TRANSVERSAL STUDIES IN MANAGEMENT AND FINANCE

EDITORS
Germán Martínez PRATS
Fabiola de Jesús Mapén FRANCO
Aida Dinorah García ÁLVAREZ
María Cruz Cuevas ÁLVAREZ

AUTHORS
Ali YEŞİLDAL
Begum Dilara EMİROGLU
Fulya ZARALI
Hale ALAN
Hülya ÇAKIR
Kader EROL
Maya KATENOVA
Neslihan YILMAZ
Onur DOĞAN
Zeliha SEÇKİN
Zeynep İLTÜZER

İKSAD
Publishing House

TRANSVERSAL STUDIES IN MANAGEMENT AND FINANCE

EDITOR

Germán Martínez PRATS

Fabiola de Jesús Mapén FRANCO

Aida Dinorah García ÁLVAREZ

María Cruz Cuevas ÁLVAREZ

AUTHORS

Ali YEŞİLDAL

Begum Dilara EMİROGLU

Fulya ZARALI

Hale ALAN

Hülya ÇAKIR

Kader EROL

Maya KATENOVA

Neslihan YILMAZ

Onur DOĞAN

Zeliha SEÇKİN

Zeynep İLTÜZER

IKSAD Publishing House

(The Licence Number of Publicator: 2014/31220)
TURKEY TR: +90 342 606 06 75
USA: +1 631 685 0 853
E mail: iksadyayinevi@gmail.com
www.iksadyayinevi.com

ISBN: 978-625-8213-19-5
Cover Design: İbrahim KAYA
February / 2022
Ankara / Turkey
Size = 16x24 cm

CONTENTS

EDITORIAL SCIENTIFIC COMMITTEE

PREFACE

Writing about administration and finance as part of a cross-sectional study arises as an idea whose purpose is to know the relationship between the aforementioned topics. The premise of this is to be able to analyze from different perspectives the topics of administration and finance, carefully generating varied related concepts to be able to acquire as much information as possible, and that in turn is aligned with the main idea of this book. What is sought is to present various terms and break down each of them so that they are easy to understand for readers. At the same time, it is desired that the way to approach the topics presented here is with practicality and at the same time easy to understand for those who have this book in their hands.

The elaboration of this book is given by the desire to make known what both administration and finance are from individual points and, equally, from a joint perspective, encouraging the intention of readers to know more about the transversality between both themes.

CHAPTER 1

ORGANIZATIONAL CULTURE AND MOBBING BEHAVIORS IN ORGANIZATIONS

Assoc. Prof. Dr. Hale ALAN[1]

[1] Akdeniz University, Manavgat Faculty of Social Sciences and Humanities, Department of MIS, Manavgat/Antalya/TURKIYE
http://orcid.org/0000-0002-2444-1551

INTRODUCTION

The culture concept, which helps people determine their place in society, guides employees to find their position in the organization. Organizational culture is a concept that regulates the behavior of employees and foresees them to act in unity. The organizational culture, which can be developed depending on the rules to be regulated by the management, may also be formed on its own over time. Organizational culture is one of the most important factors that affect and shape the behavior of the employee in the workplace. It is known that organizational culture has an impact on positive or negative sociological situations occurring within the organization. Mobbing is one of the most controversial issues in the negative and bad situations.

Mobbing is generally defined as behaviors that endanger the psychological abuse of one or more people in the workplace, human dignity, and the physical, physiological and psychological integrity of the victim over a longer period. The concept of mobbing, which has come to the agenda as a phenomenon that has been experienced quite frequently in recent years, negatively affects the psychology and health of the employee, which causes negative reflections within the organization. Also it is a problem affecting almost all areas of an individual's life, and not only the problem of the individual but of the whole society as a whole. Numerous studies reveal that it causes social and economic losses due to frequent absenteeism, job changes, and early retirement. Many organizations have acknowledged that mobbing not only creates a problem for victims and abusers in the organization but also leads to major economic losses.

Mobbing behaviors that have an effect of alienating individuals to the workplace as reducing and preventing job satisfaction, job performance and job motivation in work-life psychologically injure the victims. For these reasons, mobbing is seen as an organizational problem that is emphasized by both academia and the business world. Organizational reasons are manifested in organizational culture, which includes the characteristics of the business environment. Organizations cannot survive by adapting to these changing conditions in today's environment where there are constantly changing conditions (Köker, 2021: 96). Organizational culture has a very important effect on the survival of organizations. Organizations should create their culture so that negative concepts such as mobbing are not experienced.

The aim of this study is to investigate whether organizational culture is associated with mobbing behaviors in organizations in Turkey. This study deals with the relationship between mobbing behaviors in organizations and

organizational culture. The main purpose of the study is to reveal the effect of cultural differences in organizations on mobbing behaviors among employees. According to the literature, there are very few studies on these concepts. In the first section of this study, the concepts of culture and organizational culture were defined and detailed analysis was made according to the literature. On the other hand, the concept of mobbing and its types are explained in detail. The study was concluded by talking about the relationships between concepts and which behaviors are mobbing.

1. CONCEPTUAL AND THEORETICAL FRAMEWORK

1.1. What is Culture?

There are various approaches to culture and many different definitions. Parekh's (2000) definition of culture is “culture is a system of meaning and significance created throughout history, or in other words, a system of beliefs and customs that a group of people use to understand organize and structure their individual and collective approaches. The concept of culture has been associated with many different fields and disciplines as a concept in our lives. Culture is a social product and cannot be inherited. It cannot be passed from generation to generation by biological inheritance. Because culture is not an instinctive event. Culture is the whole of learned behaviors that are formed as a result of interaction between individuals (Ozankaya, 1983: 60).

In order to understand the culture, it is necessary to talk about its past situation. The concept of culture, which first emerged in the social sphere, was then bestowed on the individual and the organization. Until the 18th century, it is seen that the term culture was mostly related to agriculture, meant to improve the soil and cultivate/sow crops.

In other words, the use of culture on society was not common until this period. The concept was mostly used for agricultural activities and in the sense of cultivation, processing, upbringing (or religious worship). At the end of the seventeenth century, the meaning and content of the term culture began to change with the changes in social life.

The term culture gained the meaning of "active development of the human mind" because the Enlightenment thinkers had the idea that just like plants and soil, people and societies could be shaped, directed and prevented. This universe of meaning, which the culture assumed as of the 18th century, has formed one of the central meaning layers of culture until today, the classical, aesthetic definition of culture or culture as high culture. Again in

this period, with the development of anthropology, it began to be widely used in the sense of "the whole way of life" of a certain people.

1.2. Organizational Culture

When the literature on cultural phenomena in organizations that started to take interest in the 1980s is examined, it can be said that there is no agreement on the definition of the concept of organizational culture. All organizations have cultural values that affect the work of the people together. Organizational culture is the common values and beliefs that show how members of an organization approach their work and interact with each other. The behaviors exhibited by these members arise through traditions and practices. Organizations interact with the cultural features they have, and the cultural features of the organizations also gain meaning with the norms, values and symbol systems they have. Organizations are social units with unique cultural structures, formed as a whole with their owners, managers and employees (Sabuncuoğlu and Tuz, 1996).

Researches on organizational culture indicate that organizational culture is a multi-dimensional structure. Researchers classify the elements of organizational culture differently. According to Duncan (1989), organizational culture consists of visible elements consisting of physical elements, symbols, ceremonies, stories, heroes and invisible elements consisting of assumptions, values, beliefs and meanings. Ouchi's Z Culture Model also studied organizational culture by working on different business groups. The first group of these is typical American companies, the second is typical Japanese companies, and the third is Z-type American companies. While defining a typical Z company that forms the basis of William Ouchi's theory, he took into account that the four basic factors (motivation, quality, efficiency, continuity of workforce) that form the Japanese business model are the main factors in the success of large companies. In Ouchi's model, it is stated that the organizational culture has changed in proportion to the presence and number of common experiences that employees experience while dealing with abstract, uncertain and variable conditions (England, 1983). One of the most popular definitions of culture is Schein's (1984: 3) definition. According to Schein, organizational culture can be regarded as valid and recognized by a particular group to learn to deal with external adjustment and internal integration problems, and is therefore the right way to perceive, think and feel about new problems. As part of the culture of the organization, an employee is simultaneously part of a subculture, even some

subculture. Subcultures are due to the social, organizational and individual characteristics of the employees. Tasks carried out or similar experiences reveal the categorization of the position in the organizational hierarchy (Schein, 2010).

Although organizational culture is studied frequently in terms of management and organizational field, there are few studies in terms of employees. The current studies focus on the health sector and tertiary education. In addition to being an organizational variable, organizational culture strongly affects organizational behavior and performance as the main factor shaping other variables within the organization (Ott, 1989: 120; Scholl, 1981: 590). As the interaction among the employees is influenced by the cultural characteristics of the organization, the general characteristics of the interaction create the organizational culture. Organizational culture is unique to the organization, although it takes its foundations from social culture. It is seen by the researchers that qualitative or quantitative methods are used to reveal and understand organizational culture because it contains tangible and intangible elements (Van Den Berg & Wilderom, 2004: 571).

According to Hofstede, who conducted research with a large research sample with the participation of 116,000 IBM employees from 72 countries, culture consists of four dimensions: power distance, uncertainty avoidance, masculinity/femininity, and individualism/collectivism, and these four dimensions are used to distinguish cultures. Hofstede (1997) also identified dimensions that have been widely adapted and applied in organizational culture research. These dimensions of culture are process/result-oriented, employee/work-oriented, narrow-minded/professional, open/closed system, loose/tight control, and normative/pragmatic (Sødergaard, 1996).

According to Hofstede (2000), organizational culture is the cultural characteristics that distinguish members of an organization from other people. An organization that has a positive organizational culture and can maintain it has many advantages. Hofstede defined organizational culture as the collective programming of the minds of group members, in which a group differentiates itself from other groups. Another well-known and cited study on organizational culture was done by Trompenaars and Hampton-Turner (1993), who conducted a comprehensive study of the cultural attitudes of 15,000 managers from 28 different countries over the course of ten years. Cameron and Quinn (2011) argue that the most important competitive advantage that distinguishes successful organizations from others is the organizational culture. Speaking of company examples such as Coca-Cola, Disney, General

Electric, Intel, McDonalds, Microsoft and Toyota, he stated that each of them has developed a different culture that their employees can clearly define. In some organizations, while the founder creates organizing culture, sometimes when the organization faces and overcomes environmental obstacles and challenges, the culture is formed spontaneously, and in some cases the manager is consciously developed by deciding to improve. Many companies have caused their success to have a unique organizational culture.

In recent years, the phenomenon of organizational culture has been examined according to its strong and weak characteristics (Robbins, 2000: 526). From this point of view, it is argued that strong cultures have a great impact on the behavior of employees, promotion of productivity and reduction in turnover. In strong cultures, the core values of the organization are adopted and protected. If most members accept the core values of the organization and the commitment of the members to those values is high, the culture is so strong. In other words, the strength of the culture of an organization shows the degree of consensus among members about which norms will prevail and what values will be more important. Businesses with a strong culture are guiding their employees more; they make their work more meaningful. A company with a weak culture, on the other hand, is not sufficiently influential on the employees, as the general values and behavior do not become apparent.

1.3. The Phenomenon of Mobbing and Mobbing Behavior Types

According to Zapf (1999), mobbing is defined as behaving badly, harassing, hurt, excluding and harming the job in a way that reduces the individual's reputation and status (Zapf, 1999: 498). Leymann, on the other hand, defines mobbing as psychological terrorism that maintains hostile attitudes and unethical communication in the workplace. One or more people relative to the other, pushing the victim to a position that prevents his defense, systematically support it.

Mobbing behaviors usually occur at least once a week and can take a long time depending on the victim's stamina. Due to duration and frequency, this abuse results in disorders in psychology, physical health and the social area of the victim (Leymann, 1996). Zapf (1999) stated that mobbing could lead to decreased social support and weaken the flow of information. It is also stated that mobbing can increase organizational problems and work stress. Leymann (1993) has cited many cases, which show that bad work organization and leadership problems are related to mobbing. Einarsen et al.

(1994), Vartia (1996) and Zapf and Osterwalder (1998) support this view. All of them found a relationship between the frequency of mobbing behavior and organizational variables. In addition, according to Zapf (1999), adverse working conditions are thought to be the result of intimidation.

Hirigoyen (2003) describes mobbing as moral abuse and identifies it as gestures, words, behaviors, attitudes that infringe a person's dignity or regularity, and states that the working environment and moral harassment are small doses of violence, but very destructive.

Mobbing behaviors are long-term and systematic negative behaviors against a particular person in the workplace (Baykal, 2005: 1). Mobbing is done to strengthen its position and get rid of its competitors by applying moral pressure to employees or making them make mistakes. It has been defined as behaviors that break the human dignity and endanger the victim in all respects when exposed to one or more people at the workplace for a longer time (Zikic, Paunkovic & Baltazarevic, 2010).

There are three common elements in the definitions made for the concept of mobbing: The first is the effects of the action performed by the mobbing, regardless of the intent of the practitioner, on the victim. The second is the negativity of these effects, that is, whether they harm the victim. The third element is the persistent behavior of continuing the mobbing action. In other words, how often and how long the action is continued (Çobanoğlu, 2005, 22).

According to Gün (2010: 22), there are many factors to be considered in the definition of mobbing. These are as follows.

- Mobbing can be practiced by a single individual or by a group of people.
- The target may be one person or a group.
- The attack is carried out for various reasons.
- The attack is made directly to the victim, or it may be carried out secretly.
- Mobbing takes place in the workplace.
- The attack is systematic and continuous.
- The attack can be practiced verbally or non-verbally.
- The victim is negatively affected by psychologically.

Research shows that mobbing is a problem that affects almost all areas of human life, and it is not only an individual's problem, but also a great

loss in the labor market, health services and pension funds (Karsavuran, and Kaya, 2017; Yıldırım and Yıldırım, 2007). Due to the aggressive characteristic of mobbing behaviors, the victim is under constant high stress for a long time, resulting in increased negative emotions and various mental and physical disorders in the mobbing process (Leymann, 1990). The concepts of "mobbing" and "bullying" are confused with each other. Both show that the victim has been systematically mistreated and this has negative consequences for both the individual and the institution to which they belong. Unlike bullying, mobbing involves a more subtle, less physically expressed aggression instead of resorting to physical aggression. Therefore, in cases of bullying, the probability of punishing the abuser is higher than in cases of mobbing (Namie and Namie, 2003).

Mobbing can be classified as vertical and horizontal considering the victim and abuser. Vertical Mobbing aims to expose a subordinate to Mobbing by a superior and pursue a strategic goal. Strategic Mobbing, as a vertical Mobbing type, usually arises when both ideas are agreed to dismiss unwanted employees by senior management. In addition to those who are wanted to be fired, the unwanted employees are those who are considered not popular by the management level. Horizontal Mobbing is the activities among employees working in the same positions. The drive to perform hostile actions can be personal (not to like or envy) and a desire to eliminate his colleague and maintain his job or position. The punishment of the victim can be associated with a behavior that is not in line with the given cultural form (Baltazarević, 2007; Kostelić-Martic, 2005).

Heinz Leymann, observing 45 mobbing behaviors, categorized these behaviors under 5 headings: attacks on social image, communication, social relations, quality of professional and private position, and attacks on health. Leymann stated that it is not necessary to find all of these in every Mobbing behavior (1993: 33-34). The groups were identified as self-emphasis and influencing the formation of communication, attacks on social relationships, reputational attacks, attacks on the quality and professional status of the person, and direct attacks on one's health.

It is observed that for the first time, with the law enacted in Sweden in 1993, legal blocking efforts against Mobbing have started. Later, various studies were carried out in Scandinavian countries, and in 1994, legal sanctions were initiated against Mobbing in Norway. The USA, on the other hand, started to form a policy against Mobbing after 2000 (Gökçe, 2006: 33).

Business-related issues (extensive workloads, informal procedures, poorly organized working methods), failure of conflict management (managers' choices, managers' denial behaviors about the existence of conflict, managers' gender prejudices), personality traits of the victim are the main factors causing mobbing in organizations (Leymann, 1993).

1.4. Mobbing Process

A large number of definitions have been made and a model has been introduced regarding the formation process of mobbing behaviors. Mobbing is a process that starts with selecting the person as the target of disrespectful and harmful behavior. As a result of the mobbing process that started in the form of the hostility of a person or certain people to one or several people, the individual starts to become alienated first and then to the people around him.

Leymann's Four-Level Model, known as the Swedish-German Model, is the most well-known and most cited. According to this model of Leymann, conflict is at the first level and a triggering, critical event occurs at the first level. At the conflict level, the victim does not feel psychological or physical discomfort. The next level is the onset of mobbing in the workplace. At the second level, psychological harassment and attacks are expected to become continuous and systematic, and the behavior of the mobber becomes more frequent. Negative and bad behaviors towards the victim turn into aggressive behaviors that will affect the victim more, push the victim to be alone and punish them over time. The victim will begin to lose self-confidence and find their talents and achievements worthless. At the third level, the victim begins to lose health and needs health support. The realization of these negative relations by the organization management takes place at this level, but the reflection of wrong and unreal events to the management also starts in this period. management supports the mobber with negative attitudes towards the victim. Negative situations in the victim's health and psychology cause both the management and his colleagues to take an attitude and attitude towards him and not to support him. Negative comments are spread against the victim, and rarely does anyone but one or two colleagues support the victim. It is portrayed as a shame or a huge mistake for the victim to get psychiatric support. These misinterpretations cause the victims not to be interpreted as different, personality disorder and strange people than they are. The judgments and attitudes of the management due to misinformation and distortion of statements further depress the victim at this level. it is understood

that the victim's power ends as the fourth level is a level where the victim becomes alienated from the job and moves away from the job.

Harald Ege's six-level model is also known as the Italian model. According to Ege, Leymann's model was inadequate compared to Italian culture, so he adapted the Leyman's model to Italian society. Zero Situation and Double-Sided Mobbing cases were added in Ege's model. Even though the Zero State states that it is not a chosen victim, it is the increase of competition in the business environment and the absence of working peace. In the case of Double-Sided Mobbing, families get into problems. Victims share their problems and mobbing behaviors they are exposed to in order to get support from family and relatives. In time, instead of the support expected from the family, negative and variable attitudes of the family may be encountered and demoralizing and humiliating reactions may be expected from the family instead of family support. Instead of solving the victim's problems, the family may argue that the source of the problems is the victim and that there is no mobbing.

2. RELATIONSHIP BETWEEN ORGANIZATIONAL CULTURE AND MOBBING BEHAVIORS

The values of the employees, including the organization's structure, policies, procedures and perspectives on organizational goals, form the culture of that organization. Organizational culture can allow or filter mobbing behavior (Tambur & Vadi, 2012:754). If the organizational culture is believed to be functional in motivating employees, it can support offensive behavior by ignoring disrespectful behaviors and tolerance towards those who harm others and ignoring their unkind and rude behavior.

The relationships between organizational culture and employee structure determine the nature of mobbing behavior. Organizational culture and organizational justice are also negatively affected by organizations where mobbing takes place (Köse, 2010). Organizational culture affects behaviors between employees, interactions between employees and managers, and interactions between employees and patients (Erdem and Dikici, 2009). In organizations with a positive organizational culture and an open organizational climate, employees act with a strong sense of unity. In such organizations, human relations are at the desired level. The management policy of the manager ensures that the employees accomplish their duties and creates sufficient job satisfaction. In an open organizational climate, sincere relationships are created among employees, and there is a sense of social

support and organizational attachment. In closed organizational climates, the opposite features will occur. Factors such as the conflict between managers and employees, weak relationships, inadequate communication, and inadequate social support are among the characteristics of the weak and closed organizational climate (Özler et al., 2008: 352).

