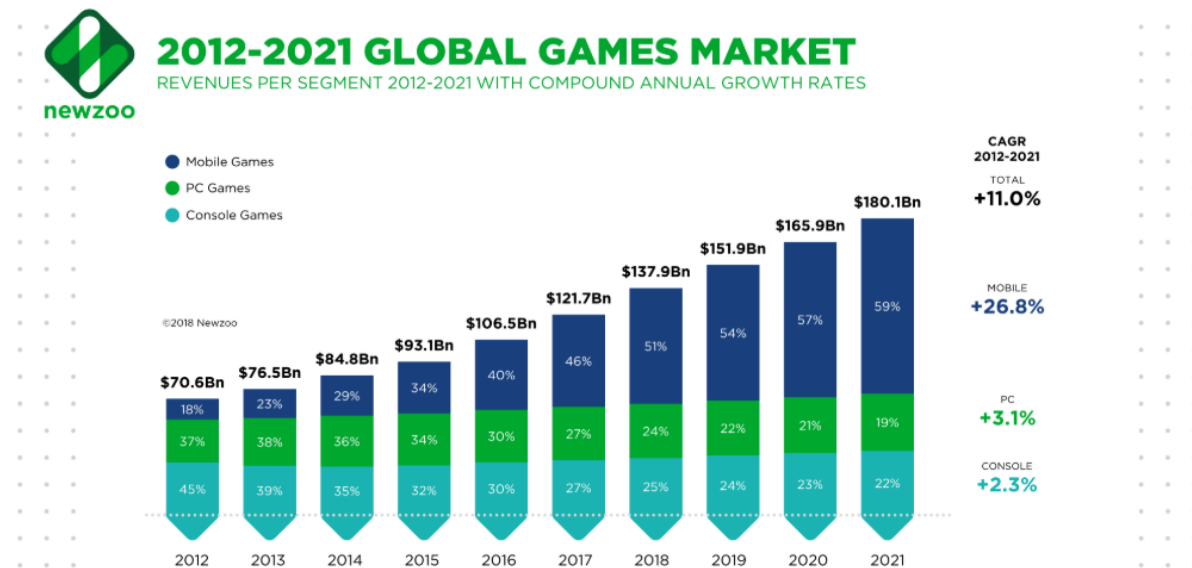
This is an example of Adorno's (2001) mentions considering popularity and rarity affect people. The happiness of the woman who has an expensive gold bracelet in real life is the same as the happiness of the player who has an expensive *skin* in the game. While there is no use value for the universe where both items are located, the high exchange values are the strongest reason for their preference for their purchase. As Adorno (2001) stated, the criterion that now affects



people to consume is not the use value of objects but their rarity and popularity which serve exchange value.

I think research findings will contribute to the literature and to practitioners. Under the title of "Game Studies", there are a lot of works in the international studies, while there are few ones in some (e.g. Turkey) local studies. Thus, I can say that researches about game studies are also important for local practitioners and researchers. The game sector, which can now have serious effects on the national income of countries, should be the subject of more works in local ones. In fact, popular computer games have even turned into a sports branch under the title of "eSports" and have their own leagues and tournaments (see, pro.eslgaming.com). Even the world cup tournament of the CS: GO game was organized, and in 2017, CS:GO Turkish national team defeated Argentina in the final and brought the cup to Turkey. For this reason, the development of the games until today and their integration to our lives are undeniably important. Famous professional game players are now considered like football players. Their fan pages are built, their signature T-shirts and hats are sold and they even appear on television. For example, the Steam profile of team *Big* and Turkish national team player named Can "Xantares" Dörtkardeş has comments of 4,655 pages. In most of comments, fans insist that Can write comments on their profiles (e.g. [Steam Xantares Profile, 2020](#)).

Mount & Blade computer game series, which is a local game of Turkey and developed by Tale Worlds company residing in METU Technopolis, is important in terms of its contribution to the country. The company, which is famous for its old games, has reached 248.000 peak players in April 2020 with the the latest game they released (e.g. [Steamcharts Bannerlord, 2020](#)). This number is a very serious success for domestic games. This game has tournaments in Europe and Turkey with prize and therefore can be analyzed for game studies. In addition, social media accounts of TaleWorlds are followed by thousands of players; It has 65,600 followers on Twitter and 17,598 on Facebook (see, Mount & Blade Twitter and Facebook official account pages). It is argued that the Valve makes huge profits by means of trades in Steam community market. It is a method that should be tried by local game producers by applying this way. Developing a market for the game can provide serious profits for game developers as Valve achieved.



Picture 3.6 2012-2021 Global Games Market

Finally, the chart above shows the value of the global game market (Newzoo, 2020). Developed countries are now investing heavily into game sector. Discussing this sector using Game Studies literature in various specific contexts provides a source for understanding consumer behavior of players and offering local entrepreneurs the opportunity to get to know the sector closely. Since the local academic field is quite insufficient in this regard, I think that it will be valuable to study the game studies on a wide axis. Conducting intensive academic research in the fields named as game culture, game studies or ludology in the world literature emphasizes the importance of this situation. This study can provide valuable data for future researches because it contains the motives of players behind their in-game consumptions. Even in international literature, there are few researches focusing on player thoughts about in-game items. I analyzed their comments on Reddit & Steam forums but future studies can analyze their thoughts using depth interview technique. Therefore, player's in-game consumption motives can be demonstrated in details.

References

- Adorno, T. W. (2001) *The Culture Industry: Selected essays on mass culture*. J. M. Bernstein (Ed.). New York: Routledge.
- Adorno, T. W., Rabinbach, A. G. (1975) *Culture Industry Reconsidered*. Durham: Duke University Press.
- Bergman, A. (2009) *Conspicuous Consumption - A study of prestige-related consumer behavior*. Sweden: Lund University Publications.



- Boblin, S. L., Ireland, S., Kirkpatrick, H., and Robertson, K. (2013) 'Using Stake's qualitative case study approach to explore implementation of evidence-based practice', *Qualitative health research*, 23(9), pp. 1267-1275.
- Bowman, C., and Ambrosini, V. (2000) 'Value creation versus value capture: Towards a coherent definition of value in strategy', *British Journal of Management*, 11(1), pp. 1–15.
- Counter Strike Blog, (2020) 'About CS:GO', Available at: <https://blog.counter-strike.net/index.php/about/> (Accessed: 6 June 2020).
- Craib, I. (1992) *Modern Social Theory: From Parsons to Habermas*. UK: Pearson Education Limited.
- Creswell, J. W. (2013) *Qualitative inquiry and research design: Choosing among five approaches* (3rd ed.). Los Angeles: Sage
- Dholakia, N. and Zhang, D. (2004) 'Online qualitative research in the age of e-commerce: data sources and approaches [27 paragraphs]'. *Forum: Qualitative Social Research*, 5(2), Art. 29, <http://nbn-resolving.de/urn:nbn:de:0114-fqs0402299> (Accessed: 6 June 2020).
- Firat, A. F., and Venkatesh, A. (1995) 'Liberatory postmodernism and the reenchantment of consumption', *Journal of Consumer Research*, 22(3), pp. 239-266.
- Forman, J., and Damschroder, L. (2008) 'Empirical methods for bioethics: A primer', *Advances in bioethics*, 11, pp. 39-62.
- Greene, D. M. and Joseph, D. (2015) 'The digital spatial fix', *tripleC*, Volume 13, No 2, pp. 223-247.
- Hadzinsky, C. (2014) 'A look into the industry of video games past, present, and yet to come', *CMC Senior Theses*, Paper 842, USA: Claremont.
- Hancock, D.R. and Algozzine, B. (2006) *Doing case study research: a practical guide for beginners researchers*. New York: Teachers College.
- Hltv, (2020) 'Live matches', Available at: <https://www.hltv.org/matches> (Accessed: 11 June 2020).
- Horkheimer, M. and Adorno, T. W. (2002) *Dialectic Of Enlightenment: Philosophical Fragments*. California: Stanford University Press.
- Kara, T. (2014) 'Kültür endüstrisi kavramı çerçevesinde medya ürünleri: Eleştirel yaklaşım', *The Turkish Online Journal of Design, Art and Communication –TOJDAC*, January 2014, Volume 4, Issue 1, pp. 51-60.