In organizations with an organizational culture that cares about the human element, the emergence, and experience of mobbing is difficult, but in organizational cultures that do not care about humanity, it is inevitable to experience mobbing (Konaklı, 2011: 24). It is believed that being weak in a relational sense in a workplace, lack of job security and chaos environment (without transparency, accountability, and appropriate rewards and guidelines) have serious effects on mobbing (O'Farrell and Nordstrom, 2013: 3; Rajalakshmi and Gomathi, 2016: 71).

Gün (2017) stated in his research that the bureaucratic organizational culture affects mobbing positively, but the innovative and supportive culture does not have an effect. Organizational factors consist of physical violence and psychological violence. On the other hand, physical violence can be experienced together with bad working conditions for culture and climate, stress and physical working environment. It is necessary to focus on leadership and management features for psychological violence.

It is emphasized that factors such as managers' failure to pay attention to employees, weak ethical values, lack of communication or weak communication, and excessive competition initiate and increase mobbing behaviors (Koç & Topaloğlu, 2010: 224). Generally, mobbing occurs in organizations that have management weaknesses or consider profitability, efficiency, and discipline as the top priority, where teamwork is not possible, communication channels are closed, and conflicts are ignored. It is not possible to deny the effect of organizational culture on mobbing. Ultimately, if the norms and values within the organization set the ground for the initiation and development of mobbing, organizational culture in time provides tolerance for mobbing and mobbing can become an organizational disease.

Hoftstede (1980) associates mobbing trends that differ from culture to culture with the power distance dimension. Power distance shows how the power factor is distributed in a society. In societies where the power distance is low, strong and weak are equal, and there is equality between individuals, and there is harmony between strong and weak. In societies with high power distances, power-related inequality is high and this inequality is seen as a

normal phenomenon. In societies with high power distances, weak individuals work dependent on strong individuals. This situation may cause conflict between strong and weak (Hoftstede, 1980: 5).

In the literature, it can be said that many studies focusing on the relationship between mobbing and organizational culture, which significantly affect the performance and productivity of healthcare workers.

2.1. Creating Organizational Culture Against Mobbing Behaviors

Organization founders have an important place in the formation of organizational culture. Since the founders of the organization are not limited by previous philosophies and ideologies, they will create a new organizational structure with their values and beliefs. The founder (s) of the organization also creates the culture of the organization, and the organization transforms into the image that its founder wants, reflecting his values, the issues he primarily cares about, and his vision.

The effect of the external environment on organizational culture is in different ways according to each organization. While this effect is higher in organizations with intensive relations with the external environment, this effect is lower in those with low external relations. An organization that has an open system and has to engage with its environment, whether its relationship is intensive or small, is affected both by the cultural characteristics of the environment and culturally. The constant change in its environment and the presence of different elements necessitate a continuous change in a dynamic organization (Genç, 1993: 30).

In the early years of the organization, although the founder had a lot of influence on organizational culture, other factors that shape the culture are also effective. The organization's dependence on customers or external actors influences the organization in the formation of a culture that they learn from their own experience and other limitations and the relationships among employees. Particularly, the contribution of employees to the formation of organizational culture is a requirement of a participatory management approach; it is a well-known fact that participation positively affects employee motivation and performance. The organizational culture formed within the framework of the working principles, in which the goals and objectives set by the visionary managers together with the employees, and the duties and responsibilities are determined very well, transforms into the lifestyle of each employee over time and creates a constantly breathing atmosphere within the

organization. The development of the organizational culture is the result of the collective living of the employees.

2.2. Changing Organizational Culture That Allows Mobbing

In many organizations, an organizational culture in which bad events, habits, and behaviors are experienced frequently and accepted by the management level may need to be changed over time. By changing the attitudes and behaviors of the members of the organization, the purpose, structure, process, and atmosphere of the organization, namely the organizational culture, can be changed. An experienced and dominant manager can make an appropriate diagnosis of the current state of the organization's culture and subcultures. Many types of changes are possible: subject changes; There may be changes such as closing departments, opening new departments, relocating individuals or groups. Although these basic cultural values are difficult to change, they can work. Process change; There may be changes such as new procedures, new control mechanisms, automation, new ways of communication. Especially in the public sector, most activities whose outputs can be easily identified are still checked for inputs (for traditional budget reasons). In personnel exchange, culture can be changed by introducing new heroes.

Experiencing mobbing in an organization and constantly encountering mobbing events reduce the trust in the organization. Without trust, there is no harmony and cooperation between the personnel and managers of the organization, and the strong element of trust cannot be neglected while doing business (Akkaya, 2020:309).

CONCLUSION

Thanks to Organizational Culture, those who work in the organization learn what is good and bad for themselves and their organizations, what is aimed and what is not, what should or should not be done. In addition, these organizational values that employees learn are a source of motivation for themselves, as well as a roadmap for the organization's goals, policies, strategies and actions. In this context, the continuity of the success of organizations depends on the creation of an effective organizational culture in the creation of organizational values.

If the culture supports the organizational goals, is shared and adopted by the members, it makes a positive contribution to the effectiveness and profitability of the organization.

However, in the opposite case, if the culture is widely spread and adopted, if it does not coincide with the goals of the organization, it has a negative effect on organizational effectiveness. This can make the complex structure even more complex. It is possible for an organizational culture to motivate employees and increase organizational and managerial efficiency directly by the members' learning and implementation of organizational values.

Employees can learn organizational culture only by observing what is valued most in an organization, what managers pay attention to and whom they reward, the behavior and attitudes of managers, how managers react during the crisis in the organization, and whether the managers' own behaviors are in harmony with the values set forth.

Mobbers have narcissistic, sadistic and hostile personality traits. The personality traits of all members within the organization should not be bad personality traits and selfish and unemotional. All members of the organization, who have regular and harmonious relations with each other, make significant contributions to the future of organizational culture. If mobbing is frequently experienced in an organization, a good, regular and established organizational culture cannot be mentioned in that organization.

As a result, a few suggestions can be made about these two concepts, which are still very important and current today. Organizations should clearly define and reveal their vision and mission by emphasizing their opposition to mobbing. Organizational culture should be created in a way that does not allow mobbing. Roles and responsibilities in the organization should be clearly defined. The organization should have ethical principles and people should be valued. Disciplinary rules must be applied fairly.

REFERENCES

Akkaya, B. (2020). Linking Organizational Commitment and Organizational Trust in Health Care Organizations, Organizacija, Vol. 53, Issue. 4,

Baltazarević, V. (2007). I want to know what is mobbing. Monograph. p. 40. Belgrade.

Baykal, A., N., (2005). Yutucu Rekabet Kanuni Devrindeki Mobbing'den Günümüze, Sistem Yayıncılık, İstanbul.

Cameron, K. S. ve Quinn, R. E. (2011). Diagnosing and Changing Organizational Culture: Based on the Competing Values Framework, John Wiley & Sons.

Çobanoğlu, Ş., (2005). Mobbing işyerinde duygusal saldırı ve mücadele yöntemleri, Timaş Yayınları, İstanbul

Danışman, A., & Özgen, H., (2003). Örgüt kültürü çalişmalarinda yöntem tartişmasi: niteliksel-niceliksel yöntem ikileminde niceliksel ölçümler ve bir ölçek önerisi, Yönetim Araştırmaları Dergisi, Vol. 3, issue. 2, p. 91-124

Day R. D. (2014). Leading and Managing People in the Dynamic Organization. London: Psychology Press.

Duncan, W. J. (1989). Organizational culture: getting a fix on an elusive concept. The Academy of Management Executive, 11, p. 229-236.

England, G. W. (1983). Japanese and American management theory z and beyond. Journal of International Business Studies (Pre-1986), 14(000002), 131.

Erdem O. & Dikici A.M. (2009). Leadership and influence organizational culture. Electronic Journal of Social Sciences Vol. 8, issue. 29, p. 198-213.

Ege, Harald. (2000). İşyerinde mobbing davranışında zamanın rolü: bir italyan araştırması. Uluslararası Psikoloji Dergisi, (35 ek SI, no.3-4) p. 203.

Genç, N. (1993). Örgüt kültürünün oluşumu ve bireysel ve örgütsel davranışlar üzerindeki etkisi. Atatürk Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi, Vol. 10, No. 1-2, 299-304.

Gökçe, A.T. (2006). İşyerinde yıldırma: özel ve ilköğretim okulu öğretmen ve yöneticileri üzerinde yapılan bir araştırma, Yayınlanmamış Doktora Tezi, Ankara Üniversitesi Eğitim Bilimleri Enstitüsü, Ankara.

Gül, G. (2017). Örgüt kültürü tiplerinin mobbinge etkisinde lider-üye etkileşiminin aracılık rolü, International Journal of Social Science, Number: 62, s. 361-377,

Gün, H. (2010). Çalışma Ortamında Psikolojik Taciz Mobbing/Bulliying, İş Yeri Sendromu, Lazer Yayıncılık, 2. Baskı, Ankara

Hofstede, G. (1983). A Research-Based Theory of Cultural Differences among Nations, International Studies of Management and Organization, Vol. 13, No. 1–2, p. 46–74.

Hofstede, G. (1997), Cultures and Organizations: Software of the Mind, McGraw-Hill, New York, NY.

Hofstede, G. (2000). Organizational Culture: Siren or Sea Cow? A Reply to Dianne Lewis, Strategic Change, Vol. 9, No. 2, p. 135-137.

Hirigoyen M.F. (2003). Molestowanie w pracy. Wyd. W Drodze, Poznań,

Karcıoğlu, F. & Akbaş, S. (2010). Association between mobbing at workplace and job satisfaction. Ataturk University Journal of Economics & Administrative Sciences, Vol. 24, No. 3, 139-161.

Karsavuran, S. and Kaya, S. (2017). The relationship between burnout and mobbing among hospital managers. Nursing Ethics, Vol. 24, No. 3, p. 337-348.

Konaklı, T. (2011). Üniversitelerde Mobbing ve Kültürel Değerlerin Mobbing İle Başa Çıkma Yaklaşımlarına Etkisi, Yayınlanmamış Doktora Tezi, Kocaeli: Kocaeli Üniversitesi Sosyal Bilimler Enstitüsü.

Kostelić-Martic, A. (2005). Mobbing psychological harassment in the workplace. Types of mobbing. p. 16-19. School books, Zagreb.

Koç, H., & Topaloğlu, M., (2010). Yönetim Bilimi, Seçkin Yayıncılık, Ankara.

Köker, A. R. (2021). Sosyal ağlar ve örgütsel değişim ilişkisinde olumsuz bağlarin etkisi, Global Journal of Economics and Business Studies, Vol. 10, Sayı. 19, pp. 95-109

Köse, E. (2010). Bir üniversite hastanesinde hekim ve hemşirelerin algiladiklari örgüt kültürünün mobbing davranışlarına etkisi (In a University Hospital, the Effect of the Doctors and Nurses Perception of Organisation Culture on Mobbing Behaviour). Graduate Thesis, Gazi University, Ankara, Turkey

Leymann, H. (1990). Mobbing and psychological terror at workplace. Violence Vict, Vol. 5, No. 2, p. 119-126.

Leymann, H., (1993). Mobbing-physiccoterror at work and how one can defend oneself, Rowohlt Reinbeck. Hamburg. pp.34-35.

Leymann, H. (1996). The content and development of mobbing at work. European Journal of Work and Organizational Psychology, 5 (2).

Namie, Gary and Ruth, Namie, (2003). The bully at work, Sourcebooks, Inc., Illinois.

O'Farrell, C. ve Nordstrom, C. R. (2013). Workplace bullying: examining self-monitoring and organizational culture. Journal of Psychological Issues in Organizational Culture, Vol. 3, No. 4, pp. 6-17.

Ott, J. S. (1989). The Organizational culture perspective. Pacific Grove, California: Brooks/Cole Publishing

Ouchi, W. G. ve Wilkins, A. L. (1985), Organizational Culture, Annual Review of Sociology, 11, pp. 457-483.

Ozankaya, Ö. (1983), Davranış Bilimlerine Giriş, 2. Baskı, AÜ Yay. No. 18, Ankara

Özler, D. E., Atalay, C. G. & Şahin, M. D. (2008). Mobbing'in örgütsel bağlılık üzerine etkisini belirlemeye yönelik bir araştırma. Dumlupınar Üniversitesi Sosyal Bilimler Dergisi, Issue. 22.

Parekh, B. (2000). Rethinking Multiculturalism: Cultural Diversity and Political Theory. Harvard: Harvard University Press.

Rajalakshmi, M. & Gomathi, S. (2016). Relationship between workplace bullying and organisational culture, Global Management Review, Vol. 10, No. 2, pp. 71-82

Robbins, S. P. (2000). Essentials of Organizational Behavior (6th ed.). Upper Saddle River, NJ Prentice-Hall.

Sabuncuoğlu, Z., & Tüz, M. (1996). Örgütsel Psikoloji, Ezgi Yayınları, Bursa.

Scholl, R. W. (1981). Differentiating commitment from expectancy as a motivating force. Academy of Management Review, 6, p. 588-599

Schein E. H. (2010). Organizational Culture and Leadership. New Yersey: John Wiley & Sons.

Schein, E. (1984). Coming to a new awareness of organizational culture. Sloan Management Review, 25, 3e16.

Sødergaard, M. (1996). Hofstede's consequences: a study of reviews, citations and replications, Organization Studies, 15, pp. 447-56

Tambur, M. & Vadi, M., (2012). Workplace bullying and organizational culture in a post transitional country, International Journal of Manpower, Vol. 33, No: 7.

Trompenaars, F. ve Hampden-Turner, C. (1993). The Seven Cultures of Capitalism: Value, Systems for Creating Wealth in the United States, Britain, Japan, Germany, France, Sweden, and the Netherlands, Doubleday Publishing, London.

Van den Berg, P. T., & Wilderom, C. P. M. (2004). Defining, Measuring, and Comparing Organisational Cultures. Applied psychology, Vol. 53, No. 4, pp. 570-582.

Yıldırım, A. and Yıldırım, D. (2007). Mobbing in the workplace by peers and managers: Mobbing experienced by nurses working in healthcare facilities in Turkey and its effect on nurses. Journal of Clinical Nursing, Vol. 16, No. 8, pp. 1444-1453.

Zapf, D. (1999). Organisational, work group related and personal causes of mobbing/bullying at work. International journal of manpower. International Journal of Manpower, Vol. 20, No. 1/2, pp. 70-85

Zapf, D. & Osterwalder, P. (1998), Organisational Causes of Workplace Harassment, Department of Psychology, J. W. Goethe-University Frankfurt.

Zikic S., Paunkovic J,, & Baltazarevic V. (2010). Mobbing - psychological abuse at work. Proceedings. The first annual conference of the Victimology Society of Serbia - Victims' rights and the EU. Belgrade, 11 - 12 November. p. 34-35.

CHAPTER 2
AN INVESTIGATION OF THE TRANSFORMATION FROM PERSONNEL MANAGEMENT TO HUMAN RESOURCES MANAGEMENT IN TERMS OF LOCAL ADMINISTRATIONS

Ali YEŞİLDAL[1]

[1] Kocaeli Büyükşehir Belediyesi, Kocaeli, Türkiye. ayesildal41@gmail.com. Orcid ID: 0000-0003-0927-7498

INTRODUCTION

Although the concept of human resources management is relatively new, it is one of the most discussed and constantly evolving concepts today. This approach, which considers the "labor" factor as the most valuable asset of production, aims to increase both job and life satisfaction levels by seeking to increase overall productivity levels.

Although the foundations of today's understanding of production were laid with the Industrial Revolution, the emergence of the understanding of human resources management coincides with the middle of the twentieth century, which is a much later date. While the practices aimed at increasing productivity were previously thought to be related to the physical conditions in factories and workshops, in the following years, the idea that the social and psychological conditions of the employees are also effective on productivity with even greater extent has become widespread. We see that the first studies on this subject started in the United States at the end of the 1920s, and then it quickly influenced the whole world. However, it would be a correct approach to say that the real progress was made after the 1980s.

Factors such as the transformation in production models in the 1970s, the rapid replacement of blue-collar workers with white-collar workers, the rise of the services sector as the manufacturing sector lost importance, and changing customer demands forced organizations to change, and this change also affected the employees and the perspectives of the organizations towards their employees. We see that the prevailing understanding until this period was "personnel management". But the fact that the personnel management, which is perceived as organizing and reporting personnel transactions of employees with a classical understanding had inadequate and limited effects on issues such as productivity increase and employee satisfaction revealed new searches. The inadequacy of the understanding of personnel management, which we can accept as a set of bureaucratic procedures, in terms of employee development is one of the factors that strengthen the understanding of human resources management.

Unlike personnel management and beyond being a set of bureaucratic procedures, perhaps the most distinctive feature of human resources management is that it is a function of management. In terms of the management and development of organizations, human resources

management includes not only keeping and reporting records about the working personnel, but also planning, developing and making ready the current and future human resource needs in coordination with the other management functions of the organization.

From this point of view, human resources management has a pro-active approach. Human resources management, which aims to support all the other functions of the organization with a solution-oriented approach, by doing the necessary work before the problems arise, in solving the problems related to human resources and meeting the needs, has an indispensable place for all successful organizations today.

Human resources management, which has different functions within itself, should not be understood as merely selecting the right personnel for the right job. As mentioned, the functions of human resources management, which is an approach far beyond this understanding, begin before the personnel selection stage and continue even after the relationship between the personnel and the organization ends. Human resources management, which has functions such as job analysis, planning, selection and placement, orientation, performance management, training and development, acts as a bridge between the employees and the organization at every stage of their careers and contributes to the development of both the organization and the development of the employee by acting with the principle that the productivity of organizations depends on their employees.

In this framework, although human resources management has various functions within itself, it should be examined with a holistic approach. It should also be noted that these functions are interconnected like links of a chain.

1. HUMAN RESOURCES MANAGEMENT APPROACH AND ITS CONCEPTUAL DİMENSİON

Although there is a number of similar definitions of human resources management in the literature, these definitions differ from each other in terms of sectoral, economic and regional factors. Another important point that draws attention in definitions is that they are mostly made in comparison with "personnel management". The need for such a comparison is that human resources management is generally accepted as an approach that complements

and then replaces the personnel management approach. However, on our part, such an approach is not correct necessarily. As many researchers agree, human resource management is a completely different, more dynamic and solution-oriented approach than personnel management.

In order to reveal the differences between human resources management and personnel management, both concepts should be defined first. Personnel management approach is the process of "planning, coordinating, supervising and reporting the employee element in an organization as a result of the activities" (Kaya and Taş, 2015: 22). According to another definition, personnel management is "the understanding that is responsible for the routine works related to the employees within the organization, keeping the files of the employees, making the necessary reports and presenting them to the senior management" (Okakın and Şakar, 2015: 1). As the definitions indicate, personnel management includes following and reporting the developments related to the employees by staying in a more bureaucratic structure in terms of understanding. However, human resources management is much broader in terms of both definition and application. Contrary to personnel management, human resources management does not see people only as a factor of production (labor), but rather as the most important resource that needs to be invested (Güler, 2006: 17-18).

Examining the definitions, we see that human resources management is defined in different ways, although they are close to each other. According to one definition, human resources management is "the process of effectively managing the human factor within the framework of applicable laws, in a way that will be beneficial to the institution, the business environment and the employee himself" (Köksal, 2005: 2). Bingöl (2006: 6) defines human resources management with a simpler approach as "the process of using human resources efficiently and effectively in the process of meeting the personal wishes and needs of the employees by reaching the strategic goals targeted by the organization". Sabuncuoğlu (2012: 5), showing a more holistic approach in his definition, defines human resources management as "all the functions that aim to increase the efficiency and performance of both managers and lower-level employees in the organization, employment, training and development activities". Yüksel (2004: 9) defines the concept as “by carrying out various studies to provide the necessary human resources in

order to create various advantages in a competitive way within the organization and to develop them by placing them in a job planning, organizing, controlling and directing activities".

As can be understood from the definitions, human resources management is concerned with the development of employees and the sustainability of this development compared to personnel management. From this point of view, it is possible to say that human resources management deals with the developments related to both the organization and the employees with a longer-term projection. To make a comparison between both approaches, following points must be highlighted (Dolgun, 2007: 9-13):

• Personnel management approach is only employee-oriented. Therefore, it only deals with the routine work of the employees. However, the understanding of human resources management has a more holistic structure. It is concerned with the effective and coordinated use of all resources within the organization, not just with employees.

• Personnel management approach is far from being a management function. As an intermediate function, the criterion of success is whether the pre-planned implementations reach the target. However, human resource management is a function of the management approach and the success criterion is the overall success of the organization.

• Another important difference between the two approaches shows itself in their philosophy. Personnel management has a business-centered perspective and may not take into account the wishes and needs of employees within the framework of organizational interests. However, human resources management approach takes the employees to the center of the company and closely monitors every issue related to the employees.

• Employees are a cost element for personnel management, but human resources management does not see employees as a cost element, on the contrary, employees are an investment element for the future of the organization and they need to be developed.

• Personnel management gives priority to short-term work within a hierarchical structure with a bureaucratic approach; human resources management focuses on longer-term and strategic planning.

• Personnel management deals with the financial and legal transactions between the employees and the organization in the internal environment of the

organization, and the relations between the organization and other organizations in the external environment. From this point of view, personnel management is one of the sub-elements of human resources management.

As seen clearly, human resources management has a wider perspective than personnel management, both in scope and philosophy. From this point of view, it would not be correct to assert that the understanding of human resources management is a continuation or an updated version of personnel management.

The main purpose of human resources management is to increase productivity and efficiency by providing coordination between all functions within the organization. Okakın and Şakar (2015: 3-4) classify the aims and objectives of human resources management as follows:

• Organizational Goals: The human resources management approach primarily aims to achieve the goals of the organization it is in. Therefore, it is necessary to ensure that all functions within the organization act in line with a common goal.

• Functional Goals: Human resources management should be suitable for the organization it is in. It must be in harmony with other functions of the organization. It should also be neither too simple nor too complex system.

• Goals for Employees: Individual goals of employees are as important as the goals of the organization and employees should be given the opportunity to realize their personal goals. The aim of human resource management is to harmonize the individual goals of the employees with the goals of the organization.

• Objectives for the External Environment (Society): Preserving the image of the organization is a crucially important issue. It is also one of the goals of human resources management to combat incidences and phenomena that may limit or develop against the organization.

2. THE CONCEPT OF LOCAL GOVERNMENT

In terms of public administration and political science, one of the most discussed and commented concepts is the concept of local government. Discussions on local government are not only theoretical, but also the differences in practice are the focus of discussions. Discussions between developing and increasing the services offered to the local people and sharing

the powers of the central government sometimes focus on autonomy and sometimes on the control authority of the central government.

All borders under the sovereignty of the central state are not in an orderly structure. This dispersed structure spreads from cities, towns and villages to sub-districts geographically within itself. Some of the needs of the citizens, who live in this dispersed structure, such as clean water, garbage collection and sewage works, must also be met. As it is understood well that meeting these needs in a timely and effective manner is not possible through only the efforts of central government, local government organizations began to be established although they were dependent on the central government.

Local governments are formed to provide services to the local people living in a geographically defined area, on various issues they need, and also the decision mechanisms are determined by the local people through elections. In addition, they are public legal entities that have legally defined powers, duties, responsibilities and economic incomes, and have their own professional staff and budget. In addition, these public legal entities have a unique organizational structure, and they also have some autonomous administrative features in terms of their relations with the central government (Öztop, 2017: 7-9). In the definition, some features such as autonomy, authority, economic and financial resources, budget and personnel come to the fore particularly.

The definitions made for the concept of local government in the literature generally show similar features. In this context, it would be a more correct approach to examine the needs of local governments instead of focusing on the differences between definitions. In this regard, Nadaroğlu (2001: 3-6) underlines the waste of resources and time, and expresses the various difficulties of trying to provide some services that should be provided locally by central administrations. This understanding is also included in the fact that local governments are organized in a different way from central governments. However, it would be an incomplete perspective to state that the only reason for establishing local governments is to avoid from the waste of time and resources. To approach the subject from a historical perspective, it is seen that local governments play an important role in both the emergence and the development of democracy in western and developed societies. Local governments are indispensable elements in strengthening individual freedoms,

transferring power from the central state to local units, and bringing equality and participation, which form the basis of democracy, to life at the local level. At the same time, it is another noteworthy issue that local governments are like a school in terms of politics, especially that politicians increase their experience by making policies at the local level, and then they prepare for politics at the national level (Eryılmaz, 2015: 118-121, Köseoğlu, 2013: 371-373).

3. HUMAN RESOURCES MANAGEMENT APPROACH IN LOCAL GOVERNMENTS

Local governments are the closest public administration units to the citizens. This gives them the opportunity to quickly identify the demands and needs of the people and to deliver the most appropriate services. Therefore, local governments are critical institutions that have direct effects on the quality of life and social welfare of citizens. It is only possible for local governments to fulfill this critical role properly if they have a qualified human resource.

The direct link between the quality and efficiency of the human resource and the quality of the service provided has been clearly recognized in recent years. For this reason, many human resources management functions that we were accustomed to seeing mostly in private sector enterprises have now started to become widespread in local governments as well. In this context, local governments first tried to replace traditional personnel management practices with modern human resources management strategies. Since it is now clearly understood that the most important asset of a local government is its human resources, human resources departments have risen to an extremely important place in the institutional structuring of local governments.

Today, the public sector in many countries has moved from traditional personnel management understanding to contemporary human resources management principles. This shift in the public sector essentially means a shift from a strict "rule-based" practice culture to a more flexible "performance-based" culture (Shim 2001). This transition process actually occurred as part of a comprehensive program of administrative restructuring and reform. As a matter of fact, it is argued that higher efficiency

management goals can be achieved with effective human resources practices, which are possible by adopting human resources management principles (Kramar 1986). In line with this view, within the framework of the adoption of the New Public Management approach in many countries, public administrators are more flexible and sensitive in the recruitment and selection of public sector employees as well as in retaining, training and developing qualified human resources in their institution.

The public sector has developed a different approach to human resources management than the private sector over time, and has included many innovations that give employees important rights. In this process, the public sector was perceived as a model employer and service provision came to the fore in employment reform and innovation. The model employer concept encompassed the principles of best practice and began to set an example for the private sector in providing good conditions of public service, including fair treatment of employees, higher job security, more humane leave entitlements and more generous retirement benefits (Black and Upchurch 1999: 506).

In the traditional model of the public sector, there is a bureaucratic employment policy in general and the existence of Weberian practices identified with the principles of rational action governed by strict rules. The management system within this structure is naturally based on the execution of decisions and actions within the framework of predefined rules and processes, and on the continuous re-bureaucratization of procedures in order to highlight the formalized and systematized dimension. (Schroeder 1992).

The implementation of the New Public Management approach, which gives importance and priority to the transfer of private sector management techniques to the public sector, has shifted the emphasis in the public sector from management to human resources and has become part of a much broader strategy to achieve efficiency, effectiveness and service quality. Changes have been made in the public sector in response to the need to reduce public spending, provide more efficient services, and reduce the scope and access of government-approved public goods and services (Weller 1996: 2). Elements of the New Public Management approach include much more contemporary and flexible practices and processes such as results management, performance

measurement, corporate planning, delegation of authority, decentralization of activities and risk management.

In the light of all these principles and processes, public sector human resource management is characterized by the creation of more flexible structures and processes, the abolition of heavily centralized institutions, the consistency of rules throughout the services provided, and the assignment of more responsibility to department managers and supervisors in the management of employees through more horizontal management structures and programs. Therefore, public sector human resources management is a revolution in terms of decentralization and delegation of authority (Gardner 1993; Gardner and Palmer 1997; Shim 2001).

In this new process, the concept of human resources, which has the capacity to achieve higher performance results in line with the strategic direction of the public sector, was introduced with more emphasis on performance and output measures (Gardner and Palmer 1997). With this orientation, emphasis was placed on securing and retaining personnel who could achieve the desired results, and performance management was considered the basis for workforce flexibility and productivity.

However, this new system has also faced some criticism from certain aspects. First, it has been argued that the downsizing and fragmentation of businesses reduces the quality of service and weakens some of the practices and conditions that traditionally separate the private interest and non-profit public sector from other organizations in the market. In addition, it has been argued that adopting New Public Management practices and principles may mean the trivialization of employee benefits and wages, widespread staff reduction, and weakening of organizational culture and structure (Black and Upchurch 1999).

The changing dimensions of public sector employment show that human resource management has a major impact on the functioning of the public sector. Human resource management's contribution to understanding the constituent elements of the "new" public sector is extremely important. Multi-level, restructured career lines, reduced seniority impact for promotion, greater emphasis on equality issues, and the weakening of rigid employment categories have been some of the benefits of moving from personnel management to human resource management in the public sector (Brown,

1997). New concerns about new trends and approaches to human resource management in the public sector focus on the organizational implications of ever-increasing levels of technology, changes in population patterns affecting labor markets, and new demands for management leadership. Among the areas where human resources concerns and challenges arise in the public sector, highly innovative information technologies, including human resources information systems, the importance of understanding the effects of demographic trends such as the aging population, the development of leadership positions rather than simple management, and the continuous increase of workforce capacity are the most prominent ones. (Shim 2001).

This change in administrative logic, which occurred throughout the public sector, inevitably included local governments as well. Local governments naturally have direct and immediate influence and contact with the citizens they serve. The way local government organizations innovate and develop themselves in administrative matters also determines their impact on local economic and social development. As it is known, local governments are responsible for the provision and maintenance of basic public services at the local level. For this reason, the ability of local governments to reform and change, especially their ability to adapt to new developments in administrative matters, is at the center of long-term community success. Many local governments today go far beyond the mandatory and formal processes of regulating community life in dealing with their citizens (Leach and Davis, 1996). A number of research conducted within the scope of innovation and creativity in the workplace, by showing a holistic approach to the subject, put the developments in the field of human resources management, including the transition processes of local governments from classical personnel management to human resources management into the center of discussion (West and Farr 1990). In summary, a common point in these studies is the claim that the resistance to innovation and change in local governments or the inability to transfer them to the administrative field increases the possibility of experiencing efficiency and effectiveness problems.

In general, it is clear that human resource management is one of the most effective tools for modernizing and reforming the public sector (Pollit and Bouckaert 2004: 67; Boyne 2003). The main reason for this is that human resource management provides many benefits and conveniences to institutions

and managers in adapting to the ever-changing nature of the dynamic personnel management process. Because with the contribution of a successful human resources management, local governments that provide public services will become stronger, more functional and more effective in terms of performance (Ingraham 2007; Pollit and Bouckaert 2004: 74; Selden 2009: 179; Maddock 2002; Carmeli and Schaubroeck 2005).

Most recent research has focused on the changing nature of human resources in modern public sector management (Harris 2002; Truss 2009). A common point in almost all of these studies is that they emphasize the necessity of establishing an effective partnership structure between human resources and public service in the reform and modernization process of public service institutions (Bach and Kessler, 2006; Teo and Rodwell 2007). One of the main purposes of this emphasis is to establish a strategy-based public administration approach that is consistent with the best strategic human resource management approach of the link between human resource management and organizational change and reform interventions aimed at improving public service delivery.

As long as local governments can implement a sustainable human resource management system, they can gain invaluable organizational and institutional gains in the form of increased efficiency and productivity in public services. At the same time, it is assumed that the sum of the key strategic human resources management elements such as individual knowledge, willingness to serve and be useful, and dedication to creating value strengthens the value and contribution of human resources to local government (Selden 2009: 13; Ployhart). et al. 2009; Carmeli and Schaubroeck 2005).

Despite all these benefits, the spread of human resource management practices across local governments has been relatively recent. Before that, although the area was mostly named as personnel management, similar practices were also implemented under different headings. The issue of which title to use resulted from the change in social and economic activities. In this sense, it is seen that the expression of industrial welfare is the first form of human resource management.

The term personnel management, which emerged in the 1920s, is largely concerned with technical tasks such as recruiting employees,

evaluating their performance, training and compensation, and constituted a large part of the "personnel" function in most organizations. Human resources management, on the other hand, has developed as a response to competitive pressures that have begun to be felt intensely in public and private sector organizations as a result of developments such as globalization, deregulation and rapid technological change. Increasing pressures prompted organizations to develop strategic plans, and local governments were inevitably affected by this process. While private sector enterprises have handled this process in the context of foreseeing possible future changes in external environmental conditions such as the nature and level of the market and preparing the relevant units within their bodies for these, local governments are responsible for determining the public services that citizens need and their level of need and duration in the most accurate way (Binsted, 1980).

On the other hand, since human resources management is a wide field and has many sub-components, it may not always be possible to implement it with all its elements within the scope of local governments. This means that some of the sub-components and functions of the human resource management process are implemented more intensively in local governments and even subject to a certain adaptation process from time to time. To put it more clearly, although the literature on the subject suggests the strategic human resources approach in the same way for local governments as well as private sector organizations (Ulrich 1998; Truss 2009), the degree of application and effectiveness of this approach in local government institutions providing public services is a separate issue. As a matter of fact, the findings on this subject show that human resource management-based reforms have more complex and partially contradictory effects, and therefore it is not possible to talk about a universal and uniform effect. To give an example, although the roles and responsibilities of human resources management units in local governments are generally defined as administrative, their effectiveness is often limited due to the lack of resources they encounter and not being sufficiently included in organizational decision-making processes (Harris 2002; Auluck 2006; Jaconelli and Sheffield 2000). . For this reason, it is often advocated to make human resources units more strategic. In this case, it is claimed that the independent and professional work opportunity and operational efficiency of the human resources units will become much more

valuable and effective when the human resources responsibilities are distributed to the line managements and the authority is delegated in some way. However, it has not been proven with sufficient number of studies that the participation of senior human resources unit managers in strategic decision-making processes has a greater impact on the results of internal strategic integration and human resource management activities (Truss 2009; Teo and Rodwell 2007).

For this reason, in order to reach a conclusion about the importance and place of human resources management processes in local governments, logical models that will reveal the internal relationship networks, the level of pressure from the top down and the bottom up, the dynamic structure of the human resources system being applied, and most importantly, the capacity building potential in public service delivery are needed. Such a study is naturally a work that should be done for each local government institution seperately.

CONCLUSION

Working life in all societies is a network of relations determined by global, social, technological, demographic, political, economic and cultural conditions. Naturally, the changes that occur in these conditions will also change the working relations and, therefore, all institutions, whether in the private or public sector, at the central or local level, will have to keep up with these changes. Strategic human resources management is the way to reshape institutions and keep up with these transformations.

Therefore, it is certain that an organization's human resource is its most valuable and most distinctive asset. The more qualified the human resource is, the more open it is to learning and development, and the higher the motivation to make a difference in what it does, the stronger and more successful an institution is. Realizing this fact, public and private sector institutions and organizations attach more importance to human resources units and invest continuously in human resources.

The issue of correct evaluation of human resources is a relatively more urgent requirement for local governments because they are the units of the state that directly contact the citizens and the representative of the central authority before the citizens. The rapid transformation of local governments

has made it necessary to strengthen the employees with the necessary competencies to meet the ever-increasing and diversifying demands of citizens. The clear expression of this is that existing human resources should be well managed. However, as seen in many local government examples, the development of human resources may not be at the desired level. However, the development of human resources is an essential component of human resource management. Local governments will expand their potential to serve citizens efficiently and effectively, thanks to the effective management of their human resources development activities and processes.

Although there are many reasons why all local government institutions, without exception, cannot give the necessary importance and value to human resources and human resources management practices, one of the most effective reasons is the scale of the local government. In this context, it is much more likely that small-scale local governments will implement traditional human resources functions. Traditional human resource systems place emphasis on administrative responsibilities with less emphasis on long-term goals and results. Here, the main purpose of the human resources department is to comply with regulatory reporting obligations and to provide basic services such as recruitment, operational training, benefits coordination to the rest of the organization and its personnel. Local governments that use traditional human resources are likely to have human resources with limited vocational training, and these people tend to follow the will of mayors or councils without questioning them, hesitating to convey constructive ideas.

These systems typically lack vision of the future. In such organizations, a culture is often entrenched in which staff continue to follow instructions given from above, "always doing what they do best," that is, without taking any risks and challenging themselves. However, it is actually possible and easy to change this ineffective and inefficient working culture. In other words, these institutions that implement traditional human resources systems are excellent candidates for transitioning to progressive and strategic human resources systems. Not only does it require a definite will and foresight to move in this direction, it also involves some difficulties in certain respects. Because the shortest way to reach progressive and modern human resources processes requires outsourcing many human resources administrative and operational responsibilities.

After the key role of local governments in creating a healthy and cohesive society was clearly understood, politicians and theorists began to pay much more attention to industrial relations in local governments because meeting the ever-changing and diversifying demands and expectations of citizens in the most efficient way is only possible with the help of local government institutions that operate correctly and smoothly. The successful and efficient operation of local governments can only be achieved with a correct and qualified human resources management. In short, experts and politicians have definitely realized that the way to success in the missions undertaken by local governments is possible with a well-functioning human resource.

For this reason, it is essential to establish a structure based on a culture of innovation in order for local government institutions to operate effectively and be successful in ever-changing environments. In fact, local government institutions are available for such a structure by origin. Because, in general, the current situation of public personnel management is full of reform ideas and practices. As central and local public institutions move from a classic "public service" to a "human resources" paradigm, the adoption of innovative personnel practices becomes increasingly critical.

REFERENCES

Auluck, R. K. (2006). The Human Resource Development Function: the Ambiguity of Its Status within the UK Public Service. *International Review of Administrative Sciences,* 72(1), 27-41.

Bach, S. and Kessler, I. (2007). HRM and the New Public Management. Peter Boxall, John Purcell, and Patrick M. Wright (Eds.), *The Oxford Handbook of Human Resource Management* (s. 469-488). Oxford University Press.

Bingöl, D. (2006). *İnsan Kaynakları Yönetimi (*6. Baskı). Arıkan Yayınlar.

Binsted, D. (1980). Design for Learning in Management Training and Development: A View. *Journal of European Industrial Training,* 4(8), 2-32.