- Keen, S. (1993) 'Use-Value, Exchange Value, and the Demise of Marx's Labor Theory of Value', *Journal of the History of Economic Thought*, 15(01), pp. 107.
- Klinger, M. (2012) 'A summary of Adorno and Horkheimer's quite interesting and staggeringly pretentious views on Art', Available at: <https://themaxklinger.wordpress.com/2012/11/27/a-summary-of-adorno-and-horkheimers-slightly-interesting-and-staggeringly-pretentious-views-on-art/> (Accessed: 6 June 2020).
- Liquipedia, (2020) 'S-Tier Tournaments (formerly known as Premier Tournaments)', Available at: https://liquipedia.net/counterstrike/S-Tier_Tournaments (Accessed: 6 June 2020).
- Lizardi, R. (2012) 'DLC: Perpetual Commodification of the Video Game', *Democratic Communiqué*, Volume 25, No 1, pp. 33-45.
- Margaret, S. (1995) 'Focus on qualitative methods: sample size in qualitative research', *Research in Nursing and Health*, 18, pp. 179-183.
- Newzoo, (2020) 'Mobile Revenues Account for More Than 50% of the Global Games Market as It Reaches \$137.9 Billion in 2018', Available at: <https://newzoo.com/insights/articles/global-games-market-reaches-137-9-billion-in-2018-mobile-games-take-half/> (Accessed: 11 June 2020).
- O'Kane, C. (2013) *Fetishism and Social Domination in Marx, Lukács, Adorno and Lefebvre*. (Published PHD thesis) A University of Sussex, Doctor of Philosophy Centre for Social and Political Thought University Of Sussex, March 2013.
- Örmeci, O. (2008) *Popüler Kültür*. (First Edition), Ankara: Elips Kitap.
- Overmars, M. (2012) 'A Brief History of Computer Games', Available at: https://www.stichtingspel.org/sites/default/files/history_of_games.pdf (Accessed: 11 June 2020).
- Pcgames, (2020) 'CS:GO player count tops Dota 2's all-time record for the first time ever', Available at: <https://www.pcgamesn.com/counter-strike-global-offensive/csgo-player-count-record> (Accessed: 6 June 2020)
- Qin, B., Strömberg, D., and Wu, Y. (2017) 'Why does China allow freer social media? Protests versus surveillance and propaganda', *Journal of Economic Perspectives*, 31(1), pp. 117-40.
- Reddit, (2020) 'Do skins really have an impact on performance in CS:GO?', Available at: https://www.reddit.com/r/GlobalOffensive/comments/49nxkx/do_skins_really_have_a_n_impact_on_performance_in/ (Accessed: 6 June 2020).



- Rose, G. (1978) *The Melancholy Science: An Introduction to the Thought of Theodor W. Adorno*. New York: Columbia.
- Smith, A. (1976) *An Inquiry into the Nature and Causes of the Wealth of Nations*. Vol. 1. Edited by R. H. Campbell, A. S. Skinner, and W. B. Todd. Oxford: Oxford University Press.
- Statista, (2020) '*Age breakdown of video game players in the United States in 2019*', Available at: <https://www.statista.com/statistics/189582/age-of-us-video-game-players-since-2010/> (Accessed: 6 June 2020).
- Steam User Profile, (2020) '*Pesymace*', Available at: <https://steamcommunity.com/profiles/76561198263675840/> (Accessed: 6 June 2020).
- Steam Xantares Profile, (2020) '*Xantares;*', Available at: <https://steamcommunity.com/profiles/76561198044118796> (Accessed: 6 June 2020).
- Steam Community Market, (2020) '*Buy and sell items with community members for Steam Wallet funds*', Available at: <https://steamcommunity.com/market/> (Accessed: 6 June 2020).
- Steam Discussions, (2020) '*Skins make you play better*', Available at: <https://steamcommunity.com/app/730/discussions/0/35221584608303298/> (Accessed: 6 June 2020).
- Steam About, (2020) '*Steam is the ultimate destination for playing, discussing, and creating games*', Available at: <https://store.steampowered.com/about/> (Accessed: 6 June 2020).
- Steamcharts Bannerlord, (2020) '*Mount & Blade II: Bannerlord*', Available at: <https://steamcharts.com/app/261550> (Accessed: 6 June 2020).
- Steamcharts, (2020) '*An ongoing analysis of Steam's concurrent players*', Available at: <https://steamcharts.com/app/730> (Accessed: 6 June 2020).
- Teng, Z., Li, Y. and Liu, Y. (2014) 'Online gaming, internet addiction, and aggression in Chinese male students: The mediating role of low self-control', *International Journal of Psychological Studies*, 6(2), pp. 89-97.
- Uçar, A. (2012) *Teselliyi Eşyada Aramak: Türkçe Romanda Nesnelere*. Unpublished PHD Thesis, İhsan Doğramacı Bilkent Üniversitesi Türk Edebiyatı Bölümü, Ankara.
- Valve, (2020) '*At Valve we make games, Steam, and hardware*', Available at: <https://www.valvesoftware.com/tr/about> (Accessed: 6 June 2020).
- Varoufakis, Y. (2012) '*It All Began with a Strange E-Mail*', Available at: <http://blogs.valvesoftware.com/economics/it-all-began-with-a-strange-email/> (Accessed: 6 June 2020).



Weplay, (2020) 'Counter-Strike: Global Offensive Weapons - Top 5 Rifles', Available at: <https://weplay.tv/news/counter-strike-global-offensive-weapons-top-5-rifles-19195> (Accessed: 6 June 2020).

Witkin, R. W. (2004) *Adorno on Popular Culture*. London and New York: Routledge Taylor & Francis Group.

Yamamoto, K. and McArthur, V. (2015) 'Digital economies and trading in counter strike global offensive: How virtual items are valued to real world currencies in an online barter-free market' Conference Paper, *2015 IEEE Games Entertainment Media Conference (GEM)*, Toronto.

Yazan, B. (2015) 'Three approaches to case study methods in education: Yin, Merriam, and Stake', *The qualitative report*, 20(2), pp. 134-152.

Yıldırım, A., Şimşek, H. (2016) *Sosyal Bilimlerde Nitel Araştırma Yöntemleri*. (10th Edition). Ankara: Seçkin Yayıncılık.

Yin, R. K. (2009) *Case study research: Design and methods (4th ed.)*. Los Angeles: Sage.

Youtube, (2020) 'Russian guy goes crazy when he sees my AWP Dragon Lore', Available at: <https://www.youtube.com/watch?v=YMY0teDE4bc> (Accessed: 6 June 2020).

Zainal, Z. (2007) 'Case study as a research method', *Jurnal Kemanusiaan*, 5(1), pp. 1-6.

Picture 3.1 AWP weapon with its white icon on right side of screen, given to the player at the beginning, Captured in CS:GO game directly by researcher himself (Accessed: 6 June 2020).

Picture 3.2 Operation Phoenix Case that includes AWP Asiimov & In-game display of AWP Asiimov (small AWP icon on the right indicates that it belongs to the red category skins), Available at: <https://steamcommunity.com/market/listings/730/Operation%20Phoenix%20Weapon%20Case> (Accessed: 6 June 2020).