Black, J. and Upchurch, M. (1999). Public Sector Employment. G. Hollinshead, P. Nicholls, and S. Tailby (Eds.), *Employee Relations*. Financial Times Management.

Boyne, G. A. (2003). Sources of Public Service Improvement: a Critical Review and Research Agenda. *Journal of Public Administration Research and Theory,* 13(3), 367-394.

Brown, K. (1997). Evaluating Equity Outcomes in State Public Sectors: A Comparison of Three Housing Agencies. *Australian Journal of Public Administration,* 56(4), 57-66.

Carmeli, A. and John S. (2005). How Leveraging Human Resource Capital with Its Competitive Distinctiveness Enhances the Performance of Commercial and Public Organizations. *Human Resource Management,* 44(4), 391-412.

Dolgun, U. (2007). İnsan Kaynakları Yönetimine Giriş. Uğur Dolgun (Ed.), *İnsan Kaynakları Yönetimi*. Ekin Kitabevi.

Eryılmaz, B. (2015). *Kamu Yönetimi*. Umuttepe Yayınları.

Gardner, M. (Ed.). (1993). *Human Resource Management and Industrial Relations in the Public Sector*. Macmillan.

Gardner, M. and Palmer, G. (1997). *Employment Relations: Industrial Relations and Human Resource Management in Australia (2nd Edn.).* Macmillan Education.

Güler, E. Ç. (2006). İşletmelerin E- İnsan Kaynakları Yönetimi ve E-İşe Alım Süreçlerindeki Gelişmeler. *Ege Akademik Bakış Dergisi,* 6(1), 17-23.

Harris, L. (2002). The Future for the HRM Function in Local Government: Everything Has Changed—But Has Anything Changed? *Strategic Change,* 11(7), 369-378.

Ingraham, P. W. (2007). Striving for Balance: Reforms in Human Resource Management. Ewan Ferlie, Laurence E. Lynn Jr, and Christopher Pollitt (Eds.), *The Oxford Handbook of Public Management* (s. 521–536). Oxford University Press.

Jaconelli, A., and Sheffield, J. (2000). Best Value: Changing Roles and Activities for Human Resource Managers in Scottish Local Government. *International Journal of Public Sector Management,* 13(7), 624-644.

Kaya, E. N., and Taş, İ. E. (2015). Personel Yönetimi-İnsan Kaynakları Yönetimi Ayırımı. *Kahramanmaraş Sütçü İmam Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi,* 5(1), 21-28.

Köksal, M. (2005). *İnsan Kaynakları Yönetimi.* Kocaeli Üniversitesi Yayınları.

Köseoğlu, Ö. (2013). İsviçre'de Yerel Yönetimler. Murat Okçu and Hüseyin Özgür (Eds.), *Dünyada Yerel Yönetimler: Örnekler-Uygulamalar*. Seçkin Yayınları.

Kramar, R. (1986). The Personnel Practitioner and Affirmative Action. *Human Resource Management Australia,* 24(1), 38-45.

Leach, S. and Davis, H. (1996). *Enabling or Disabling Local Government: Choices for the Future*. Open University Press.

Maddock, S. (2002). Making Modernisation Work: New Narratives, Change Strategies and People Management in the Public Sector. *International Journal of Public Sector Management,* 15(1), 13-43.

Nadaroğlu, H. (2001). *Mahalli İdareler (Yenilenmiş 7. Baskı).* Beta Yayınları.

Okakın, N. and Şakar, M. (2015). *İnsan Kaynakları Yöneticisinin El Kitabı (Yenilenmiş 3. Baskı)*. Beta Yayınevi.

Öztop, S. (2017). Mülki İdare-Belediye İlişkileri. Hamza Ateş and Mücahit Bıyıkoğlu (Eds.), *Belediye Yönetimi ve Kamusal İlişkiler*. Der Yayınları.

Ployhart, R. E., Weekley, J. A., and Ramsey, J. (2009). The Consequences of Human Resource Stocks and Flows: a Longitudinal Examination of Unit Service Orientation and Unit Effectiveness. *Academy of Management Journal*, 52(5), 996-1015.

Pollitt, C., and Bouckaert, G. (2004). *Public Management Reform: a Comparative Analysis (2nd ed*.). Oxford University Press.

Sabuncuoğlu, Z. (2012). *İnsan Kaynakları Yönetimi (Uygulamalı) (6. Baskı).* Beta Basım Yayım Dağıtım.

Schroeder, R. (1992). *Max Weber and the Sociology of Culture.* Sage Publications.

Selden, S. C. (2009). *Human Capital: Tools and Strategies for the Public Sector*. CQ Press.

Shim, D. S. (2001). Recent Human Resources Developments in OECD Member Countries. *Public Personnel Management,* 30(3), 323-348.

Teo, S. T. T., and Rodwell, J. J. (2007). To Be Strategic in the New Public Sector, HR Must Remember Its Operational Activities. *Human Resource Management*, 46(2), 265-284.

Truss, C. (2009). Changing HR Functional Forms in the UK Public Sector. *The International Journal of Human Resource Management,* 20(4), 717-737.

Ulrich, D. (1998). A New Mandate for Human Resources. *Harvard Business Review,* 76(1–2), 124-134.

Weller, P. (1996). The Universality of Public Sector Reform. P. Weller and G. Davis (Eds.), *New Ideas, Better Government*. Allen & Unwin.

West, M. A. and Farr, J. L. (1990). Innovation at Work. West, M. A. and Farr, J. L. (Eds.), *Innovation and Creativity at Work: Psychological and Sociological Strategies*. John Wiley & Sons.

Yüksel, Ö. (2004). *İnsan Kaynakları Yönetimi (5. Baskı*). Gazi Kitabevi.

CHAPTER 3
HOW DO BEHAVIORAL MARKETING OPERATIONS AFFECT OUR PURCHASE BEHAVIOR?[1]

Lect. Dr., Kader EROL[2]

[1] 8. Uluslararası Mardin Artuklu Bilimsel Araştırmalar Kongresinde özet bildiri olarak sunulmuştur.

[2] Tekirdağ Namık Kemal Unıversity, kkizilerol@nku.edu.tr, +905382968721 https://orcid.org/0000-0002-9143-2946

INTRODUCTION

Social media, which makes it possible to reach large masses in a short time, has increased its importance even more during the Covid-19 Pandemic period, which we have just tried to get rid of. This process, which created new normals all over the world, has affected many things in our lives, as well as our purchasing behaviors. In the days of quarantine, when we were forced to stay at home, we became able to do many things such as education, work, communication and shopping from where we sit, via the internet. Therefore, businesses have started to use social media tools as a marketing tool to showcase, promote and adopt their new products, apart from communicating more effectively with their current and targeted customer base.

First of all, it was tried to attract the attention of current and potential customers with advertisement images called “banners” placed inside the websites for advertisement and description purposes and to measure their reactions. Later, creative applications began to be developed in the fields of technology and marketing in order to add a behavioral approach to marketing. It has become possible to store a lot of data about people browsing the virtual world, with social networks such as Facebook, Twitter, Instagram, or with the pictures we take with the smartphones we have. The information obtained through all these channels is also defined as "Big Data". These stored data are used especially for marketing and advertising purposes and it is tried to create the desired behavior on consumers. From the online behavior of people, not only demographic factors such as age, gender, job, educational status, but also individual information about what they think to buy, when and where they want to vacation are also obtained. And based on this information, personalized advertisements have started to be displayed. This has led to the fact that the concept of behavioral marketing, whose importance in online marketing is increasing day by day, has become a technique.

The purpose of this study is to explain what behavioral marketing is and how it can make a difference to businesses. In addition, it is aimed to give information about marketing operations and to discuss the effect of behavioral marketing on our purchasing behavior by drawing attention to the increasing importance of behavioral marketing today.

1. BEHAVIORAL MARKETING

At the core of the marketing concept is to offer solutions and different options to those who can benefit. In addition, marketing is a branch of science that offers new theories by blending the products of many disciplines and making use of them. Because, in order for any marketing strategy to be successful, it must be able to know and understand the other sciences it is in contact with and adapt it to itself. However, many businesses that have tried to do this throughout history have had a hard time deciding what to market to whom, because they do not have enough data to accurately determine their target audience. Hence, consumers have been annoyed by irrelevant advertisements, emails, phone calls, or other social media messages they try to ignore.

Behavioral marketing, on the other hand, focuses on consumer behavior patterns by matching the market with specific goals, individual interests, needs, and purchasing behaviors, rather than sending a bunch of ads to consumers and waiting for the marketing messages to take hold. Behavioral marketing relies on data from many different types of benchmarking tools. To identify potential customers on the Internet; Different types of user data are needed, which can be obtained through web analytics, customer journey, cookies, search history, interests, intentions, geographic location and other criteria (Gilmore et al., 2008). With the user features acquired, much more successful and efficient targeting campaigns can be created. Because the ads created using this data will be personalized according to current and potential customers and will appeal to them much more (http://help.planports.com/Blog/Post/davranissal-marketing). In addition, the user data obtained is very valuable, especially for marketers in the virtual world. They also need to plan well how to use and manage them correctly (https://blog.belogic.co/2021/04/23/davranissal-pazarlama-nedir-ve-nasil-calisir/). In addition, care and attention should be paid to the security of this data (Arora, et al., 2020).

2. HOW DOES BEHAVIORAL MARKETING WORK EFFICIENTLY?

Behavioral Marketing works well and works for its intended purpose when three sequential activities as data collection and analysis, audience

segmentation, and data application are integrated. These three stages can be listed as follows;

Stage 1: Data Collection and Analysis

Data used in behavioral marketing can be obtained from different channels such as

- ✓ Social Media
- ✓ Search Engines
- ✓ Websites
- ✓ Mobile Applications
- ✓ Emails
- ✓ Chatbots.

Today, social media platforms, major online retailers, bulk email services, and mobile apps collect behavioral data from users. Therefore, businesses can use this data for ads with more accurately targeted offers without having to spend time or money collecting information about consumer behavior.

As marketing automation technologies continue to evolve, businesses can use these databases to predict consumer behavior months in advance. For example; predicting that someone who researches maternity clothes will need baby clothes, diapers and toys and a bed for the baby after a while, advertisement images containing these items are placed. Businesses collect data in order to present advertising images that may be of greater interest to consumers. In this way, they can become better at offering appropriate products and services to consumers. On the other hand, some users are sensitive about sharing their private information. For consumers who don't like this situation, online privacy is becoming more and more important. Consumer data can also be used strategically to determine target audience preferences and provide services accordingly. In addition, businesses can collect data to determine the expectations of their potential customers and provide more enjoyable experiences for them.

Stage 2: Audience Segmentation

Segmentation is one of the oldest concepts in marketing and has become a strategy (Future and Martins, 2008). Segmentation, which is the process of developing marketing programs that meet these needs by dividing the market according to customer groups whose needs and purchasing behaviors are similar, is extremely important for marketing success (Gary & Rangaswamy, 2004). The needs, value judgments, expectations, income levels or purchasing behaviors of consumers in the market are different from each other. Therefore, firms are also competing in the market for all these customers (Dowling, 2004). They can understand customers more accurately by segmenting the market. Segmentation is used to identify the most easily accessible leads (Bonoma et al., 1990). In order to compete more effectively in the market and increase profitability, focus should be placed on the potential customer group that will show the most interest in the offer. Without audience segmentation, the message with the same offer could be sent to many people who may not be interested at all. That is, the target audience should be segmented taking into account their interests or behavioral patterns.

Google Analytics can collect data about what potential customers search for and how long they browse the internet. With this data, more effective display and retargeting ads can be served to customers. In addition, companies can easily segment their subscribers based on their participation in email marketing campaigns. They can send private e-mails or send different messages to users who have never shopped from their brands or who have shopped recently. In other words, while our purchasing behaviors activate behavioral marketing operations, it is as if they went shopping with us and almost decided on our behalf what, where and when to buy.

Stage 3: Application of Data

The application of data, which is the last stage of behavioral marketing, means creating messages suitable for the information obtained about the target audience, preparing advertising content and sending e-mails. While subscribing to social networking platforms, users' information is stored, in fact, as a result of the information they provide, it allows them to be determined as a target audience and directed to the sections where ads are suitable for them (Sebetci et al., 2018). Agreements and user policies

approved by users on the Internet may also include the permissions of individuals to share their personal information with other institutions and organizations. Since this can make it easier to reach users, there is also the marketing of their personal data. For example; A potential consumer who searches the internet for the price of a product or service he/she intends to buy may encounter similar product or service advertisements in another social network that he/she logs in later.

Increasing advertising activities on the Internet and the increasing interest in websites have also been effective in the tendency of small and large-scale companies to the Internet environment and such activities (Özdemir, Özdemir, Eray, & Aksoy, 2014). Advertising activity on the internet, which has taken its place in the literature as 'online advertising', has started to be preferred more by businesses as it reduces the amount of time and money that needs to be spent to identify and classify new buyers as well as protecting existing customers (Evans, 2009).

4. BENEFITS OF BEHAVIORAL MARKETING

The concept of behavioral marketing, which first emerged in 2008, has started to come to the fore as digital marketing tactics increase. Behavioral marketing guides the use of new marketing tactics to increase the revenue of the business and create process efficiency (Walters, 2015). This dynamic marketing approach brings the satisfaction of the business. Behavioral Marketing guides everyone who uses digital marketing strategies. Hence, most of the digital marketers worldwide try to base their online marketing strategy on behavioral marketing fundamentals because of the advantages available. They try to reach their customers through advertisements, e-mails or visuals that will make them feel special. Customers are much more affected by personalized advertisements for their purchasing behavior rather than advertisements that do not interest them at all. Behavioral marketing, in this way, helps online marketers develop and renew customer targeting campaigns.

Some of the benefits of Behavioral Marketing can be listed as follows:

a. Improved User Interaction

Ads that are tailored to the demographics, tastes, tastes and purchasing behaviors of existing users attract more attention from users. This can help them stay with you longer on their purchasing journey. By skipping sections that are considered unnecessary details for some users, you can direct them to the page they are looking for. Some users are more detailed. They even read other customer reviews to learn more about the product or service they are considering purchasing. User behaviors provide the opportunity to recognize different customer models and provide services accordingly. According to the behavioral marketing approach, the requests of such users can be met by adding additional information to the relevant product section. In addition, thanks to this approach, the rate of clicks and views of the ad on the internet will be much higher. Campbell and Wright (2008) stated that, thanks to the personalization of the content of the advertisements according to the purchasing behavior of the consumer and the increase in interaction, attitudes towards advertisements have improved. While Malheiros, Jennett, Patel, Brostoff, & Sasse (2012) concluded that the more relevant the content of the ads are to the user, the higher the attention and viewing rate, (Tucker, 2014) stated that as the interest in the ad content increases, the number of clicks also increases. Similarly, Chen & Stallaert (2014) equates the success of online advertising with the number of clicks.

b. Fast Buying Journey

By analyzing the past search results of the users in detail, offers can be made quickly according to their wishes. By adding the right suggestions for the person next to the most frequently preferred options by the user, the user's purchasing process can be simplified and completed faster. For example; displaying the images of the nutritional supplements that the user is constantly taking will enable them to remember them and easily complete the purchase process. In addition, offering the right alternatives for the products and services inquired about on the internet, suitable for the purchasing behavior of the users, will accelerate this process, which we can define as the 'purchasing journey'. This is one of the important advantages of behavioral marketing for both the business and the user.

c. Projected future prospects

After the user's characteristics are analyzed, it becomes easier to detect behavioral trends. Google Ads and Facebook Ads are designed to help promote different brands, products and services. These tech giants collect a wealth of personal and behavioral data to make business ads more personalized and accessible to interested audiences. In order for digital marketers to make accurate predictions about future customer expectations, this data is analyzed in detail and detailed results are obtained. Thus, it becomes possible to plan targeting campaigns in advance, according to anticipated future expectations. In this way, both products and services are presented to an interesting audience and sales can be increased. Sales teams working in line with future expectations can achieve more accurate and better results by following user behavior patterns.

CONCLUSION

From past to present, advertisements have always been at the forefront in delivering products and services to potential customers. However, advertisements that do not match the purchasing behavior, needs, interests and preferences of consumers have created frustration among consumers and have been ignored. The awareness that marketing activities do not consist of sales and advertisements has given birth to the concept of behavioral marketing. Behavioral Marketing tries to use more personalized advertisements that will appeal to people's interests and are suitable for their consumption and purchasing behaviors. Today, behavioral targeting is mostly applied in the internet environment. Internet user behavior tells businesses who their customers are, so they can offer their customers the products and services they want when they need it most. For example, behaviors such as the time a person spends on a website, making searches for the same product or service on different days, and the number of clicks on these give advertisers very important information about users. As a result, advertisements can be shown in line with this information. For example, when you examine the hotel prices in a region and the flight prices of different airline companies before you travel, or when you do research about the places to visit and local tastes of that region, you actually give a lot of important information. Companies that advertise on the Internet now show you different offers through more

personalized advertisement images, as they have a lot of information about where, when, how many people you will go, how much budget you have allocated for this trip, where you want to eat and where. In other words, in the light of this information, personalized advertisements are offered.

Behavioral Marketing is a series of actions aimed at promoting and selling products to existing and potential customers through technological communication channels such as advertisements, websites, e-mails, social media pages, chatbots. These digital marketing channels help companies determine future marketing strategies by collecting and analyzing people's behavioral data, segmenting target audiences. In other words, behavioral marketing, which is a marketing model developed by considering the expectations, preferences, habits and purchasing behaviors of us consumers, is like a boomerang that starts from us and returns to us again.

Behavioral Marketing has many advantages as well as negative aspects. For example, encountering an image that matches your expectations and behavior can save you time and make your job easier. It can enable you to reach an offer that really suits your consumer behavior and matches the service or product you want more quickly. On the other hand, security and risk factors create anxiety. Consumers are concerned about the security of any personal information they provide while researching or making a purchase on the Internet. This causes users to avoid advertisements. If customers trust the business and believe that they are collecting accurate information about their behavior and preferences, they tend to interpret any online advertisements as tailor-made advertisements (Simonson, 2005).

That is, when the sense of trust increases, the effectiveness of the advertisement also increases. According to Sablemen (2013), trusted websites are visited much more by users. Because, users are not worried about the websites they trust monitoring their own behavior, and they consider offers more reasonable for their interests and behaviors. In general, as the sense of trust increases, users' anxiety about sharing their personal information decreases (Taylor et al., 2011).

As a result, the security of the personal information provided also creates anxiety for customers. All personal information provided while performing any sales transaction on the Internet allows third parties to access it without even realizing it. In addition, personal information such as phone

number, location information, workplace information, which is given to become a member of some social media sites, is also stored. Therefore, the protection of users' personal data by laws is an extremely important issue in the face of these dangers arising from rapidly developing technology (Çokmutlu, 2014).

REFERENCES

Bonoma, T. V., & Kosnik, T. J. (1990). Marketing Management Text & Cases. Homewood, IL: Richard D. Irwin.

Campbell, D. E., & Wright, R. T. (2008). Shut-Up I Don't Care: Understandıng The Role Of Relevance And Interactıvıty On Customer Attıtudes Toward Repetıtıve Onlıne Advertısıng. Journal of Electronic Commerce Research, 9(1).

Chen, J., & Stallaert, J. (2014). An economic analysis of online advertising using behavioral targeting. Mis Quarterly, 38(2), 429-A7.

Çokmutlu, M. (2014). Türk ceza hukukunda kişisel verilerin korunması.

Dowling, G. R., & Dowling, G. R. (2004). *The art and science of marketing: marketing for marketing managers*. Oxford University Press, USA.

Ensari, A. B. (2014). Çevrimiçi davranışsal pazarlamanın tüketici davranışları üzerindeki etkileri ve kişisel verilerle ilişkisi (Doctoral dissertation, İstanbul Bilgi Üniversitesi).

Evans, D. S. (2009). The online advertising industry: Economics, evolution, and privacy. Journal of economic perspectives, 23(3), 37-60.

Gilmore, W., & Erdem, S. A. (2008). The future of online internet marketing: A solution to behavioral marketing using biometrics. *Journal of Business & Economics Research (JBER)*, *6*(2).

John, A. G., Horsefall, A., & Sunny, I. R. (2012). Behavioral-based segmentation and marketing success: An empirical investigation of fast food industry. *European Journal of Business and Management*, *4*(15), 56-65.

Koç, E. (2017). Temel tüketici davranışı ve pazarlama stratejileri. Ankara: Seçkin Yayıncılık.

Lilien, G. L., & Rangaswamy, A. (2004). Marketing engineering: computer-assisted marketing analysis and planning. DecisionPro.

Malheiros, M., Jennett, C., Patel, S., Brostoff, S., & Sasse, M. A. (2012, May). Too close for comfort: A study of the effectiveness and acceptability of rich-media personalized advertising. In Proceedings of the SIGCHI conference on human factors in computing systems (pp. 579-588).

Okumuş, A. (2013). Tüketici Davranışı: Teorik ve Uygulamalı Bir Yaklaşım. *İstanbul: Türkmen Kitabevi*.

Özdemir, S. S., Özdemir, M., Polat, E., & Aksoy, R. (2014). Sosyal Medya Kavrami Ve Sosyal Ağ Sitelerinde Yer Alan Online Reklam Uygulamalarinin İncelenmesi. Ejovoc (Electronic Journal of Vocational Colleges), 4(4), 58-64.

Reimagining marketing in the next normal, July 19, 2020 | Article By Arun Arora, Peter Dahlström, Eric Hazan, Hamza Khan, and Rock Khanna

Sableman, M. (2013). Should journalists seek special protection?. Gateway Journalism Review, 15-16.

Simonson, I. (2005). Determinants of customers' responses to customized offers: Conceptual framework and research propositions. Journal of marketing, 69(1), 32-45.

Sebetci, Ö., Topal, A., Hanaylı, M. C., & Dönük, G. G. (2018). Dijital Ortamda Kişisel Veri Güvenliği ve Sosyal Medya Reklamcılığı Üzerine Bir Değerlendirme. The Journal of Kesit Academy, 4(16), 389-409.

Taylor, S. A., Hunter, G. L., Melton, H., & Goodwin, S. A. (2011). Student engagement and marketing classes. Journal of Marketing Education, 33(1), 73-92.

Tucker, C. E. (2014). Social networks, personalized advertising, and privacy controls. Journal of marketing research, 51(5), 546-562.

Walters, D. (2015). *Behavioral marketing: delivering personalized experiences at scale*. John Wiley & Sons.

https://blog.belogic.co/2021/04/23/davranissal-pazarlama-nedir-ve-nasil-calisir/ Erişim Tarihi: 19.05.2022

http://help.planports.com/Blog/Post/davranissal-pazarlama Erişim Tarihi: 19.05.2022

CHAPTER 4

GEN Z'S TOURIST BEHAVIOUR AND CHANGES IN THE COVID-19 ERA

Asst. Prof. Begum Dilara EMİROGLU[1]

[1]Sirnak University, Tourism and Hotel Management College, Sirnak, Merkez. e-mail: begum-88@outlook.com, ORCID: https://orcid.org/0000-0002-3668-1632

INTRODUCTION

Generation Z (Genz) members have enormous spending power (Priporas et al., 2017: 375). They also affect family spending (Williams & Page, 2011: 11). Therefore, most industries and organizations target Gen Z members and shape their products and services according to the needs of this generation (Dimitriou & Abouelgheit, 2019: 312). The consumption behaviour patterns of Gen Z enable us to differentiate them from other generations. Gen Z likes to explore new things via other digital platforms and the internet (Vieira et al., 2020: 3). Genzs generally do not have brand loyalty and they care more about the experience (Priporas et al., 2017: 376). They are an extremely demanding generation. In addition to giving importance to personalized goods and services, they expect innovative services and products. They also expect their requests to be answered instantly (Dimitriou & Abouelgheit, 2019: 314).

Gen Z has unique features in the travel style. They make travel planning through technologies like smartphones, digital influencers and social media (Wacyuni & Kusumaningrum, 2020: 68). Members of Gen Z can be referred as digital tourists because of their intensive dependence on technologies like the internet, social media, gadgets, and their extensive use of them (Setiawan et al., 2018: 1). When making a reservation, they usually prefer online travel agencies (ETC, 2020: 57). They use social networks to share information about their personal experiences (Monaco, 2018: 10) and value all ideas, experiences and comments about products and services shared in their networks (Vieira et al., 2020: 3). They use social media such as Youtube or Instagram to collect information about travel destinations and share their experiences during and after travel using sites such as Path, Facebook, Instagram and Snapchat (Setiawan et al., 2018: 8).

Gen Z's tourists are interested in unusual places, more personalized experiences and local cultures (Dimitriou & Abouelgheit, 2019: 315). Therefore, this generation can be expected to travel distant routes and participate in many travel activities (Robinson & Schanzel, 2018: 129). The Genzs attach importance to the budget issue during their travels (Dimitriou & Abouelgheit, 2019: 315; Robinson & Schanzel, 2019: 129). Price has an important place in travel planning (Tavares et al., 2018: 233) Price is one of the factors affecting the Genzs' destination choice (Setiawan et al., 2018: 10), and purchasing decisions regarding tourism goods and services (Vieira et al., 2020: 12). However, although they seem budget-oriented in general, they prefer to stay in luxury (4-5 star) hotels (ETC, 2020: 43). Genzs mostly travel

with family and friends (Kusmayadi, et al., 2017: 8; Setiawan et al.,2018: 6; Slivar et al., 2019: 154; Tavares et al., 2018: 231; Wiastuti et al., 2020: 4). Members of this generation travel to enjoy leisure through rest and relaxation (Setiawan et al.,2018: 5), to escape from routine and share their experiences (Kusmayadi et al., 2017: 8), to spend their time away and find peace (Wiastuti et al., 2020: 4).

Covid-19 has upset every aspect of Gen Z's lives (Dorsey, 2020). In particular, measures such as social distance have had an important impact on young people's mental health (ETC, 2020: 32). A lot of studies revealed that Gen Z's mental health was affected by Covid-19 and Gen Z members feel more stress, depression, boredom due to restrictions imposed by the pandemic (Deloitte, 2021: 14; McCrindle and Fell, 2020: 12; The Center for Generational Kinetics, 2020: 17). Tourists' travel behaviours have been impacted worldwide since the outbreak of Covid-19 (Abdullah et al., 2021: 22). Especially, the Genzs are concerned about the inability to travel and explore the world due to ever-changing restrictions (Rokuo, 2020). During the Covid-19 period, people perceive a greater risk to all types of travel and avoid going to locations where they perceive as a medium to high risk. Individuals generally tend to cancel international travel or flights to avoid infection (Abdullah et al., 2020: 1). Studies revealed that Gen Z was not that eager to travel (DCI, 2020, Kurniawan et al., 2020; Lebnun et al., 2021; McCrindle and Fell, 2020). However, although Gen Z is concerned with Covid-19 dangers, they will continue to travel while trying to reduce the risks as much as possible (Kelly, 2020). Gen Z wants to travel after Covid-19, but they are cautious about security. This generation will prefer chain or luxury hotels with advanced standards of cleanliness for post-pandemic travels (Kwok, 2020). They prefer safe, socially distanced places for travel (Taylor, 2020). For example, A study by DCI (2020: 5-6) found that they feel very little fear and anxiety about travelling to local cities and towns, and are more concerned about travelling to/from more distant countries and internationally. Gen Z will continue domestic travels first, and initiatives with local communities in the post-coronavirus era (GlobeTrender, 2020: 43). In addition, in a post-Covid world, Genzs wish to be more socially and environmentally sensitive, especially from their travels (GlobeTrender, 2021).

For all these reasons, this book chapter aims to explain Gen Z's tourist behaviour in the tourism industry and changes in the tourist behaviours of Genzs in the Covid-19 era. Accordingly, firstly, Gen Z's tourist behaviour will be emphasized, secondly, changes in Gen Z's tourist behaviour in the

Covid-19 era will be explained and finally, suggestions will be made for the hospitality and tourism practitioners to play an effective role in Gen Z travellers in Covid-19 era.

GEN Z's TOURIST BEHAVIOUR

Consumer behaviour (CB) include "certain decisions, activities, ideas or experiences that satisfy consumer needs and wants". Consumer behaviour is used synonymously with the terms 'tourist behaviour' or 'travel behaviour' in the marketing and tourism field. Satisfaction and trust, motivations, loyalty, decision making, values, expectations, self-concept and personality, perceptions and attitudes constitute the most important key concepts of consumer behaviour (Cohen et al., 2014: 872-875).

Generation Z describes a generation born from 1995 to 2010 (ETC, 2020: 11; Sakdiyakorn et al., 2021: 1; Skinner et al., 2018: 95). No previous generation has a lot of terms as Gen Z and they are tagged with names such as "Post Millennials", "iGeneration"," Online Generation", "Facebook Generation", "Gen-Tech", "Switchers", "homo sapiens digitalis", "digital natives", "centennials", " pivotals", "always clicking" (Dolot, 2018: 45; Robinson and Schanzel, 2019: 128; Vieira et al., 2020: 2).

Young tourists have a significant effect on tourism's present and future. Today, 33% of all hotel reservations were carried out by young tourists and the value of international youth tourism total volume is estimated to double in the following years. Young tourists tend to spend more on the destination rather than on travel and accommodation. Hence, Genzs, who are young travellers, can become a great economic opportunity for politically and economically fragile regions. If the tourism industry wants to get ready for the future by designing future-oriented services and products, it has to take present generational change into account between the 2020s and 2030s, the middle-aged tourist, just like today's young tourist, will have completely different travel behaviours, needs and wants than the contemporary middle-aged tourist. All these considerations highlight the importance of researching Gen Z and the necessity of detecting fundamental elements for online consumption of this generation's travel products and services, such as the meaning and values they give to tourism (Vieira et al., 2020: 3-4).

Gen Z has unique features in the travel style. When planning their travels, they rely strongly on technologies such as digital influencers, social media and smartphones (Wachyuni and Kusumaningrum, 2020: 68). As determined, the social media platform Instagram plays a very important role

in the holiday planning process, especially for Gen Z members (Unger and Grassl, 2020: 92). For example, In terms of choosing a travel destination, 96 per cent of Chinese Gen Zers state that social media affects them more than other generations (ETC, 2020: 26). The vast majority (42%) of the German Gen Zers are "always active" and constantly using smartphones. 69% of German Gen Zers use YouTube and 65% use Instagram (ETC, 2020: 26-27).

The important elements that characterize the tourism consumer behaviour of Gen Z are defined as follows: i) tendency to last-minute decisions, ii) the constant search for opportunities, iii) using word of mouth advice sources to choose their destinations, iv) increased use of low-cost services (Baltescu, 2019: 65).

Robinson and Schanzel (2019: 136) stated that there are 3 factors that shape the travel experiences of Gen Z.

- Immediate forces (impacts)- including family, friends, hometown events,
- Destination forces (impacts) - including socio-political, physical, cultural, characteristics / attributes,
- Global forces (impacts) – including events having (global) worldwide ramifications, terrorism, geopolitical and technological developments, climate change, financial volatility

Gen Z travellers are interested in a more personalized experience, unusual places and local cultures (Dimitriou and Abouelgheit, 2019: 315). Members of Gen Z mostly prefer ethnic and authentic tourism activities and modern activities during their holidays (Baltescu, 2019: 66). Gen Z travellers are more social individuals than Gen Y and they are more likely to contact local people (Slivar et al., 2019: 4). Gen Z has a great interest in authenticity and localism. Two examples of this are the strong interest in locally produced food and beverages and the learning of local urban culture (ETC, 2020: 47). For example, the most important aspect of a holiday for German Gen Zers is food and drink (ETC, 2020: 27). In a study conducted on Gen Z, Setiawan et al. (2018: 1) found that Gen Z is interested in culture and cuisine and tends to establish "direct contact" with local people. The fact that Gen Z's use public transportation, purchase local products or eco brands reveals that they have a holistic view of sustainability (ETC, 2020: 74).

Gen Z members are budget-conscious travellers (Dimitriou and AbouElgheit, 2019: 315; Robinson and Schanzel, 2019: 129). British Gen Zers, for example, are the youngest youths most eager to save money. They

prefer cheap flights and accommodation and generally pay attention to their expenses while at their destination (ETC, 2020: 40). In the studies conducted, it was revealed that price is one of the factors affecting the choice of destination of Genzs (Setiawan et al., 2018: 10), the purchasing decisions regarding tourism goods and services (Vieira et al., 2020: 12) and in travel planning (Tavares et al., 2018: 233). For example, Baltescu (2019: 66) revealed that Genzs do not prefer expensive activities and low-priced activities, and he stated that although they are at the head of their professional activities and their income is not very high, they do not resort to low-cost tourism services for either basic or traditional tourism activities.

Although Gen Z seems to be more budget-oriented at the beginning, they prefer luxury (4-5 star) hotels as their accommodation preferences (ETC, 2020: 43). In many studies conducted, it was found that the Genz preferred hotels as accommodation (Kusmayadi et al., 2017: 10; Setiawan et al., 2018: 6; Slivar et al., 2019: 154; Tavares et al., 2018: 231; Wiastuti et al., 2020: 4). For example, Wiastuti et al. (2020: 1) stated that most Genzs travel to spend their leisure time comfortably and they prefer to stay in local branded hotels rather than brands.

Gen Z travellers can be referred to as "digital tourists" because they depend heavily on the technologies such as the internet, social media, and gadgets and use them extensively (six to 16 hours a day) (Setiawan et al., 2018: 1). Genzs are highly talented to use technology to meet their needs at every step of their travel (ETC, 2020: 9). Setiawan et al. (2018: 1) stated that Genzs more likely use online media to search for information and make reservations in comparison with traditional travel agencies while they are travelling. Gen Z is more likely to book online than Gen Y (Slivar et al., 2019: 4). Gen Z generally uses online travel agencies (OTAs) in the booking stages (ETC, 2020: 57). Many studies have also found that Gen Z made reservations through online travel agencies (Baltescu, 2019: 66; Kusmayadi et al., 2017: 9; Wiastuti et al., 2020: 6).

Gen Z often uses social networks to share information on their personal experiences. They communicate mainly by chat applications and instant messaging (Monaco, 2018: 10). Twitter, Instagram and other social media applications have become very popular in Gen Z (Kusmayadi et al., 2017: 6) Staying connected online and sharing real-time experiences plays an important role in Gen Z's travel habits (ETC, 2020: 62).

Gen Z individuals give importance to all comments about experiences, ideas, products and services which are shared on their social

networks (Vieira et al., 2020: 3). In some research, it was revealed that Gen Z attaches much more importance to the Instagram social media platform, especially in the holiday planning process (Unger and Grassl, 2020: 92), they use websites such as Instagram or YouTube As far as finding information about travel destinations is concerned, shared their experiences during and after travel using sites such as Instagram, Path, Snapchat and Facebook (Setiawan et al., 2018: 8), and used Instagram to provide post-travel feedback (Kusmayadi et al., 2017: 10).

Gen Zers from the USA, UK and Germany have different behavioural patterns in application usage while travelling. WhatsApp app is one of the most used apps by Germans and British, but its popularity is largely low in the United States. On the other hand, only 13% of German Gen Zers indicated that they frequently use Facebook when travelling, while it is one of the most used to travel (Robinson and Schanzel, 2019: 129). For example, Baltescu (2019: 66) revealed that Gen Z members prefer entertaining activities during their travels. Gen Z is open-minded and looks for unconventional ways. Therefore, they can be expected to travel distant routes and participate in many travels/activities (Robinson and Schanzel, 2019: 129). Mediterranean destinations are popular for British and American Gen Zers respectively with 44% and 46% (ETC, 2020: 65). For example, Setiawan et al. (2018: 2) reveal that it is a very important factor whether a location is 'Instagrammable' or not because the majority of Genzs' activities include documentation of videos or images and posting them on Genzs' social media accounts. However, although Genzs use social networks extensively in general, the recommendations of friends and family and official websites take a more important place (ETC, 2020: 42).

Gen Z seeks experiences in his travels and the search for “fun experiences” increases the tendency evident among Genzs. France, Italy, and Spain are the most interesting countries for the US, German and British Gen Zers. Genzs generally prefer popular tourism hotspots. In addition, Scandinavian countries have the opportunity to benefit from Chinese Gen Zers. Destinations such as Finland, which has designed products and services specifically focused on Chinese tourists, are gaining popularity among Chinese Gen Zers (ETC, 2020: 46).

In the tourism sector, many studies have been conducted to investigate the tourist profile, travel profile, pre-travel and post-travel behaviour, and travel motivation of Gen Z. These studies are shown in table 1 (Baltescu, 2019; Kusmayadi et al., 2017; Monaco, 2018; Setiawan et al.,

2018; Slivar et al., 2019; Tavares et al., 2018; Unger and Grassl, 2020; Vieira et al., 2020; Wiastuti et al., 2020).