Picture 3.3 Sales chart of AWP Asiimov in the market (Showing the prices of March 14 2014 and May 25 2020), Available at: <https://steamcommunity.com/market/listings/730/StatTrak%E2%84%A2%20AWP%20%7C%20Asiimov%20%28Field-Tested%29> (Accessed: 6 June 2020).

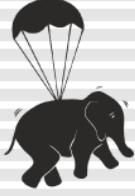
Picture 3.4 When you search for StatTrak™ AWP | Asiimov in the CS:GO's market (the price list and the quantity number of the weapon available on market), Available at: https://steamcommunity.com/market/search?category_730_ItemSet%5B0%5D=any&category_730_ProPlayer%5B0%5D=any&category_730_StickerCapsule%5B0%5D=any&category_730_TournamentTeam%5B0%5D=any&category_730_Weapon%5B0%5D=any



5D=any&appid=730&q=StatTrak%E2%84%A2+AWP+%7C+Asiimov (Accessed: 6 June 2020).

Picture 3.5 Minimum 3 prices of “AK-47 | Wild Lotus” so far (\$1238, \$1293, \$1362), Available at: <https://steamcommunity.com/market/listings/730/AK47%20%7C%20Wild%20Lotus%20%28Field-Tested%29> (Accessed: 6 June 2020).

Picture 3.6 2012-2021 Global Games Market, Available at: <https://newzoo.com/insights/articles/global-games-market-reaches-137-9-billion-in-2018-mobile-games-take-half/>, (Accessed: 11 June 2020).



Ülkelerin İnovasyon ve İtibar Düzeylerinin Sürdürülebilir Rekabet Üzerine Etkisi

Tuğba Erhan¹ Seher Yastıoğlu²

Received/ Başyuru: 29.10.2020

Accepted/ Kabul: 06.11.2020

Published/ Yayın: 07.11.2020

Özet

21. yüzyılda ülkeler beklenmedik krizler yaşadıkları için refah düzeylerini ve zenginliklerini koruma konusunda güçlük çekmektedir. Bu güçlükler ülkelerin sürdürülebilir rekabet avantajı elde etmesinde doğru kaynakları doğru hedeflere yönlendirmenin, teknoloji ve yenilik kapasitesini arttırmanın bununla birlikte itibarlarını da korumanın önemini ortaya çıkarmaktadır. Bu düşünceden hareketle, bu çalışmanın amacı, ülkelerin sahip oldukları itibar ve inovasyon düzeyleri ile sürdürülebilir rekabet düzeyleri arasındaki ilişkiyi ve yine itibar ve inovasyonun sürdürülebilir rekabet üzerindeki etkisini ortaya koymaktır. Bu amaç doğrultusunda, Country RepTrak raporunda, Global Innovation Index raporunda ve The Global Sustainable Competitiveness Index raporunda ortak olarak yer alan 53 ülkeye ait inovasyon, itibar ve sürdürülebilir rekabet skorları konsolide edildikten sonra IBM SPSS 24 paket programı aracılığıyla analize tabi tutulmuştur. Yapılan korelasyon ve regresyon analizleri sonucunda, ülkelerin sahip olduğu yüksek inovasyon ve itibar düzeylerinin sürdürülebilir rekabet düzeylerini de arttırdığı ortaya konulmuştur. Dolayısıyla, sürdürülebilir rekabet avantajı elde etmek isteyen örgütlerin/ülkelerin kaynaklarını, manevi ve taklit edilemez yetenekler oluşturmaya ve itibar yönetimine ayırmaları önerilmektedir.

Anahtar Kelimeler: İnovasyon, İtibar, Sürdürülebilir Rekabet

Makale Türü: *Araştırma*

¹ Süleyman Demirel Üniversitesi, Isparta, Türkiye, tugbaerhan@sdu.edu.tr, Orcid: 0000-0002-5697-490X

² Mehmet Akif Üniversitesi, Burdur, Türkiye, saytas@mehmetakif.edu.tr, Orcid: 0000-0001-8166-4172



The Effect of Innovation and Reputation Levels of Countries On Sustainable Competition

Abstract

Countries have been struggling to protect their current welfare and wealth experiencing unpredictable crises in the twenty-first century. These difficulties reveal the importance of directing the right resources to the right goals, increasing the technology and innovation capacity as protecting their reputation in order to gain sustainable competitive advantage for countries. Considering these ideas, the purpose of this study is to reveal the relationship between the reputation and innovation levels of countries and their level of sustainable competition, on the effect of reputation and innovation on sustainable competition. In line with this purpose, the innovation, reputation and sustainable competition scores of 53 countries included in the Country RepTrak report, Global Innovation Index report and The Global Sustainable Competitiveness Index report were consolidated, and then analyzed through the IBM SPSS 24 package program. As a result of the correlation and regression analyses, it has been revealed that the high innovation and reputation levels of the countries increase their sustainable competition levels. Therefore, organizations/countries that want to obtain sustainable competitive advantage are recommended to allocate their resources to build moral and inimitable skills, and reputation management.

Keywords: Innovation, Reputation, Sustainable Competition

Article Type: *Research*

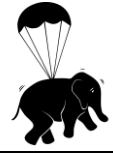


EXTENDED ABSTRACT

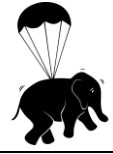
Background & Research Purpose: Countries make certain financial investments to examine and manage their "reputation" in detail, which is perceived as the most valuable asset they can lose at any moment. However, the ability of countries to be recognized by the world through their innovations is closely associated with their reputation in achieving sustainable competition. When reputation, innovation and sustainable competition indexes are analyzed considering all these criteria; while some countries can keep their first place for a few years; some cannot reach these principles of being a better world country. Countries take their place in these lists through the organizations they have and the technologies used by these organizations, innovations and management sensibilities. Therefore, when it is considered that the awareness of individuals about the world is increasing day by day, the development levels of countries should be considered as abstract as concrete determinants. The term of "sustainable competition", which is one of these abstract development types, can also be shaped by different variables. The aim of this study is to reveal the effects of the terms of innovation and reputation, which are among the mentioned variables, on the sustainable competition levels of the countries.

Method: In this study, the secondary data source was used to test whether the relationship and the strength of the effect between the reputation and innovation level of countries and their level of sustainable competition are significant. The data of the reputation levels of countries is taken from the 2018 Country RepTrak report. Innovation levels data is taken from the 2019 Global Innovation Index report, and sustainable competition levels data is taken from The Global Sustainable Competitiveness Index-2019 report. In order to do the analysis, the data of 53 countries included in the indexes of the reports were consolidated, and the country scores of each variable were collected in a single line. After the data of 53 countries were consolidated, correlation and regression analyses were conducted in accordance with the purpose of the study.

Conclusion: Results show that countries' reputation and innovation levels increase their sustainable competitive advantage. In this study, innovation and reputation, which have an impact on the competition levels of countries, explains 70% of the change in the level of sustainable competition, which is considered to be a very high rate. Creating an effective government structure, stable, supporting the business environment, human resources, research, having strong information and communication technologies, and a wide investment, trade and market scale, paying attention to intellectual property, technology investments, information and technology outputs, and in other words, it is seen that countries that support these (Cornell University, INSEAD ve WIPO, 2019) have strong innovation inputs / outputs also hold the advantage of sustainable competition. Another finding of the research is that the reputation based on factors such as the effectiveness of the management, the attractiveness of the country, a developed economy, security, ethical climate, and education level increases the sustainable competitive advantage. As stated by Rodriguez et al. (2002) and Sachs et al. (2019), for sustainable development and a continuous competitive advantage, it is essential to focus on two



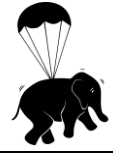
improvable resources: innovation and reputation. Therefore, organizations/countries that want to obtain sustainable competitive advantage are recommended to allocate their resources to build moral and inimitable skills, and reputation management.



1. GİRİŞ

Günümüzde toplumların gelişmişlik düzeylerini devam ettirebilmeleri ve gelişmekte olan toplumların bu düzeyleri yakalayabilmeleri giderek zorlaşmaktadır. İklim değişiklikleri, kimyasalların oluşturduğu kirlenme ve doğal kaynakların azalması gibi sorunlar yıllar öncesinde göz ardı edilen hatta araştırmaların bile az olduğu konular arasında yer alırken, içinde bulunulan çağda özellikle ekolojik çevreye duyarsızlık, sosyal sorumluluk projelerinde pasiflik gibi durumlar toplumların ilerlemesine engel teşkil etmektedir (Sánchez-Torné vd., 2020). Ayrıca, küreselleşme ile ülkelerin görünülebilirliği kolaylaşmakta ve ulusal sınırlar yalnızca fiziki belirleyiciler olarak algılanmaktadır. Örgütlerin ülkelerin itibar göstergeleri arasında yer alıyor olması da bu görünürlüğün/şeffaflığın önemli bir parçasını oluşturmaktadır (Kelley vd., 2019). 2016 yılından bu yana Reprtrak modellemesi ile yürütülen ve örgütlerin yıllık itibar endeksindeki sıralamasını belirleyen Reputation Institute (İtibar Enstitüsü), en güçlü örgütlerin algılar üzerine inşa edileceğini öne sürmektedir (Hahn-Griffiths, 2019). Öte yandan Global İnovasyon Endeksi ve Ülkelerin Sürdürülebilir Rekabetçilik Endeksi gibi ülkelerin gelişmişlik, yenilikçilik, sürdürülebilirlik, sosyal sorumluluk konularında sıralamalarını her yıl belirleyerek tüm dünyaya bildirmede öncülük eden endeksler arasında yer almaktadır. Sözü edilen bu göstergeler arasında var olabilmek, özellikle hızla gelişen ve yenilenen teknolojik ilerlemelerden pay alabilmek, bilgiyi en hızlı şekilde kullanabilmek ve geliştirebilmekle mümkün görünmektedir. Ancak ülkelerin bu ilerlemeler karşısında en büyük payı alma çabaları sahip oldukları itibarlarını zedelemeyen hareket etmelerine bağlı olabilmektedir. Diğer bir deyişle, dünyanın gözü rekabet üstünlüğünü gözle görülür oranda arttırmış ülkelerin itibarları üzerindedir.

Yakından takip edilen ve hemen hemen her alanda beklentilerin tamamına yakınının karşılanması gerektiğini düşünen ülkeler, bu her an kaybedebilecekleri en kıymetli sermaye olarak algılanan “itibarlarını” detaylı bir şekilde incelemek ve yönetmek için belirli maddi yatırımlar yapmaktadır (Pires ve Trez, 2018). Bununla birlikte ülkelerin isimlerini inovasyonları aracılığıyla dünyaya yayabilmeleri beraberinde sürdürülebilir rekabet elde etmede itibar sahibi olmaları ile yakından ilişkilendirilmektedir (Gallardo-Vázquez, vd., 2019). Örneğin ülkenin gelecek projeksiyonunu, istikametini ve ekonomik alanlara kaynak aktarımını belirleyen kalkınma planlarında ar-ge ve inovasyon programlarına, araştırma ve yenilik yapma kabiliyetine sahip nitelikli iş gücüne sahip olmanın gerekliliği ifade edilmektedir (T.C. Cumhurbaşkanlığı Strateji ve Bütçe Başkanlığı, 2019). İyi veya kötü bir itibarın, ülkelerin ulusal/uluslararası ortakları ile koalisyon kurmalarını, iş çevrelerini, yabancı sermaye için cazip bir yatırım merkezi olmalarını, işgücü istihdamını, gelir kaynaklarını ve güven endekslerini etkilediği bilinmektedir (Kiambi, 2017; Philip ve David, 2002). Dolayısıyla bireylerin dünya ile ilgili farkındalıklarının her geçen gün arttığı düşünüldüğünde ülkelerin gelişmişlik düzeylerinin somut belirleyiciler kadar soyut olarak da göz önünde bulundurulması gerekliliği ortaya çıkmaktadır. Tüm bu kriterler göz önünde bulundurularak ülkelerin sahip oldukları örgütler ve bu örgütlerin kullandıkları teknolojiler, yenilikler, nitelikli iş gücü kapasitesi ve yönetim duyarlılıkları aracılığıyla yerlerini aldıkları itibar, inovasyon ve sürdürülebilir rekabet

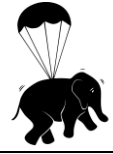


endeksleri incelendiğinde; bazı ülkeler özellikle ilk sıralarını birkaç yıl boyunca koruyabilmekte iken; bazıları daha iyi bir dünya ülkesi olma yolundaki bu prensiplere erişememektedir.

Ülkeden ülkeye düzeyi farklılık gösteren ancak önemi tüm ülkeler için ortak olan, soyut gelişmişlik türlerinden biri de sürdürülebilirliktir. Ülkelerin sürdürülebilir rekabetinin artmasına kaynaklık edecek değişkenlerin bütüncül bir bakış açısı ile ortaya konulmasının önemli olduğu düşünülmektedir. Ülkelerin sürdürülebilir rekabet avantajını kazanmasını sağlayan iki kaynak (inovasyon ve itibar) ise dikkat çekmektedir (The Sustainable Competitiveness Index, 2019). Buradan hareketle, ülkelerin inovasyon ve itibar düzeylerinin sürdürülebilir rekabet avantajı elde etmede ne derece etkili olduğunu yapılacak analizler aracılığı ile elde edilecek somut delillerle ortaya koymak bu çalışmanın amacını oluşturmaktadır. Bu amaç doğrultusunda, bu çalışmanın ilk bölümünde itibar, inovasyon ve sürdürülebilirlik kavramları açıklanmış ve birbirleri ile olan ilişkileri incelenmiştir. İkinci bölümde ise araştırma tasarımına ve analiz bulgularına yer verilmiş ve sonuç ve tartışma bölümü ile çalışma tamamlanmıştır.

2. KAVRAMSAL ÇERÇEVE

Her soyut kavram için geçerli olan tanımlama karmaşası ya da belirli bir tanım üzerinde uzlaşma zorluğu hem ülkelerin hem de örgütlerin birincil önceliğe sahip ve paha biçilemez değerlerinden biri olan “itibar” kavramı için de söz konusudur (Meynhardt vd., 2019). Küreselleşmenin doğal sonuçlarından biri olarak varlıklarını sürdüremeyen, on binlerce örgütün sonunu hazırlayan ya da uzun yıllar var olmaları konusunda önemli bir değer olarak ortaya çıkan itibar kavramı, tüm paydaşların ortak bir olumlu algı merkezinde bir araya gelmeleri ile oluşmaktadır. Örgütlerin soyut değeri (Dowling, 1993) olarak ifade edilen itibar; halkın güveni ya da yüksek takdir duygusu şeklinde tanımlanmaktadır (Merriam Webster's Collegiate Dictionary, 1996). Diğer bireylerin örgütlerin itibarı konusunda kişisel yargıları olmakla birlikte bireyler örgütlerin itibarını global düzeyde de değerlendirmektedir (Yoon, Guffey, and Kijewski, 1993). Bu bağlamda itibar kavramı ile ilgili olarak tek boyutlu evrensel bir yapıya sahip olduğu ifade edilmektedir (Theus, 1993; Weiss vd., 1999). Öte yandan internet ya da diğer dijital kanallar aracılığıyla bilgi çağını yakalamanın hızlı olduğu bu yüzyılda ülkelerin de itibarlarını yönetmelerinin önemi artmaktadır (Berens vd., 2011). Global düzeyde de örgütler gibi ülkelerde varlıklarını sürdürebilmeleri konusunda birçok alanda yetkin, yeniliğe açık ve farkındalığı yüksek bireylere sahip olmaları ile bağdaştırılmaktadır (Ajmal vd., 2018). Aynı zamanda ülkelerin üretkenlik düzeylerini ortaya koyan örgütler de bünyesinde duyarlılıkları yüksek, etik ve uzman bireyler ile çalışmalarının sonuçlarını da itibarlarına yansıtılmaktadır (Kim vd., 2018). Ayrıca 21. Yüzyıl beraberinde internet teknolojisinde getirdiği yenilikleri sayesinde de web tabanlı itibar endekslerinin boyutlarından olan şeffaflık ilkesi uyumlu göstergeleri tüm dünyaya sunabilmektedir (Chang ve diğerleri, 2006). Dolayısıyla ülkeler yaptıkları her bir eylemden sorumlu ve aldıkları her karar ile hesap verebilir bir konum ile karşı karşıya kalmaktadır. Bu bağlamda itibar ülkelerin takdir edilme, saygınlık