Table 1: Studies on Gen Z in the tourism industry

Study	**Content**
Baltescu, 2019: 63-67.	**Purpose** • To analyze some behavioural factors related to the knowledge, acquisition and consumption of tourist products of Gen Z **Sampling** • Students of the Faculty of Economic Sciences and Business of the Brasov Transilvania University **Method** • Quantitative research **Result** • The majority of Gen Z members prefer ethnic-authentic tourist services (28%), modern activities (24%) and fun activities (19%), respectively. • Expensive activities (2%), basic activities (3%), non-classical activities (4%), low-priced activities (12%) and traditional activities (8%) are not preferred by Gen Z • The Internet is by far the main source of information and reservations • Members of this generation search and book online through random searches and reservations (39%), tourism blogs and online booking platforms (36%), and online travel agencies (18%).
Kusmayadi et al., 2017: 1-12.	**Purpose** • To analyze Gen Z's behaviour during and after travel, including initiation, information seeking, evaluation, and the final decision **Sampling** • 128 young generations born between 1995 and 2012 in Jabodetabek (Jakarta, Bogor, Tangerang and Bekasi) **Method** • Quantitative research

	Result • Gen Z is very active in using gadgets and they always benefit from internet access with an average usage time of 6-10 hours in daily life • In terms of the social media accounts they use, most of them have more than one social media account and mostly Facebook (82.8%), Youtube (78.1%), Path (62.5%), Twitter (56.3%), Snapchat (32%). 8) use social media accounts such as Blog (29.7%), Pinterest (20.3%), Linkedin (17.2%) and Tumblr (15.6%) • 10 most frequent activities of Gen Z when using gadgets and the internet: social media (95.3%), update information (79.7%), listening to music (76.6%), video streaming (70%, 3%) search for reference courses (64.1%), playing games (59.4%), online shopping (51.6%), planning vacation trips (45.3%), searching for food references (40.6%), and information about fashion (35.9%) • 57.8% of Gen Z prefer Paris, Turkey, Bangkok, Germany, Dubai, South Korea (Seoul), Japan, Liverpool, Prague, New Zealand, and New York. • Sources of funding for travel: 70.3% own savings, 59.4% from parents, 29.7% part-time • Gen Z travels with their families (50%), friends (45.3%) and alone (4.7%) during the journey • Gen Z`s main motivation to travel: to get out of routine (81.3%) and to share their experiences with others (76.6%). Other motivations are culinary tourism (59.4%), enjoying the beach (50%), as a hobby (48%), enjoying the city atmosphere (43.8%), enjoying mountainous areas (37.5%), local life (32,8), shopping, water and art trips (29.7%), visiting relatives or friends (25%) • Travelling for educational purposes, picnics, finding new friends, cinema, hunting, cycling, religion and health is not preferred by the Gen Z • Information about the destination using social media (92.2%), stories

	based on other people's experiences (by word of mouth) (68.8%), official tourism websites (50%), television (35.9%), books and magazines (34.4%) and blogs (26.65%) • Issues concerning Gen Z visiting the destination: climate differences (64.1%) according to the regions they live in, safety conditions (53.1%) and environmental sustainability (flora and fauna) (51.6%) • Popular media used by the participants when booking: Traveloka (75%), online travel agency (34.4%), travel agency (29.7%), Official website (29%), Agoda (20.3%) • 48.4% of respondents travel to places visited by others as well as using local facilities (transport and accommodation) and interacting with local communities. 40.6% visit as backpackers and visit places where not prefered by others and do not have tourist resorts • Gen Z gives feedback after using/enjoying tourism products and services (95.3%). Feedback is made in various ways, such as suggesting posts or positive comments (73%), giving points (48.4%) on the relevant site, and giving tips (18.8%) • Media used to provide feedback: Instagram (90.6%) while telling stories with colleagues or family (53.1%), Facebook (48.4%) and Path (43.8%) • Common types of transport: various types of land transport (Automobile, bus, motorcycle) (81.3%), Airplane (75%), Trains (62.5%) and water transport (ferry) 28.1%) • The type of accommodation: they usually use is Homestay (summer tours) (51.6%), Residence friend / brother (46.9%), star (42.2%), Villa (40.6%), Hotel Non star (% 31.3), hostel (23.4%), apartment/ apart hotel (20.3%), Camping / Caravan (15.6%) and Bed & Breakfast (14.1%) • Length of stay: 3-7 days (76%), staying only 1 night (2 days) (14.1%), and one-day excursion (6.3%) • Payment methods they use: internet banking (84.4%), cash (54.7%),

	credit card (15.6%), coupon (4.7%)
Monaco, 2018: 7-13.	**Purpose** • To describe the profile of Italian tourists from Gen Y and Z **Sampling** • 200 Italian web users who equally divided between Gen Y and Z **Method** • Quantitative research **Result** • Gen Z uses mostly the web to look at the information required to make bookings and make purchasing decisions • Gen Z shares their ideas and opinions on social networks and platforms • Gen Z gains knowledge previously on the internet by visiting certain review websites to gain information about restaurants and accommodations. • When Gen Z gets negative feedback, they can change their plans
Setiawan et al., 2018: 1-10.	**Purpose** • To determine the pre-travel, post-travel behaviour of Gen Z and define the media used by this generation **Sampling** • Adolescents born between 1995-2000 and living in South Jakarta **Method** • A qualitatively descriptive approach **Result** • They use the internet, social media, and gadgets for 6 to 16 hours a day • The majority of Gen Z prefer to visit places where they have never seen before • Enjoying leisure time through relaxation and rest are the main motivations for their travels • They mostly travel with family (46.2 %) and friends (53.1%)

	• They prefer to travel in small groups (individually) or with no more than five people. • They use airplanes as the type of transportation. • They prefer hotels as accommodation • They use booking sites such as Traveloka, Agoda and Airbnb when booking • They prefer to experience local food and local specialities • They prefer traditional cultural attractions, man-made attractions and nature-related attractions, • After travelling, they frequently prefer to share their journey experience by talking to a relative or friend and they post them on their social media accounts • They use their website, Instagram or YouTube as far as finding information about travel destinations is concerned. • They use the sites where they look for information about travel destinations not only to search for information but also to share their travel experiences during and after tours. They share their travel experiences using sites like Instagram, Path, Snapchat and Facebook • The factors that affect the choice of destination are location, price, attractions and facilities
Slivar et al., 2019: 147-156.	**Purpose** • To state the Gen Z and Y members' behaviours during their stay in the tourism destination and their preferences regarding transportation, company and accommodation options • To explore the behaviour of Gen Y's and Gen Z's regarding disseminating information about their time in a tourism destination. **Sampling** • Pula Juraj Dobrile University, Faculty of Economics and Tourism Erasmus students, Generation Y (71.4%) was born in 1977-1994, 28.6% of them are Gen Z representatives (1995-2012). **Method**

	• Quantitative research **Result** • Generation Y and Z mostly prefer to travel with friends (40%), followed by partners (34.3%) and family members (20%), respectively. • Gen Y and Gen Z mostly reserve respectively for private accommodation (51.4%), hotels (31.4%) and hostels (12.9%). • In terms of transportation options, the majority of Gen Z (48/70) prefer to travel in private cars or motorcycles • Most of the participants (62.7%) share their holiday experiences on social media during their travels. • If the service exceeds expectations (17.1%), more comments are made than if the service is too bad (7%)
Tavares et al., 2018: 223-237.	**Purpose** • Determining the travel profiles of Gen Z **Sampling** • 300 university students born between 1993 and 1996 and located in Belo Horizonte (Brazil) **Method** • Quantitative research **Result** • Gen Z prefers trips of 4 to 7 days (59%) • Gen Z prefers to travel with their family (69%) • They prefer to accommodate in hotels (51%) • They prefer the sun and the sea as their favourite tourism activity (62.7%) • The majority of them prefer to pay the bill in cash (43%) and credit card (30%) • Factors affecting travel plans: presence of family/friends while travelling (36.3%) and tour-related cost advantage (28.7%) • Travel preferences: following a predefined route (29.3%) and

	interaction with locals at the destination (25.7%) • The most disturbing factors in terms of accommodation are insufficient cleaning (30.3%), difficulty in obtaining general information about the destination (19.4%), internet connection problems (13.2%), insufficient TV (13.2) • The most important elements in travel planning: gastronomy and safety (76%), destination location (65%), price (62%), Internet / WiFi need (30.3%)
Unger and Grassl., 2020: 92-101.	**Purpose** • Identifying the motivations behind using the social media platform Instagram for travel planning purposes and the possible impact of Insta-Spots on the choice of travel destination **Sampling** • Members of Generation Y and Z, i.e. persons born between 1980-2010 regardless of gender or nationality **Method** • Quantitative research technique **Result** • Instagram is increasingly used for travel planning purposes as age decreases. Gen Z gives much more importance to the Instagram social media platform in the holiday planning process. • Gen Z members are three times more likely to use Instagram than a Gen Y member • Insta-Spots have a very significant impact on Gen Z when it comes to vacation planning processes, but a destination is not visited deliberately due to the presence of Insta-Spots alone
Vieira et al., 2020: 1-12.	**Purpose** • To determine the important factors in the online purchase decision of Gen Z individuals in the Portuguese tourism industry **Sampling** • Individuals between the ages of 18-25

	Method • Quantitative research **Result** • Gen Z uses the internet to research and purchase tourism products and services • Gez Z tends to buy tourism products/services online due to available online services • Advertising and opinions by family and friends are an effective element in purchasing services • Gen Z obtains information on goods and services through websites such as booking and Momondo • Factors influencing purchasing decisions regarding tourism goods and services: Trust, price, use of aggregating websites, WOM / EWOM, online product/service offering and online Experience
Wiastuti et al., 2020: 1-12.	**Purpose** • To review the travel features and hotel selections of the Indonesian Gen Z and define their perceptions in choosing hotel qualifications based on their education level and place of origin **Sampling** • 313 participants from four educational institutions in the Jabodetabek region **Method** • Quantitative research **Result** • The majority of Gen Z use hotels while travelling (52.7%) • They mostly travel with their family (66%) or friends (27.8%) • The three most preferred channels for Gen Z to book or book a room in a hotel are: online travel agents (50.1%), direct search (22.5%) and official hotel websites (15.4%) • Gen Z travels for two main reasons: spending their time away (39%) and finding peace (32.2%)

	• Instant Messaging (IM), Line (35.3%) and WhatsApp (29.3%) are the main platforms Gen Z uses to communicate in their daily lives • Gen Z is very interested in gadgets, especially mobile phones • They prefer local brands rather than international brands in hotel selection • The online travel agency is the main resource for Gen Z to look up hotel information and make reservations • Gen Z, who mostly study for high school, diplomat or bachelor's degree, consider cleaning as the most important feature in hotel selections, while high school and undergraduate students consider safety and security as the most important feature • For Gen Z from Jawa Tengah-Jawa Timur and out of Jawa, cleanliness is one of the top three features in hotel selection. Gen Z from Jakarta-Jawa Barat chooses security over cleanliness

Studies have revealed that Genzs mostly travel with family and friends (Kusmayadi, et al., 2017: 8; Setiawan et al., 2018: 6; Slivar et al., 2019: 154; Tavares et al., 2018: 231; Wiastuti et al., 2020: 4). In general, the vast majority of Chinese Genzs travel with their friends, the US, British and German Genzs, most likely their family members while travelling (ETC, 2020: 44).

Understanding Gen Z travellers, their motivations and concerns are crucial to assessing how tourism demand can evolve in the coming years and how this may affect tourism in Europe and the world (ETC, 2020: 12). The reasons which trigger the need for Genzs to travel are specific and unique to them. They generally try to meet new people, get to know different cultures and make friends with foreigners (Dimitriou and AbouElgheit, 2019: 320). In addition, in some studies conducted on Gen Z, it was revealed that they mostly travelled to enjoy leisure time through relaxation and rest (Setiawan et al., 2018: 5), to escape from routine and share their experiences with others (Kusmayadi et al., 2017: 8), and to spend their time away and to find peace (Wiastuti et al., 2020: 4). Also, peer recognition and acceptance are important factors

for Gen Z. They comfortably share sharing personal videos and pictures with the public and their peers as a means of emotional fulfilment and self-actualization. Peer influence is an important factor influencing their purchase intentions. As a result, the recognition of Gen Z's need to travel cannot be set apart from their social recognition need (Dimitriou and AbouElgheit, 2019: 320).

A study by Booking.com of 21,807 Gen Z participants aged 16-24 in 29 markets found the following result (Booking.com, 2019):

- 70% of Gen Z travellers believe meeting local people makes travel more authentic
- 63% of Gen Z plan to visit lesser-known places rather than popular places if it is a matter of having a lower environmental impact.
- 76% of Gen Z travellers prefer to use the more environmentally friendly vehicle of transportation when they arrive at their destination
- 77% of Gen Z consider the environmental impact of travel on destinations to be an important factor
- 81% of Gen Z travellers desire to stay in eco-friendly or green accommodation when planning and booking a trip
- 76% of Gen Z said they would prefer to use greener or environmentally friendly modes of transportation when they arrive at their destination.

In another study conducted by Booking.com on 5456 Gen Z members, the following results were obtained (https://destinationgenz.com/).

- 52% of Gen Z plan to visit an extreme destination or trekking
- 56% of Gen Z want to experience an adventure from their trips, such as paragliding or bungee jumping.
- 18% of Gen Z want to go on a backpacking trip alone

- 34% of Gen Z plan to travel on their own at least once in the next ten years.
- 33% of Gen Z prefer to be on their own while travelling in general
- 65% of Gen Z indicate ′travelling and seeing the world" as the most important when considering how they spend their money
- 45% of Gen Z trust recommendations from people they don't know personally, such as influencers and celebrities
- 25% of Gen Z takes more than 50 photos a day on vacation
- 40% of Gen Z consider Instagram their biggest inspiration when deciding where to travel
- 42% of Gen Z always upload photos from their trips to social media while travelling
- 50% of Gen Z say they believe social media is given too much importance when travelling.

GEN Z's TOURIST BEHAVIOUR IN THE COVID-19 ERA

Tourists' travel behaviours have been impacted worldwide since the outbreak of COVID-19 (Abdullah et al., 2021: 22). Marques Santos et al (2020: 6) indicated that after the quarantine practices due to Covid-19, tourist behaviour and choices will be affected by economic and psychological factors. Psychological factors associated with the fear of contagion of the pandemic affect tourists' willingness to travel, resort conditions and preferences. On the other hand, economic factors are associated with a decrease in household income due to unemployment or reduced working hours. Before the pandemic, people could travel without fear or restriction. But the Covid-19 pandemic has changed this, and tourist behaviour has also changed. Travellers' desire to travel is still in their minds, but the issue is under control and people have to adjust their travel habits accordingly (Augustine and Balachandran, 2021: 1)

For Gen Z, Covid-19 has turned almost every aspect of their lives upside down. Younger members of Gen Z no longer attend school with their classmates, see their friends face-to-face, or do part-time jobs. The people they interact with are limited to their parents or other family members and

they try to continue their education with distance education programs (Dorsey, 2020).

Gen Z members rely on many sources to get information about the COVID-19 pandemic, but they mostly follow the national mainstream media. Gen Zs share the most scientific content on Covid-19 on social media (Hess et al., 2021: 4-5). A study by McCrindle and Fell (2020: 6) revealed that 49% of Gen Z use social media as the primary source for gaining information about Covid 19. This is followed by government websites (38%), news sites (33%), mainstream broadcast networks such as TV and radio (33%), and the World Health Organization website (29%). Likewise, a survey of Gen Zs conducted by Amplify revealed that social media is the most important news source for Gen Z, especially for those under the age of 21. CBC, CNN and CP24 are reliable TV Networks while The Globe and Mail, New York Times and The Toronto Star are reliable digital newspapers. Twitter, Government websites, Apple News and Facebook are reliable websites and apps. However, Liu et al. (2021: 1) revealed that information overload related to Covid-19 via social media negatively affects the psychological well-being of Genzs. Moreover, The perception of information overload has increased social media fatigue and Covid-19 fear, which in turn increases users' intention to quit social media.

University of Melbourne, Wunderman Thompson, and Pollfish have carried out research in collaboration with WHO (World Health Organization), in 24 countries on five continents, with individuals between the ages of 18-40, to find out where they get about Covid-19 information, which they are concerned about, who they rely on as sources and their awareness on fake news. The study was conducted involving approximately 23,500 participants aged between the ages. In the study, the greatest concern of Gen Y and Z, in general, was found to be the risk of their family and friends members getting Covid-19 (55.5%), followed by the collapse of the economy (53.8%). The biggest concern of participants in Australia, Argentina, Brazil, Colombia, Indonesia, Italy, Morocco, Nigeria, Peru, South Africa, Spain and Turkey is a collapsing economy. Other economic concerns were employment uncertainty (39.8 per cent overall and the main concern in India) and facing financial constraints (39.7%). Participants also found the inability to visit family and friends (% 38.2), important lifestyle changes (33.7%) and losing of contact with their social community (22.5%). Concerns about mental health (33.4%), access to health services (31.1%) and access to education (27.0%) were also increased (Hess et al., 2021: 2-7). In another study conducted by The Center for Generational Kinetics (2020: 17), it was revealed that 57% of Genzs are

less happy since the start of the pandemic and experienced higher levels of stress, anxiety, and depression due to the pandemic. McCrindle and Fell (2020: 12) found that social isolation caused boredom in 51% of Gen Z individuals, increased feelings of loneliness in 41%, and a quarter (25%) thought that the greatest negative impact of Covid-19 was on their mental health. Likewise, a survey by Deloitte (2021: 14) found that 46% of Genzs felt stressed by the lockdowns.

In the early stages of the Covid-19 crisis in the United States, in mid-March, it was revealed that young people on Florida beaches appeared to have not paid enough attention to isolation measures. As a result, the US coronavirus task force directly addressed the American Genzs regarding the importance of "social distance". Similarly, a senior consultant to the WHO Director-General emphasized that in the current situation young people are afraid of their attitude. In an article published in the New York Times, it was stated that Gen Z was trying to take advantage of the current low travel prices. Gen Z is the generation that least supports the restrictive measures adopted for the Covid-19 pandemic. In the first phase of the implementation of travel restriction measures in mid-March 2020, the astonishing drop in flight and accommodation rates caused by the lockdown was perceived by Gen Z (briefly) as an excellent opportunity to travel and experience other places to do (ETC, 2020: 30-32). However, later studies revealed that Gen Z was not that eager to travel (DCI, 2020, Kurniawan et al., 2020; Lebnun et al., 2021; McCrindle and Fell, 2020).

Covid-19 affected people's travel behaviour around the world since the beginning (Abdullah et al., 2021: 21). During the Covid-19 period, different countries have started to impose different levels of restrictions for preventing and controlling the spread of the virus. Such restrictions can greatly affect people's social interactions, economic conditions and lifestyles. In particular, people's outdoor and travel activities can be considerably affected (Abdullah et al., 2020: 2). For example, DCI (2020: 5-6) emphasized that there are news on social media that Gen Z ignores the warnings to stay at home and embarks on more risky trips than their former peers. However, in a study by DCI, it was found that Gen Z has the least travel planned in 2020, they think that they are less likely to travel and they are reluctant to travel, and thus it has been reported that an intergenerational generalization should not be made.

During the Covid-19 period, people perceive a greater risk to all types of travel and avoid going to locations where they perceive as a medium to

high risk. Individuals generally tend to cancel international flights or travel to protect themselves from infection. Such self-protective behaviours depend primarily on demographic characteristics including mainly race and age and perceived infection risk (Abdullah et al., 2021: 2). The risk perceptions of tourists in the travel decision-making process lead to the emergence of specific behaviours that people will cause to avoid travelling to infected destinations (Seabra et al., 2021: 466). Kurniawan et al (2020: 443-444) found that perceived safety risk by Gen Zs had a significant impact on travel intention in the ecotourism area during phase 5 of the new normal. McCrindle and Fell (2020: 7) revealed that 40% of Gen Z think that the cancellation of sports and entertainment events due to COVID-19 has affected them significantly. Lebnun et al (2021: 4-15) revealed that Gen Z is least willing to go on vacation compared to other generations. A study by DCI (2020: 4-7) revealed that getting sick during or after travel is the biggest fear of Gen Z and they feel very little fear and anxiety about travelling to local cities and towns, and more concerned about travelling to/from more distant countries and internationally. Saebra et al (2021: 463) carried out research with Gen Z and Y participants. The authors found that participants accepted the restrictions and measures caused by Covid and that Covid-19 has a significant effect on their daily security perceptions and future travel plans. Moreover, it was revealed that the participants were afraid of catching the virus as a tourist and that their travel plans would change because of their fears of contracting the virus.