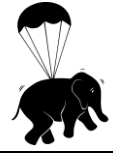


ve güvenilirlik sembolü olarak ifade edilmektedir (Gotsi ve Wilson, 2001). Ülkemizde itibar yönetiminin öncü isimlerinden olan Kadıbeşegil (2013), itibar sahibi olmanın ve yönetmenin ilk ve en öncelikli şart olduğunu vurgularken; itibara yatırım yapmanın da toplumların kültürlerinin bir parçası olması gerektiğini ifade etmektedir.

Küreselleşme ile ortaya çıkan diğer bir kavram olan sürdürülebilirlik, inovasyon gibi dinamik bir göstergenin bileşenidir (D'Souza vd., 2020). Gelişmişlik düzeyi ülkelerin sürdürülebilir rekabet stratejilerine tüm paydaşlarını dâhil edebilmeleri anlamına gelmektedir (Greco, 2015). Nicel göstergeler ile ölçümlenen sürdürülebilir rekabet, sosyal ve çevresel sürdürülebilirliği göz önünde bulundurarak üretme yetisi ve sahip olunan serveti azaltmadan geleceğe taşıma veya var olan serveti artırma yeterliliği şeklinde tanımlanmaktadır (Schwab, 2013). Ekonomik bir gösterge olan sürdürülebilir rekabet üstünlüğü aynı zamanda bir ülkenin en önemli hedefi olarak ifade edilen vatandaşlarının refahının garanti altına alınmasını da içermektedir (Despotovic vd, 2016).

Durağan ve dinamik olarak sürdürülebilir rekabet olgusu, ülkelerin somut gelirler elde etmesi olarak algılanmasının yanı sıra ekonomik gelişmişliğin de önemli bir belirleyicisidir (Balkyte ve Tvaronavičiene, 2010). Dolayısıyla ülkelerin refahının korunması bir başka deyişle ekonomik cazibe kaynaklarının talep görmesi aynı zamanda artarak çoğalması somut bir kavram olan rekabet ile soyut olan itibarın iç içe geçmesi ile mümkün olabilecektir (Ingenhoff vd., 2017). Bu bağlamda sürdürülebilir rekabet incelendiğinde beş önemli boyutu ile karşılaşılmaktadır. Bunlardan doğal sermaye boyutu, ülkenin sahip olduğu doğal çevre ve kaynakların varlığı veya azalmasını; sosyal sermaye boyutu ülkenin sağlık, güvenlik, özgürlük, eşitlik ve yaşam tatminini; kaynak yönetimi boyutu, kaynak sınırlılığı olan dünyada operasyonel rekabet ölçütü olarak var olan kaynakların etkin kullanımı; entelektüel sermaye boyutu, küresel pazarlarda inovasyon ve katma değer oluşturan endüstri kollarında iş ve zenginlik elde edebilme yeterliliği; yönetim etkililiği boyutu ise, altyapı, pazar ve iş olanakları oluşturma yatırımlarını ve sürdürülebilir refah/varlık üretebilmenin sonuçlarını ifade etmektedir (Kell, 2019). Ülkelerin gelişimlerinde vatandaşların/paydaşların örgütlerin eylemlerini algılamalarında ve kabullenmelerinde itibarın öncülünün sürdürülebilirlik olduğu ortaya koyulmaktadır (Gomez-Trujillo vd., 2020).

Rekabet üstünlüğünün zorlayıcı seviyelere ulaştığı bu yüzyılda, ülkelerin diğer ülkelere karşı üstünlük oluşturma göstergelerinden biri olan ve sürdürülebilir rekabet üstünlüğü ile iç içe olan diğer bir kavram ise inovasyondur (Despotovic ve diğerleri, 2016). 2005 (Eurostat) yılında yayınlanan OECD ülkelerinin kitapçığında yer alan tanıma göre inovasyon; yeni veya önemli ölçüde geliştirilmiş ürün, hizmet ya da süreç, yeni bir pazarlama yöntemi veya işletmelerde yeni bir örgütsel yöntem, işyeri yapılanması veya dışsal etkileşimlerin uygulanmasını ifade etmektedir. Aynı zamanda iklim değişikliklerini azaltmaya yardımcı olan, sürdürülebilir gelişmeye olanak sağlayan ve sosyal olarak bütüncül uyumun yakalanmasını kolaylaştıran inovasyon ülkelerin belirli ölçütlere göre gelişmişlik göstergelerini şekillendiren bir kavram olarak karşımıza çıkmaktadır (Gault, 2016). Dolayısıyla inovasyon yalnızca somut ürün ve



teknolojik gücü baskın alt yapıların ilerleyişini değil farklı birçok alanın tüm insanlığın faydalanması adına gelişimsel süreçlerini de değerlendirmektedir.

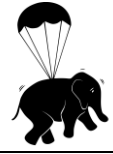
3. YÖNTEM

Bu çalışmada, ülkelerin sahip oldukları itibar ve inovasyon düzeyi ile sürdürülebilir rekabet düzeyleri arasındaki ilişkinin ve etkinin gücünün, anlamlı olup olmadığını test etmek amacıyla *nedensel tarama modeli* kullanılmış; analize tabi tutulacak verilerin elde edilmesinde ise ikincil veri türünden yararlanılmıştır. Nedensel tarama modeliyle, bağımlı değişken üzerinde etkili olan bağımsız değişken veya değişkenler tespit edilmeye çalışılmıştır (Gürbüz ve Şahin, 2017: 108). Nedenselliğin tespit edilebilmesi için öncelikle, İlişkisel modelle değişkenlerin arası ilişki ve değişkenlerin birlikte değişim derecesi çözümlenmeye çalışılmıştır. Bu çözümlemedeki ilişkiler korelasyon türü ilişki yolu ile elde edilmiş (Karasar, 2005: 81-82); ilişkilerin tespitinden sonra nedensellik modeli kurulmuştur. Araştırmanın amacına uygun olarak önceden derlenmiş, zengin içerikli ve periyodik çalışma yapmaya imkân tanıyan ikincil veri türlerinde ise *çok kaynaklı alan çalışmaları verilerinden* (Altunışık, vd., 2010: 74-75) faydalanılmış; elde edilen skorlar nicel analiz tekniklerine tabi tutulmuştur.