Contiki, which a travel agent, conducted a study on 1200 young people between the ages of 18-35, belonging to Gen Y and Z. As a result of the research, 71% of the participants stated that they will be vaccinated to enable them to travel, and 58% will travel today, even if it means they have to quarantine when they return home. Also, 31% of them would prefer to visit less populated places for a better distance socially, but most (56%) do not care (Cowling, 2021). Wachuyini and Kusumaningrum (2020: 67) tried to reveal the travel intentions of Gen Zs after the pandemic was over. It has been revealed that after the pandemic is over, the majority of Gen Zs (78%) will return to the tour, 65% of them will return to travel in the near term 0-6 months after the announcement of the end of the epidemic, 66% of them want nature tourism, they prefer short-term tours with 1-4 days and that they primarily prefer secure and clean destinations. Likewise, Pramono et al. (2021: 2265) in the near future, 65% of Gen Z will return to tourism 0-6 months after the pandemic is declared over, 66% of them want natural tourism

as a type of tourism and most of the desired tours are short, that is, it changed between 1-4 days

Although Gen Z is concerned with Covid-19 dangers, they will continue to travel while trying to reduce the risks as much as possible. They seek accommodation with great deals and high standards of cleanliness and are likely to glamping or camping to maximize social distancing (Kelly, 2020). Gen Z has been the most comfortable travelling generation in the summer of 2020. Generation Y follows this. Gen Z's ability to travel comfortably depends on their dependence on social media more than other generations. The more members of this generation see their friends outside, the more likely they are to go out and travel. Moreover, road trips and in-state vacations are becoming very popular for them. They prefer safe, socially distanced places for travel (Taylor, 2020).

Gen Z wants to travel after Covid-19, but they are cautious about security. Hence, it wouldn't be surprising to see some Genzs travel with gears like N95 masks and hand sanitisers. Members of this generation will prefer chain or luxury hotels that have advanced cleanliness standards for post-pandemic trips (Kwok, 2020). A study conducted by Topdeck Travel found that the pandemic has harmed the mental health of young Britons, with 53% struggling to maintain their mental health during the lockdown period. In addition, finance (39%) and education (32%) top the list of young people contributing to stress. When it comes to booking a holiday, 35% of respondents stated that going on a vacation and taking advantage of travel is the most important factor in getting away from the events of the last few months. However, 45% of Gen Z are concerned about their inability to travel and explore the world due to ever-changing restrictions (Rokou, 2020).

Research conducted by IHG Hotels & Resorts on travel in a post-Covid world with 9,000 people in Australia, Germany, UAE, UK, Greater China and US Australia revealed that young people are especially worried about travelling in a way that respects society and the environment. It was revealed that sixty per cent of the respondents indicated that they want to be more conscious of the environment and society when they travel. Moreover, 69% of Gen Z travellers aged 18-24 were found to be strongly in favour of responsible travel (GlobeTrender, 2020). Likewise, a survey by Deloitte (2020: 9) revealed that Gen Zs are concerned about the environment after the pandemic. McCrindle and Fell (2020: 7) revealed that 82% of Gen Z individuals think that Covid-19 will enhance the desire of the next generation of children to travel and explore the world. A study by GlobeTrender (2020:

43) found that Gen Z has a higher awareness of tourism's environmental impacts on the planet after the pandemic, that concern in the months before the lockdown triggered a desire to sustain environmental benefits, Gen Z will continue domestic travels first, and initiatives with local communities in the post-coronavirus era. It has been revealed that travel brands that encourage and invest in protection will attract the attention of this age group. Likewise, DCI (2020: 8-9) found that Gen Z would be willing to pay more to travel to places where there is no corona threat and emphasized that Gen Z considers their own health and this may be an opportunity to attract young travellers when their fears of Covid-19 are removed.

CONCLUSION

Covid-19 has caused significant changes, especially in the life and travel behaviours of young people. The restrictions imposed due to the pandemic have had very negative consequences, especially on the mental health of young people. Therefore, social media organizations should follow a transparent and informative attitude and broadcast by taking into account the mental health of the young generation.

Covid-19 has had devastating effects on Gen Z's travel plans. Concerns brought by the pandemic have led to the questioning of health, hygiene and safety conditions at travel destinations. The pandemic has caused Gen Z to perceive travelling as risky and to reduce their tourism travel plans accordingly. Many Gen Z members have given up on travelling for fear of getting sick from the pandemic. However, Gen Z is generally characterized as a generation eager to travel. It seems that young people will not give up on their decision to travel when their concerns about health and safety arise. Especially the young generation, Gen Z, makes taking safety and health measures a top priority for travel and they prefer to visit clean and safe destinations. Gen Z users are doing research on social media regarding the risk of Covid-19 in a destination. Therefore, managers in the tourism sector should act together with national-level authorities on Covid-19 health and safety. To create a safe destination perception in the eyes of tourists, all stakeholders must take measures on health, hygiene and safety issues as a whole. They should provide tourists with transparent and accurate information by regularly publishing the number of Covid-19 cases, the health and hygiene measures taken to control the virus, on the websites of destinations that enable tourists to make decisions. In addition, accommodation facilities should take

the necessary hygiene and safety measures and publish their standards and protocols on their websites.

Covid-19 has had devastating effects on Gen Z's travel plans. Concerns brought by the pandemic have led to the questioning of health, hygiene and safety conditions at travel destinations. The pandemic has caused Gen Z to perceive travelling as risky and to reduce their tourism travel plans accordingly. Many Gen Z members have given up on travelling for fear of getting sick from the pandemic. However, Gen Z is generally characterized as a generation eager to travel. It seems that young people will not give up on their decision to travel when their concerns about health and safety disappeared. Especially the young generation, Gen Z, makes taking safety and health measures a top priority for travel and they prefer to visit clean and safe destinations. Gen Z users are doing research on social media regarding the risk of Covid-19 in a destination. Therefore, managers in the tourism sector should act together with national-level authorities on Covid-19 health and safety. To create a safe destination perception in the eyes of tourists, all stakeholders must take measures on health, hygiene and safety issues as a whole. Destinations are required to provide tourists with transparent and accurate information by regularly posting the number of Covid-19 cases and the health and hygiene measures taken to contain the virus on their websites to enable tourists to make decisions.

When comparing their preferences before and during the Covid-19 pandemic, Gen Z attaches importance to health and safety issues. Therefore, it is seen that the cleanliness and hygiene of accommodation facilities are important over time. In this direction, necessary hygiene and health measures should be taken in all places where touristic services are provided, including accommodation facilities, and standards and protocols on this subject should be published on websites. For example, it is necessary to monitor by placing special cameras at airports, cleaning the places where touristic services such as hotels, restaurants, planes, and buses are provided with special disinfectants, monitoring the personnel working in the service areas and conducting their tests at certain periods, providing handwashing stands and disinfecting gels and sprays at certain points of destinations, including accommodation, catering and transportation facilities, obligation to wear masks where necessary. In addition, tourists need to make sure that the health services in the destination are of sufficient capacity. In particular, the social distancing rules that came with Covid-19 and its aftermath required people to be more out of touch with each other. Therefore, businesses that provide

services to Gen Z need to provide contactless, interactive and personalized services with the latest digital developments and make their investments to appeal to Gen Z and create customer loyalty. Virtual reality applications can be used to promote tourist places, hotels and restaurants. Similarly, artificial intelligence applications can be used to create a contactless environment in such environments. For example, smartphones can be used for credit cards, operating the TV, opening hotel door rooms, adjusting lights and controlling room temperature.

The restrictions imposed due to Covid-19 have increased people's perceptions of security risk, causing them to prefer closer destinations instead of distant destinations. Gen Z is interested in more authentic and local tourism activities instead of general touristic activities, and they attach importance to environmental sustainability and budget. In addition, they benefit from technology and use social media and online channels in the pre-purchase research and post-purchase evaluation of touristic goods and services. Therefore, organizations operating in the hospitality industry need to create a niche market and innovation-based marketing strategies and develop creative ways of delivering low-priced packages. They need to design, promote and advertise niche products better than other competitors and deliver them to strategically targeted Genz's category or groups. Marketers should segment Genzs by interests, culture, lifestyle and nationality. Also, behavioural segmentation (e.g., type of content consumed, hours spent online and activities in travel etc.) will allow marketers to select specific groups that meet their criteria and are the most attractive and worthy of investment. By developing services that focus on activities such as nature, gastronomy, culture, and eco-tourism, managers will encourage more authentic local holidays and offer more authentic accommodation, which will allow tourism demand to remain alive. In addition, promoting the services offered by local tourism destinations by providing an effective digital service through social media such as Facebook, Snapchat, Youtube and Instagram can contribute to the revival of the domestic tourism market. Necessary security measures should be taken to increase the revival of domestic tourism, health and hygiene protocols should be determined in transportation systems such as highways, railways and seaway, and necessary precautions should be taken to comply with them.

Maintaining the necessary social distance between people has become the most important factor in the period of Covid-19 and its aftermath. This situation has led to the taking of restrictive measures in tourism services, and

accordingly, the capacity of the physical area served, the number of people, and the service hours are limited. Therefore, consumers should be informed about the physical capacity and service hours of tourist places.

REFERENCES

Abdullah, M., Dias, C., Muley, D., & Shahin, Md. (2020). Exploring the impacts of COVID-19 on travel behavior and mode preferences. *Transportation Research Interdisciplinary Perspectives*, 8(100255). doi:10.1016/j.trip.2020.100255.

Abdullah, M., Ali, N., Hussain, S. A., Aslam, A.B., & Javid, M.A. (2021). Measuring changes in travel behavior pattern due to COVID-19 in a developing country: A case study of Pakistan. *Transport Policy*, *108*, 21–33. doi:10.1016/j.tranpol.2021.04.023.

Augustine, A., & Balachandran, V. (2021). A study on changes in tourist behaviour during pandemic. *International Journal of Advanced Research in Management and Social Sciences*, *10*(8), 1-10.

Baltescu, C. (2019). Elements of tourism consumer behaviour of Generation Z. *Economic Sciences*, *12(61)(*1), 63-68. https://doi.org/10.31926/but.es.2019.12.61.1.9

Booking.com. (2019). *Booking.com research reveals that Gen Z is the second most likely generation to want to volunteer when travelling (59%)*. Booking.com. https://news.booking.com/en-in/bookingcom-research-reveals-that-gen-z-is-the-second-most-likely-generation-to-want-to-volunteer-when-travelling-59/

Cohen, S. A., Prayag, G., & Moital, M. (2014). Consumer behaviour in tourism: Concepts, influences and opportunities. *Current Issues in Tourism*, *17*(10), 872-909. doi:10.1080/13683500.2013.850064.

Cowling, C. (2021). *Voice of a generation: our survey reveals your thoughts on the future of travel*. Contiki.com. https://www.contiki.com/six-two/voice-of-a-generation-our-survey-reveals-your-thoughts-on-the-future-of-travel/

DCI. (2020). *Post-covid-19: generational divides.* DCI. https://aboutdci.com/wp-content/uploads/2020/04/Generation-Report-Final-2020.pdf

Deloitte. (2020). *The deloitte global millennial survey 2020. Resilient generations hold to key to creating a better normal*. Deloitte Touche Tohmatsu Limited. https://www2.deloitte.com/content/dam/Deloitte/global/Documents/About-Deloitte/deloitte-2020-millennial-survey.pdf.

Deloitte (2021). *A call for accountability and action. The deloitte global 2021 Millenial and Gen Z survey*. Deloitte Touche Tohmatsu Limited.

https://www2.deloitte.com/content/dam/Deloitte/global/Documents/2021-deloitte-global-millennial-survey-report.pdf

Destination Genzs. *Gen Z unpacked.* Destinationgenz.com. https://destinationgenz.com/

Dimitriou, C. K., & AbouElgheit, E. (2019). Understanding generation Z's travel social decision-making. *Tourism and Hospitality Management, 25*(2), 311-334. doi:10.20867/thm.25.2.4.

Dolot, A. (2018). The characteristics of Generation Z. *E-mentor, 2*(74), 44-50. http://dx.doi.org/10.15219/em74.1351

Dorsey, J. (2020). *Gen Z and COVID-19 Update: A Generation Defining Moment.* Jason Dorsey Researcher, Advisor, Speaker. https://jasondorsey.com/blog/gen-z-and-covid-19-update-a-generation-defining-moment/

European Travel Commission (ETC) (2020). *Study on Generation Z travellers.* Brussels, Belgium: European Travel Commission. https://etc-corporate.org/uploads/2020/07/2020_ETC-Study-Generation-Z-Travellers.pdf.

GlobeTrender (2020). *Travel in the age of Covid-19*. GlobeTrender. https://globetrender.com/product/travel-in-the-age-of-covid-19/

GlobeTrender (2021, 15 Mar). *Majority of Gen Z consumers want to travel more responsibly*. GlobeTrender. https://globetrender.com/2021/03/15/majority-gen-z-consumers-travel-more-responsibly/

Hess, S., Brocklehurst, E., Brauch, T., & Volkmer, I. (2021). *Social media & Covid-19: A global study of digital crisis interaction among Gen Z and Millennials- key insights.* https://www.covid19-infodemic.com/assets/download/Social_Media_COVID19_Key_Insights_Document.pdf

Kelly, H. (2020). *The importance of Gen Z to travel's recovery.* Adventure Travel Trade Association. https://www.adventuretravelnews.com/the-importance-of-gen-z-to-travels-recovery

Kurniawan, D. T., Prasasti, A., Rakhmad, A. A. N., Hidayat, W. N., &Takada, A. (2021). The influence of post millennial generation behavior on travel intention to the ecotourism during the 5th phase of new normal or Covid-19 in Indonesia. *Proceedings of the Sixth Padang International Conference On Economics Education, Economics, Business and Management, Accounting and Entrepreneurship (PICEEBA 2020).* Atlantis Press, 439–446. https://doi.org/10.2991/aebmr.k.210616.068.

Kusmayadi, H., Wiweka, K., Kurniawati, R., & Adnyana, I.N. (2017). The profile and behavior of "smart tourist' (generation z) in travel decision

making. *4th World Research Summit for Tourism and Hospitality.* file:///C:/Users/user/Downloads/The_profile_and_behavior_of_SMART_TOURIS.pdf

Kwok, L. (2020). *Recovery is when Gen Zers and Millennials travel for business.* Hospitalitynet. https://www.hospitalitynet.org/opinion/4099695.html

Lebrun, A. M., Corbel, R., & Bouchet, P. (2021). Impacts of Covid-19 on travel intention for summer 2020: A trend in proximity tourism mediated by an attitude towards Covid-19. *Service Business*. doi:10.1007/s11628-021-00450-z.

Liu, H., Liu, W., Yoganathan, V., & Osburg, V.-S. (2021). COVID-19 information overload and generation Z's social media discontinuance intention during the pandemic lockdown. *Technological Forecasting and Social Change*, 166(120600), 1–12. doi:10.1016/j.techfore.2021.120600.

Marques Santos, A., Madrid, C., Haegeman, K., & Rainoldi, A. (2020). *Behavioural changes in tourism in times of COVID-19. European Commission*, Luxembourg: Luxembourg: Publications Office of the European Union, 1–64. file:///C:/Users/user/Downloads/KJNA30286ENN.en.pdf

McCrindle, M., & Fell, A. (2020). *Understanding the impact of covid-19 on the emerging generations*. Australia: McCrindle Research Pty Ltd. https://mccrindle.com.au/wp-content/uploads/COVID19-Emerging-Generations-Report.pdf

Monaco, S. (2018). Tourism and the new generations: emerging trends and social implications in Italy. *Journal of Tourism Futures*, 4(1), 7–15. doi:10.1108/jtf-12-2017-0053.

Pramono, R., Juliana, J., Maleachi, S., Pramezwary, A., Djakasaputra, A., & Purwanto, A. (2021). Gen z explorative study on tourism activities in the pandemic Covid-19. *Turkish Journal of Physiotherapy and Rehabilitation*, 32(3), 2261–2266.

Priporas, C. V., Stylos, N., & Fotiadis, A. K. (2017). Generation Z consumers' expectations of interactions in smart retailing: A future agenda. *Computers in Human Behavior*, 77(1), 374–381. doi:10.1016/j.chb.2017.01.058.

Robinson, V. M., & Schänzel, H. A. (2019). A tourism inflex: Generation Z travel experiences. *Journal of Tourism Futures*, 5(2), 127–141. doi:10.1108/jtf-01-2019-0014.

Rokou, T. (2020). *A change of heart: Generation Z have changed future plans in the wake of COVID-19*. TravelDailyNews International. https://www.traveldailynews.com/post/a-change-of-heart-generation-z-have-changed-future-plans-in-the-wake-of-covid-19

Sakdiyakorn, M., Golubovskaya, M., & Solnet, D. (2021). Understanding Generation Z through collective consciousness: Impacts for hospitality work and employment. *International Journal of Hospitality Management*, 94(102822), 1–13. doi:10.1016/j.ijhm.2020.102822.

Seabra, C., AlAshry, M., Cinar, K., Raja, I., Reis, M., & Sadiq, N. (2021). Restrictions' acceptance and risk perception by young generations in a COVID-19 context. *International Journal of Tourism Cities*, 7(2), 463–491. doi:10.1108/ijtc-08-2020-0165.

Setiawan, B., Trisdyani, N.L.P., Adnyana, P.P., Adnyana, I.N., Wiweka, K., & Wulandani, H.R. (2018). The Profile and Behaviour of 'Digital Tourists' When Making Decisions Concerning Travelling Case Study: Generation Z in South Jakarta. *Advances in Research*, 17(2), pp.1–13. doi:10.9734/air/2018/43872.

Skinner, H., Sarpong, D., & White, G.R.T. (2018). Meeting the needs of the Millennials and Generation Z: gamification in tourism through geocaching. *Journal of Tourism Futures*, 4(1), 93–104. doi:10.1108/jtf-12-2017-0060.

Slivar, I., Aleric, D., & Dolenec, S. (2019). Leisure travel behavior of generation Y & Z at the destination and post-purchase. *E-Journal of Tourism*, 6(2), 147–159. doi:10.24922/eot.v6i2.53470.

Tavares, J. M., Sawant, M., & Ban, O. (2018). A study of the travel preferences of Generation Z located in Belo Horizonte (Minas Gerais – Brazil). *e-Review of Tourism Research (eRTR)*, 15(2-3), 223–241.

Taylor, D. (2020). *Gen Z Travelers Could Be Key to The Industry's Recovery*. Travelmarketreport.com. https://www.travelmarketreport.com/articles/Gen-Z-Travelers-Could-Be-Key-to-The-Industrys-Recovery

The Center for Generational Kinetics (2020). *The state of Gen Z 2020. The impact of Covid-19 and Gen Z looking ahead*. The Center For Generational Kinetics LLC. https://genhq.com/wp-content/uploads/2020/11/State-of-Gen-Z-2020-Covid-19.pdf

Unger, S., & Grassl, W. (2020). Insta-Holidays and Instagrammability. *Journal of Tourism Leisure and Hospitality*, *2*(2), 92-103.

Vieira, J., Frade, R., Ascenso, R., Prates, I., & Martinho, F. (2020). Generation Z and key-factors on e-commerce: A study on the Portuguese tourism sector. *Administrative Sciences, 10*(4), 1-17. doi:10.3390/admsci10040103

Wachyuni, S. S., & Kusumaningrum, D. A. (2020). The effect of covıd-19 pandemic: how are the future tourist behavior?. *Journal of Education, Society and Behavioural Science*, *33*(4), 67-76. DOI:10.9734/JESBS/2020/v33i430219

Wiastuti, R. D., Lestari, N. S., Ngatemin, B. M., & Masatip, A. (2020). The Generation Z characteristics and hotel choices. *African Journal of Hospitality, Tourism and Leisure*, *9*(1), 1-14.