Ülkelerin itibar düzeyleri verileri 2018 Country RepTrak raporundan alınmıştır. Ayrıca İnovasyon düzeyleri verileri 2019 Global Innovation Index raporundan ve sürdürülebilir rekabet düzeyleri verileri ise The Global Sustainable Competitiveness Index- 2019 raporundan alınmıştır. Analizin yapılabilmesi için raporların endekslerinde birlikte yer alan 53 ülkeye ait veriler konsolide edilmiş; konsolidasyon işlemi farklı veri tabanlarında/raporlarda yer alan veriler tek bir dosya içerisinde hazırlanmış, bu dosya içerisinde her bir değişkene ait ülke skorları tek bir satırda sınıflandırılmıştır. 53 ülkeye ait veriler konsolide edildikten sonra araştırmanın amacı doğrultusunda korelasyon ve regresyon analizine tabi tutulmuştur.

Dünya İtibar Endeksi: Ülkelerin itibar endeksleri için uluslararası danışmanlık şirketi Reputation Institute tarafından kapsamlı bir araştırma sonucu hazırlanan “Dünyanın En İtibarlı Ülkeleri” araştırmasının sonuçlarının yer aldığı rapordan faydalanılmıştır. Raporda yer alan ülkelerin itibar puanları, Mart-Nisan 2018 döneminde 58.000’den fazla kişiye anket yapılarak belirlenmiştir. Ayrıca raporda kişilerin ülkeleri itibarlı olarak görme düzeyleri belirlenirken üç temel boyut dikkate alınmıştır: ‘Gelişmiş ekonomi (örnek alt boyutlar: marka değeri, teknoloji, kalifiye insan gücü), Etkin Hükümet Yapısı (iş çevresi, sosyal ve ekonomik politikalar, güven, etik iklim) ve Ülkelerin Cazibesi (çekici yaşam tarzı, ülkenin güzelliği, toplumun misafirperverliği).

Global İnovasyon Endeksi: Ülkelerin inovasyon endeksleri için Global İnovasyon Endeksi - 2019 raporundan (Cornell University, INSEAD ve WIPO; 2019) faydalanılmıştır. Raporda ülkelerin inovasyon endeksi hesaplanırken iki temel boyuttan yararlanılmış ve bu iki boyutun ağırlıklı ortalaması alınarak hesaplanmıştır. Bu iki temel boyuttan ilki İnovasyon Girdi Alt Endeksi olup kurumlar, beşeri sermaye ve araştırma, altyapı, pazarın kapsamlılığı, işletmelerin kapsamlılığı alt boyutlarından oluşmaktayken; ikinci boyut olan İnovasyon Çıktı Alt Endeksi



bilgi ve teknoloji çıktıları ve yaratıcı çıktılar alt boyutlarından oluşmaktadır. Bu çalışmada, ülkelerin toplam inovasyon düzeyi puanları kullanılmıştır.

Ülkelerin Sürdürülebilir Rekabetçilik Endeksi: Ülkelerin rekabetçilik endeksi için The Sustainable Competitiveness Report'tan faydalanılmıştır. Endeks başarının ve performansın temelini oluşturan 116 nicel göstergelye hesaplanmakta ve 116 gösterge beş temel boyut altında toplanmaktadır: Doğal Kaynaklar, Kaynak Yoğunluğu, Entelektüel Sermaye, Sosyal Uyum ve Yönetişim. Ülkelerin söz konusu beş boyuttan aldıkları puanların ortalaması ise sürdürülebilir rekabetçilik puanlarını oluşturmaktadır. Bu çalışmada, ülkelerin toplam sürdürülebilir rekabetçilik puanları kullanılmıştır. Çalışmaya dâhil edilen endekslerde 1'den 100'e kadar olan ulusal puanlara ilişkin olarak 1 en düşük olanı temsil etmekteyken 100 en yüksek puanı temsil etmektedir.

4. ANALİZ BULGULARI

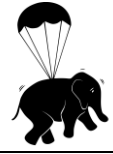
Araştırmanın amacı doğrultusunda yapılan analizleri gerçekleştirmeden önce betimleyici istatistikler yapılmış ve veri setinin değişkenlikleri (dağılım durumları) incelenmiştir. Öncelikle, yapılacak analizlere elde edilen veri setinin değişkenliğini ve yapılacak analizlere uygunluğunu tespit etmek amacıyla SPSS 24 paket programı aracılığı ile normallik testi yapılmıştır. Normallik testi için, endekslerin (veri setinin) ortalamaları üzerinden normal dağılım değerlerini gösteren çarpıklık ve basıklık değerlerine bakılmış; çarpıklık (skewness) ve basıklık (kurtosis) değerlerinin ± 3 aralığında yer aldığı görülmüştür. Çarpıklık ve basıklık değerlerinin ± 3 aralığında dağılması durumunda verilerin normal dağılım gösterdiği kabul edilmekte ve veri setine parametrik hipotez testlerinin uygulanabileceği ifade edilmektedir (Kalaycı, 2010: 209). Buradan hareketle, değişkenler arası anlamlı ilişkileri incelemek üzere korelasyon analizi gerçekleştirilmiştir. Söz konusu değişkenlerin birbirleriyle ilişkilerinin yönünü ve şiddetini belirlemek, sonraki aşamalarda yapılacak analizlere kaynaklık etmekte ve analizlerin sonuçlarına işaret edebilmektedir.

Tablo 1. Değişkenler Arası İlişkiler ve Betimleyici İstatistikler

Değişkenler	Ort.	S.S.	1	2	3
1. Sürdürülebilir Rekabet	48,06	5,546	1	,795**	,798**
2. İtibar	61,14	14,170		1	,729**
3. İnovasyon	44,88	11,481			1

N= 53; Ort.=Ortalama; S.S.= Standart Sapma
**p < 0.01

Yapılan korelasyon analizi sonucunda (Tablo 1), ülkelerin sürdürülebilir rekabet düzeyi ile itibar düzeyleri ($r_{(55)} = ,795$; $p < 0,01$) ve inovasyon düzeyleri ($r_{(55)} = ,798$; $p < 0,01$) arasında pozitif yönde anlamlı bir ilişkinin olduğu tespit edilmiştir. Değişkenler arasındaki pozitif yönlü ilişkinin varlığı iki değişkenin birlikte değiştiğini; “sürdürülebilir rekabet ile inovasyon ve itibar” düzeylerinin birlikte arttığını veya azaldığını göstermektedir.



Değişkenler arası anlamlı ilişkilerin varlığı sorgulandıktan sonra, ülkelerin sürdürülebilir rekabet düzeyleri ile ilişkili olan inovasyon ve itibarın ülkelerin sürdürülebilir rekabet düzeylerini etkileyip etkilemediğini görmek üzere regresyon analizi gerçekleştirilmiş, bağımsız değişkenler birlikte regresyon modeline sokulmuştur. Yapılan analiz sonucunda, regresyon modelinde (Tablo 2) VIF değerlerinin tümü 10' dan küçük ve Tolerance değerlerinin tümü 0,2'den büyük değerler almış olup, çoklu bağlantı sorununun olmadığı ispat edilmiştir. Durbin Watson değerlerinin de 1,5 ve 2,5 değerleri arasında olduğu görülmüştür.

Tablo 2. İnovasyon Düzeyi ve İtibarın Ülkelerin Sürdürülebilir Rekabet Düzeylerine Etkisine İlişkin Regresyon Modeli

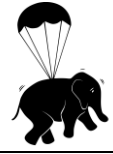
Bağımsız Değişkenler	Ülkelerin Sürdürülebilir Rekabet Düzeyleri			Regresyon Modeli Özeti
	β	S.H.	p	
İnovasyon	,234	,052	,000	R ² =,709; Adj. R ² =.698; F=59,826; p=,000
İtibar	,155	,044	,001	

Tablo 2'de verilen çoklu doğrusal regresyon analizi sonuçlarına bakıldığında, kurulan modelin anlamlı olduğu görülmektedir ($p < 0.01$). Buna göre, ülkelerin inovasyon düzeyleri ($\beta = ,234$; $p < 0,01$) ve itibar düzeyleri ($\beta = ,155$; $p < 0,01$), ülkelerin sürdürülebilir rekabet düzeyleri üzerinde pozitif yönde ve anlamlı bir etkiye sahiptir.

5. SONUÇ VE TARTIŞMA

Sürdürülebilir rekabet temelde bireylerin, örgütlerin veya ülkelerin şimdi ve gelecek nesilde başarılı olmasını sağlayan unsurlarla (iç çevre ve dış etkiler) ilgilidir. Dolayısıyla sürdürülebilir rekabet edilebilirlik, bir örgütün veya ülkenin politikalarını, yönetmeliklerini, yönetim araçlarını ve vizyonlarını, mevcut ve geleceğe ilişkin gelir sağlama yeteneğinin üzerine inşa etmesidir (The Sustainable Competitiveness Report, 2019). Günümüzde örgütler için değişen rekabet anlayışı bugün ülkeler için de geçerli olmaktadır. Stratejiler, ekonomik kalkınma ve rekabetçiliğe odaklanarak ülkeler çapında uygulanmaktadır. Ülkelerin büyümelerini sürdürülebilir kılmak, rekabetçi bir ekonomiye sahip olmak ve toplum refahını sağlamak için bilgi, yenilik ve yaratıcılığa dayalı (Cornell University, INSEAD, ve WIPO, 2019), itibar sağlayan (Hall, 1993) stratejiler uygulaması gerektirmektedir. Buradan yola çıkarak, bu çalışmada, ülkelerin yeniliğe açık olmalarının / inovasyon performanslarının ve gelişmiş ekonomi, ülke cazibesi ve etkili yönetimle kazanılan itibarın, ülkelerin sürdürülebilir rekabet avantajı elde etmesindeki önemi ortaya konulmaya çalışılmıştır.

Araştırmanın bulgularına göre, ülkelerin itibar ve inovasyon düzeyleri arttıkça sürdürülebilir rekabet avantajının da arttığı görülmektedir. Ülkelerin rekabet düzeyleri üzerinde etkili olan inovasyon ve itibar sürdürülebilir rekabet düzeyindeki değişimin %70'ini açıklamaktadır ki bu oldukça yüksek bir oran olarak kabul edilmektedir. Bulgular ayrıntılı incelendiğinde; etkili bir hükümet yapısı oluşturan, istikrarlı, iş çevresini destekleyen, insan kaynağına ve araştırmaya destek veren, güçlü bilgi ve iletişim teknolojilerine, geniş bir yatırım, ticaret ve pazar ölçeğine



sahip, fikri mülkiyetleri, teknoloji yatırımlarını, bilgi ve teknoloji çıktılarını önemseyen, yaratıcı ürün ve hizmetleri destekleyen (Cornell University, INSEAD, ve WIPO, 2019) başka bir ifade ile güçlü inovasyon girdi/ çıktılarında sahip ülkelerin sürdürülebilir rekabet avantajını da ellerinde tuttuğu görülmektedir. Bu çalışmanın bulgularını destekler şekilde, Doğan'ın (2016) yaptığı çalışmada, bilgi teknolojisi çıktısının ve yaratıcı çıktının rekabet gücünü olumlu etkilediği sonucuna varılmış; bilgi teknolojisi üretimindeki 1 birim artış rekabet gücünde 0.0045 birim artışa; 1 birim yaratıcı çıktı artışı rekabet gücünde 0,0046 birim artışa neden olmuştur (Doğan, 2016). Araştırmanın bir diğer bulgusu ise, yönetimin etkililiği, ülkenin cazibesi, gelişmiş bir ekonomi, güvenlik, etik iklim, eğitim düzeyi gibi unsurlar üzerine kurulu olan itibarın sürdürülebilir rekabet avantajını arttırmasıdır. Rodriguez ve arkadaşlarının (2002) belirttiği gibi sürdürülebilir kalkınma ve kalıcı bir rekabet avantajı için temelde iki geliştirilebilir kaynağa odaklanmak gerekmektedir: İnovasyon ve itibar. Dolayısıyla, sürdürülebilir rekabet avantajı elde etmek isteyen örgütlerin/ ülkelerin kaynaklarını, manevi ve taklit edilemez yetenekler oluşturmaya ve itibar yönetimine ayırmaları önerilmektedir. Ülkeler, küresel pazarlarda yenilik ve katma değerli endüstriler aracılığı ile maddi zenginliğini arttırabilir, küresel imajını ve istihdam yaratma yeteneğini geliştirebilir. Bununla birlikte ülkeler sürdürülebilir rekabet düzeyine katkıda bulunan sürdürülebilir kalkınmayı destekleyici politikaları belirleyerek yenilik kabiliyetinin artırılmasını hedefleyen somut politikaları ve uygulamaları hayata geçirebilir. Örneğin Türkiye On Birinci Kalkınma Planı'nda, sürdürülebilir rekabet avantajı kazandıran, teknoloji ve yenilik kabiliyetinin artırılması hedefiyle milli teknoloji hamlesi başlatmış; yapay zekâ, nesnelerin interneti, artırılmış gerçeklik, büyük veri, siber güvenlik, enerji depolama, ileri malzeme, robotik, mikro/nano/opto-elektronik, biyoteknoloji, kuantum, sensör teknolojileri ve katmanlı imalat teknolojilerine ilişkin gelişim yol haritalarını hazırlamaya, gerekli altyapının tesis edilmesine, ihtiyaç duyulan nitelikli insan kaynağının yetiştirilmesine ve toplumsal yönelimin buraya kanalize edilmesine odaklanmıştır (T.C. Cumhurbaşkanlığı Strateji ve Bütçe Başkanlığı, 2019). Michael Porter (1996) rekabet avantajı teorisinin son aşamasında gelişmeyi, ülkeler ve ulusal farklılıklarda refah ve büyüme aracılığı ile ifade etmektedir. Porter'a göre sürdürülebilir rekabet avantajı, sektörlerin gelişimine ve işletmelerin geliştirilmiş üretim faktörleri üzerindeki inovasyon ve yatırımlara dayanan rekabet avantajlarına bağlıdır (Grant, 1991: 539).

Konu ile ilgili daha sonra yapılacak olan araştırmalar için; iki temel boyuttan oluşan inovasyon çıktı düzeylerinin, beş temel boyuttan oluşan inovasyon girdi düzeylerinin ve alt boyutlarının, sürdürülebilir rekabet üzerine etkisinin ayrıntılı olarak incelenmesi önerilmektedir. Yine ekonomik çıktılarının ötesinde refah ve sürdürülebilir büyümenin yolu olan ülkelerin sürdürülebilir rekabet avantajının elde edilmesinde etkili olabileceği düşünülen farklı değişkenlerin, aracı etkilerinin ortaya konulmasının önemli olduğu düşünülmektedir



Kaynakça

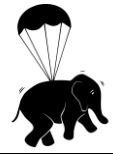
- Ajmal, M.M., Khan, M., Hussain, M. and Helo, P., (2018) ‘Conceptualizing and incorporating social sustainability in the business world’, *International Journal of Sustainable Development & World Ecology*, 25(4), pp.327-339.
- Altunışık, R., Coşkun, R., Bayraktaroğlu, S., ve Yıldırım, E. (2010) *Sosyal bilimlerde araştırma yöntemleri* (6. Baskı). Sakarya: Sakarya Yayıncılık.
- Balkyte, A., and Tvaronavičiene, M. (2010) ‘Perception of competitiveness in the context of sustainable development: facets of “sustainable competitiveness”, *Journal Of Business Economics And Management*, 11(2), pp. 341-365.
- Berens, G., Fombrun, C.J., Ponzi, L.J., Trad, N.G. and Nielsen, K., (2011) *Country RepTrak™: a standardized measure of country reputation*. In International Place Branding Yearbook Palgrave Macmillan, London.
- Chang, E., Hussain, F. K., and Dillon, T. (2006) ‘Reputation ontology for reputation systems’, in OTM Confederated International Conferences, *On the Move to Meaningful Internet Systems*,. Berlin, Heidelberg: Springer, pp. 1724-1733.
- Cornell University, INSEAD, and WIPO (2019) *The Global Innovation Index 2019: Creating Healthy Lives—The Future of Medical Innovation*, Ithaca, Fontainebleau, and Geneva.
- Despotovic, D., Cvetanovic, S., Nedic, V., and Despotovic, M. (2016) ‘Economic, social and environmental dimension of sustainable competitiveness of European countries’, *Journal of Environmental Planning and Management*, 59(9), pp. 1656-1678.
- Doğan, E. (2016) ‘The effect of innovation on competitiveness’, *Ekonometri ve İstatistik e-Dergisi*, (24), ss.60-81.
- Dowling, G. R. (1993) ‘Developing your company image into a corporate asset’, *Long Range Planning*, 26(2), pp. 101-109.
- D'Souza, C., McCormack, S., Taghian, M., Chu, M.T., Mort, G.S. and Ahmed, T., (2020) ‘An empirical examination of sustainability for multinational firms in China: Implications for cleaner production’, *Journal of Cleaner Production*, 242, p.118446.
- Eurostat, O. E. C. D. (2005) *Oslo manual: guidelines for collecting and interpreting innovation data*. A joint publication of OECD and Eurostat. Paris: OECD.
- Gallardo-Vázquez, D., Valdez-Juárez, L.E. and Castuera-Díaz, Á.M., (2019) ‘Corporate social responsibility as an antecedent of innovation, reputation, performance, and competitive success: A multiple mediation analysis’, *Sustainability*, 11(20), p.5614.



- Gault, F. (2016) *Defining and measuring innovation in all sectors of the economy: Policy relevance*. In Proceedings of the OECD Blue Sky Forum III, Ghent, Belgium, pp. 19-21.
- Gomez-Trujillo, A.M., Velez-Ocampo, J. and Gonzalez-Perez, M.A., (2020) ‘A literature review on the causality between sustainability and corporate reputation: What goes first?’, *Management of Environmental Quality: An International Journal*, 31(2), pp.406-430.
- Gotsi, M. and Wilson, A. (2001) ‘Corporate reputation: seeking a definition’, *Corporate Communications*, 6(1), pp. 24-30.
- Grant R., (1991) ‘M., Porter’s Competitive Advantage of Nations’: an Assessment’, *Strategic Management Journal*, 12(7), pp: 535-548.
- Greco, V. (2015) ‘The global sustainability index: an instrument for assessing the progress towards the sustainable organization’, *ACTA Universitatis Cibiniensis*, 67(1), pp. 215-220.
- Gürbüz, S. and Şahin, F., (2017) *Sosyal Bilimlerde Araştırma Yöntemleri Felsefe-Yöntem-Analiz*, Seçkin Yayınevi, 4. Baskı, Yayın, 134.
- Hahn-Griffiths, S. (2019) *The World’s Most Reputable Countries Report*. Available at: <https://www.reprtrak.com/> (Accessed: 15 December 2019)
- Hall, R. (1993) ‘A Framework linking intangible resources and capabilities to sustainable competitive advantages’, *Strategic Management Journal*, 14, pp. 607-618.
- Ingenhoff, D., Buhmann, A., White, C., Zhang, T. and Kioussis, S., (2017) ‘Reputation spillover: corporate crises’ effects on country reputation’, *Journal of Communication Management*, 22 (1), pp. 96- 112.
- Kadıbeşegil, S. (2013) *İtibar yönetimi*, 7. Baskı. İstanbul: MediaCat.
- Kalaycı, Ş. (2010) *SPSS uygulamalı çok değişkenli istatistik teknikleri*, Ankara: Asil Yayın Dağıtım.
- Karasar, N. (2005) *Bilimsel araştırma yöntemleri*, 14. Baskı. Ankara: Nobel Yayınları.
- Kell, G. (2019) *The Sustainable Competitiveness Report*, 8th edition, 2019. Available at: <http://solability.com/the-global-sustainable-competitiveness-index/the-index> (Accessed: 15 December 2019)
- Kelley, K.J., Hemphill, T.A. and Thams, Y., (2019) ‘Corporate social responsibility, country reputation and corporate reputation’, *Multinational Business Review*, 27 (2), pp. 178-197.



- Kiambi, D. (2017) 'The role of familiarity in shaping country reputation' J. Fullerton, and A. Kendrick (eds.), in *Shaping international public opinion: A model for nation branding and public diplomacy*, New York: Peter Lang, pp. 57- 75.
- Kim, K.C., ElTarabishy, A. and Bae, Z.T., (2018) 'Humane entrepreneurship: How focusing on people can drive a new era of wealth and quality job creation in a sustainable world', *Journal of Small Business Management*, 56(sup1), pp.10-29.
- Merriam-Webster, Inc, (1996) *Merriam-Webster's Dictionary of Law*. Merriam-Webster.
- Meynhardt, T., Strathoff, P., Fröhlich, A. and Brieger, S.A., (2019) 'Same Same but Different: the Relationship Between Organizational Reputation and Organizational Public Value', *Corporate Reputation Review*, 22(4), pp.144-158.
- Philip, K., and David, G. (2002) 'Country as brand, product, and beyond: A place marketing and brand management perspective', *Journal of Brand Management*, pp. 249-261.
- Pires, V. and Trez, G., (2018) Corporate reputation. *Revista de Gestão*.
- Porter, M.E.,(1996) 'Competitive advantage, agglomeration economies, and regional policy', *International regional science review*, 19(1-2), pp.85-90.
- Rodriguez, M. A., Ricart, J. E., and Sanchez, P. (2002) 'Sustainable development and the sustainability of competitive advantage: A dynamic and sustainable view of the firm', *Creativity And Innovation Management*, 11(3), pp. 135-146.
- Sachs, J.D., Schmidt-Traub, G., Mazzucato, M., Messner, D., Nakicenovic, N. and Rockström, J., (2019) 'Six transformations to achieve the sustainable development goals', *Nature Sustainability*, 2(9), pp.805-814.
- Sánchez-Torné, I., Morán-Álvarez, J.C. and Pérez-López, J.A., (2020) 'The importance of corporate social responsibility in achieving high corporate reputation', *Corporate Social Responsibility and Environmental Management*.
- Schwab, Klaus (2013) *World Economic Forum, 2013. Global Competitiveness Report 2013-2014*. Available at: <https://www.weforum.org/reports/global-competitiveness-report-2013-2014> (Accessed:15 December 2019)
- T.C. Cumhurbaşkanlığı Strateji ve Bütçe Başkanlığı (2019) *On Birinci Kalkınma Planı (2019-2023)*.
- Theus, Kathryn T. (1993) 'Academic Reputations: The Process of Formation and Decay', *Public Relations Review*, 19 (3), pp. 277-92.
- Weiss, A.M., Anderson, E. and MacInnis, D.J., (1999) 'Reputation management as a motivation for sales structure decisions', *Journal of Marketing*, 63(4), pp.74-89.



Yoon, Eusang, Hugh Guffey, and Valerie Kijewski (1993) 'The effects of information and company reputation on intentions to buy a business service', *Journal of Business Research*, 27 (3), pp. 215-228.