Williams, K., & Page, R. (2011), Marketing to the generations. *Journal of Behavioral Studies in Business*, *3*, 1-17.

CHAPTER 5

AN EVALUATION ON DIGITAL TRANSFORMATION PROCESSES IN PUBLIC AND PRIVATE UNIVERSITIES IN TURKEY

Lecturer Onur DOĞAN[1]

Prof. Dr. Zeliha SEÇKİN[2]

[1]Onur Doğan1, Aksaray University, Ortakoy Vocational School, Aksaray, Türkiye, https://orcid.org/0000-0002-8109-4728
[2] Zeliha Seçkin2, Faculty of Economics and Administrative Sciences, Aksaray, Türkiye, http://orcid.org/0000-0003-0603-3236

1. INTRODUCTION

The process called digital transformation has caused radical changes in the institutional structures of countries, societies, and organizations as well as their levels of technology use. Technological developments, referred to as information and communications technology, constituted a dimension of the strategies that organizations planned to achieve their goals and visions. Recently, with digital transformation, this understanding has evolved into the main determinant of the general strategies of organizations. This transformation has led to radical changes in the way organizations operate. In other words, it would be a correct approach to state that digital transformation processes have become the central strategies of organizations. Digital transformation, which is described as the radical structural transformation of organizations, has not only profoundly affected areas such as the healthcare, telecommunications, automotive, banking, economy, education, and manufacturing sectors but has also become a process that forces people, organizations, and countries to transform. While many traditional professions disappear during this process, different business models and careers also emerge. In particular, training human resources to adapt to digital transformation is the primary duty of universities, which are the central power behind the societal transformation, and the production of digital and Industry 4.0 technologies for society and the state are among their duties and responsibilities. Digital transformation deeply affects not only the content of education but also the organizational structures of universities. For this reason, universities should manage the changes in fields such as science, education, technology, and production that will achieve the goals specified in their organizational vision by taking into account current technological developments and should lead society in this regard.

2. THEORETICAL FRAMEWORK

2.1. Digital Transformation

Acceleration in modern technological developments causes the transformation of individuals, organizations, societies, and states as the main determinants of radical changes at home, at work, in education, in transportation, and all areas of life (Henriette et al., 2015).It would be more useful to draw attention to the differences between these concepts to understand the concept of digital transformation and to eliminate the confusion arising from the fact that researchers use the concepts of digitization and digitalization interchangeably from time to time. The differences between these concepts are given in Figure 2.1.

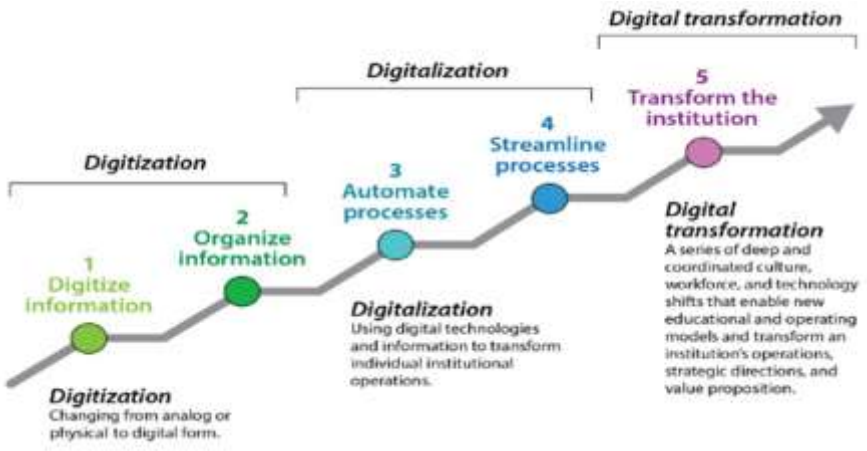


Figure 2.1: Digitization, digitalization, and digital transformation (Brooks & McCormack, 2020, 5)

Figure 2.1 indicates that the first step for digital transformation to take place is digitization, with the second step being digitalization. In his definition of digitization, Gartner (2020) describes this concept as the numerical coding of analog data without being altered by giving an example of how e-mail replaces correspondence made using paper and envelopes. A different example could be recording the pages of a book in digital media as a PDF extension through a browser. Automating digitization processes offer advantages such as easy access, archiving, and high efficiency. Gartner (2020)

defines digitalization as the process of turning into a digital organization through the use of digital technologies to change an existing business model and provide new opportunities to generate income and value. Digitalization is the evaluation, restructuring, and redesign of how an organization does business using digital information technology to fully transform its processes. Savic (2019) defines digital transformation as the process of profoundly changing the identity, culture, management strategies, and operational processes of an organization with technological transformations. Zinder and Yunatova (2016) state that the concept of digital refers to the technology and the concept of transformation refers to motivation for the mental changes of individuals in digital transformation. Bosilj Vuksic et al. (2018) state that only using a technology-oriented digitalization strategy in the digital transformation process is an erroneous practice for organizations. Apilioğulları (2018) stated that digital transformation is about strategy and way of thinking rather than technology; it is not enough to only want and desire transformation, and it is necessary to strive for the realization of the developed strategies. Apart from these definitions, definitions made by different authors and organizations related to digital transformation and their emphases are given in Table 2.1.

Table 2.1: Definitions of Digital Transformation

Sources	Definitions	Emphasis
OECD (2018).	Digital transformation refers to the economic and social effects of digitization and digitalization. Digitization is the conversion of analog data and operations into a machine-readable format. Digitalization is the use of digital technologies and data as well as ensuring their interconnectedness, which leads to changes in new or existing activities.	Process Technology Interconnectedness
Deloitte (2018)	Digital transformation is the use of technology to radically improve the performance or access of an organization. In a digitally transformed organization, digital technologies ensure improved processes, new capabilities, and new business models.	Process Technology Model

Li et al. (2018)	Digital transformation emphasizes that organizational structure, data flow, and organizational skills and habits are influenced by technology to adapt to information technology. In this sense, digital transformation highlights the technological dimension of information technology and the harmony between information technology and businesses.	Organizational cohesion Technology
Bloomberg (2018)	Digital transformation requires the organization to cope better with change in general and makes change a core competency as it becomes fully customer-oriented. Such agility will facilitate ongoing digitalization initiatives.	Change Individual Agility
European Commission (2019)	Digital transformation is the integration of advanced technological digital systems with physical systems and the creation of innovative business models, new processes, smart products, and services.	Technology Model Process

Source: Verina and Titko (2019); Karaman and Aydın (2020)

In general, the definitions are shown in Table 2.1 generally emphasize the dimensions of individuals, technology, and process. Apart from defining these dimensions separately, the most important data are the relationships between them. While the relationship between technology and the individual is doing the work through using different technologies, the relationship between technology and process is about doing the work faster and in a shorter amount of time. Ueckermann (2017) stated that what is meant by technology, which is one of the three dimensions necessary for digital transformation, is infrastructure, cyber security, and mobility. Process refers to policies, procedures, and rules; whereas individual refers to employees, suppliers, and customers. Similarly, Mckeown (2017) defined the five basic blocks of digital transformation while expressing the process of change related to successful digital transformation. They are strategy-culture relationship, employee-customer relations, process-innovation relationship,

technology, and data analysis. In this model, strategy is considered an initial step of change as well as an approach that covers all components.

2.1.1. Technology and Digital Transformation

The use of technology by many organizations and individuals is perceived and referred to as digital transformation. Digital transformation is defined as an important process of technological and cultural change in which technology is used as a tool (De la Peña and Cabezas, 2015). As can be understood from the definition, the technological developments that Bilge (2018) referred to as disruptive technology reveal a process that causes both technological and cultural change. Thomas (2019) defines disruptive technology as technologies that cause radical change and innovation and lead to existing technologies and social relations being restructured. Berman et al. (2016) emphasized that it is a necessity for strategy, operations, and technology to undergo a process of bottom-up redesign to achieve a successful transformation. Recent disruptive technologies have entered our lives, especially with the advent of the technological revolution referred to as Industry 4.0. The most important among these are the Internet of Things (IoT), cloud computing, artificial intelligence (AI), Big Data, deep learning, augmented reality, cyber security, and Cyber-Physical Systems (Doğan and Baloğlu, 2020$_a$).

Thomas (2019) stated that business processes can be made more efficient with the support of technology. In particular, collecting and analyzing large data, identifying new needs by transferring them to different areas and departments, and optimizing decision processes are a few examples of this efficiency. Definitions made by Thomas (2019) on the internet of things, cloud computing, artificial intelligence, and deep learning, which are among the most important disruptive technologies of digital transformation, are given below:

Internet of Things (IoT): The Internet of Things is a worldwide network topology in which all data is stored in a cloud system via the Internet, where things, devices, and smart objects that can be managed, analyzed, and visualized with the help of big data in various services through the cloud are created (Alieyan et al., 2020). Bıçakcı (2019) defines the Internet of Things as the connection of every conceivable thing to the Internet, the ability to communicate with other things or devices and to exchange information.

Cloud Computing: Cloud computing is an evolution of information technology and a digital warehouse that provides information technology

resources. Mell and Grance (2011) and Schneider et al. (2020) define cloud computing as the collection of computing resources such as networks, servers, storage, applications, and services in a pool, and being able to be used on-demand at any place and time.

Artificial intelligence (AI): According to Pirim (2006), "Artificial intelligence is the performance of behaviors considered intelligent when performed by humans by machines. It is a theory that tries to reveal how the human mind works. The purpose of artificial intelligence is to imitate human intelligence through computers". The goal to be achieved with artificial intelligence is to build a machine with all the physical and intellectual abilities of a person. Projects have been developed in many different fields related to artificial intelligence dating back to the 1950s but have recently become increasingly prominent. Among them are natural language processing, automatic planning, data mining, image recognition, machine learning, robotics, and computer vision (Fettke, 2020).

Deep learning: Deep learning, which is a sub-branch of machine learning and artificial intelligence, is a digital learning method similar to the artificial neural networks located in the human brain. Like the human brain, it labels and decodes information under a category by comparing each new piece of information with old information. In other words, deep learning is a field of technology that includes artificial neural networks consisting of one or more hidden layers and similar algorithms (Jakhar and Kaur, 2020).

2.1.2. The History of Digital Transformation

The long history of digital transformation began with the first computers that could process handwritten notes into numerical information that could be analyzed and shared. With the emergence of Networks and the Internet, these capabilities have improved and data storage has grown dramatically. This growth has led to the development of more reliable processes of digital data management and analysis by supporting expanding types of data such as big data, data centers, data warehouses, and data lakes. Cloud Technologies has emerged as a response to the expanding amount of data and the need for ever-expanding capabilities to manage, analyze, and process this data. IoT, AI, and Machine Learning have provided more advanced technological options for organizations that want to transform their processes to achieve better results. Virtual and Augmented Reality has become a part of innovative initiatives that contribute to digital transformation along with technologies based on video analytics (Oracle, 2020). The

declaration of the fourth industrial revolution called Industry 4.0 by Germany accelerated digital transformation in the world, which accelerated even further with the pandemic.

2.1.3. The Individual and Digital Transformation

In the process of digital transformation, the individual adapting to change, showing willingness and desire to direct change, and accepting change is extremely vital in terms of transformation. Ancarani and Mauro (2018) stated that successful digital transformation can only be realized by focusing on individuals in organizations. However, the willingness of the managers and leaders of the organization to change and their efforts to create the necessary investment tools for change are also very important. Planning and organizing digital transformation processes is known as the process of transformational leadership. Special statuses and units are created for transformational leadership in organizations, or someone with executive status takes responsibility for these processes and becomes the transformational leader. Singh and Hess (2017) state that many organizations that have a vision for digital transformation have a position called Chief Digital Officer (CDO). As it is understood, CDOs will replace the CEO (Chief Executive Officers), who are the managers of international large organizations today.

New organizational capabilities are required to increase the acceptance and active use of digital transformation. Leaders of organizations need to accept the complex consequences of digitalization for the future of both the organization and the employees (Wang et al., 2016). Adaptation to transformation can only take place with the acceptance of the change. Digital transformation directly affects the human resources of the organization and causes roles to change. Therefore, individuals' necessary knowledge and skills should be taken into consideration along with their acceptance of the change (Kohli and Johson, 2011). According to business analysts and academic studies, one of the main shortcomings of existing digital transformation programs is that they focus on technology by targeting the digitization of existing business processes rather than trying to restructure them to create new business models. Moreover, it is the miscalculation of the dynamics of digitalization that necessitate the continuous adaptation of organizations, people, technologies, organizational structures, and ultimately organizational culture (Bonnet and Nandan, 2011). It is seen that managers fail to accept that the most important obstacle to digital transformation is humans and not technology. For this reason, transformations that focus on technology and

separate technological development, technological implementation, and business processes from daily processes and practices cause a significant internal conflict against change (Bonnet and Nandan 2011).

Digital transformations are inherently cross-functional and fast. Additionally, the hierarchical structure and silo mentality present in organizations directly affect decision-making processes. Digitalization increases the level of transparency through the free flow of information, thus causing managers to perceive a particularly moderate loss of control and a threat to their leadership role. Therefore, some managers may resist digitalization. A management structure focused on supporting digitalization should be sufficiently collaborative, dynamic, flexible, and agile to ensure that processes are efficient (McAfee and Welch 2013).

2.1.4. Business Processes and Digital Transformation

Digital transformation management includes managing and directing changes in the business processes and culture of the organization as well as organizing technological changes and innovations in the organization. In this sense, the changes that occur with the effect of digital transformation can be at the micro-level, while changes in roles and responsibilities, general functioning, and strategies can be at the macro level. (Karaman and Aydın, 2020). Since digital transformation affects business processes, it has now become possible to see expressions such as "now we make different offers to each customer" in the business processes of organizations that use advertising. Solis and Littleton (2017) stated in their articles on digital transformation that Domino's Pizza recruited 400 software experts as artificial intelligence and big data analysts. It is seen that a pizza company operating in the service sector has become an information technology organization with the effect of digital transformation and has seen radical changes in business processes. Bayrak (2017) stated that everyone perceives digital transformation as an interesting, important, and up-to-date subject, but it evokes a different image in each mind. In his article titled “The Legends of Digital Transformation”, the author attempted to summarize the false facts the about subject as follows:

1. *Every organization will undergo digital transformation*. Digital transformation does not refer to installing or updating software or incorporating new technology into the organization. Digital transformation is a strategically planned shock in line with the goals of the organization. In this sense, not every organization, business process or business model needs to undergo digital transformation in the short term. When evaluated in terms of

the organization and the business models of the organization are charted with the necessary feasibility studies, digital transformation can be delayed taking into consideration market share, income and profit until the necessary conditions arise.

2. *The most successful digital transformation processes are usually carried out by organizations with a high rate of profit*. If all processes are going well for the organization and everyone (managers, employees, customers, and all stakeholders) is doing well, it becomes difficult to direct the organization to digital transformation. Failed organizations are generally more motivated to transform business processes because they see digital transformation as salvation.

3. *The organization tries to be a pioneer in its sector by being the first to transform but worries that its competitors will get the biggest piece of the pie*. Innovative and disruptive transformation initiatives in a sector are rarely carried out by the largest organizations of the relevant sector. Startups such as Netflix, Yemeksepeti, WhatsApp, and Uber were not carried out by industry leaders, but by startup organizations.

4. *Digital transformation draws its power from disruptive and innovative technologies.* The main reason for the results obtained in the short term in digital transformation is not the latest technologies, but traditional strategies and existing technologies. Many companies that make sales on the internet have made their initiatives successful by carrying out the suitable transformation for existing mobile phones and websites.

5. *Middle-level managers are more enthusiastic about focusing on digital transformation and innovative approaches.* Although middle-level managers are responsible for digital transformation in organizations, the most important role for the transformation of the organization belongs to top-level managers and leaders. However, leaders and managers can resist such disruptive transformations with the idea that the current order will be disrupted.

2.1.5. Importance and Benefits of Digital Transformation

Digital transformation can play a fundamental role in ensuring that an organization continues its life more strongly and provides a competitive advantage in its sector, effectively and efficiently achieving the goals stated in its vision. Berman (2012) stated that simultaneity in customer-organization interaction became possible due to the rapid increase in the digital facilities of customers and the acceleration of internet connection rates. For this reason,

organizations need to fulfill the requirements of the digital age and take steps to adapt to this age to be able to compete and offer all kinds of added value opportunities to their customers depending on their strategy for digital transformation. Rogers (2017) stated that the digital age saw the forming of a world defined by networks of customers instead of mass markets. Rogers stated that the dynamic connections and interactions established between customers with this paradigm change their relations with organizations and with each other, and that thanks to the digital tools used by today's organizations in their relations with their customers, they affect the way customers discover, evaluate, buy and use products and are more effective in sharing brands, interacting with them and changing brand loyalty. Digital transformation requires a more holistic perspective on factors such as human factors, business processes, and technology to provide more effective and efficient services in line with the opportunities offered by technological transformations and changing social needs (Telli, 2018). Belmudes (2019) defined digital transformation as a cultural change that constantly motivates organizations to force themselves to adopt digital technology to all business processes, transforms the way they work, and adds value to customers and all stakeholders. Doğan and Baloğlu (2020_b), stated that with Industry 4.0, it is very important for organizations to plan the demand for technology in detail as well as prioritize it and market an indispensable element in their strategy and business plans.

Since digital transformation serves the purpose of making the functioning of the organization more efficient and effective, it creates an obligation to innovate in all processes. This innovation can be at different levels. The method is to evaluate the transformation from a process-oriented perspective. From a product-oriented perspective, interventions, interactions, information efforts, protection, coordination, implementation, etc. on the components in the processes cause costs to arise. Digitalization obtained with these costs can become a more valuable investment by reducing the total costs of the business (Karaman and Aydın, 2020). Schulz (2019) stated that although many organizations had information technology in this period, most of the transactions were made on paper, information technology systems were not integrated, digital methods were not taken into account in communication with stakeholders, marginal and low data quality were used, random data management systems were taken as a basis, and information technology systems were not updated. Schulz (2019) emphasized that the following benefits will be obtained if the organizations established for commercial

purposes complete their digital transformation into liminate the above-mentioned negative aspects:

Reduced operating costs: Optimizing business processes with digital technology will reduce costs in every way.

Improved customer-oriented strategy: Digital technology will help organizations acquire, retain, and sell products or services to customers, while at the same time creating capabilities that will reduce marketing spending.

Superior data analysis: Digital technologies will increase efficiency by combining data from all customer interactions and using all operational data and data sources for the benefit of the organization.

Advanced customer-driven focus: Digital technologies enhance customer experience. This way, services, and products can be improved consistently with all communication points and channels by paying more attention to what customers want.

New products and services: Since digital technologies make a customer-oriented approach possible, organizations will be able to better adapt products and services to their customers and the competitive environment.

Universal customer experience: By working with advanced digital technologies, customers can be offered an effective experience regardless of when, where, and how they choose to interact with the organization.

Increased agility and innovation: This transformation will replace old information technology systems, enabling organizations to acquire digital technologies that make them more agile and transform them to respond more quickly to customer demands, market trends, and technological developments. Additionally, organizations will emphasize data as an important asset and be able to develop a process-based management structure to manage data quality. There will be access to technologies such as artificial intelligence, augmented reality, cloud computing, the internet of things, big data, and analytics.

Reddy and Reinartz (2017) listed the benefits of digital transformation as new products and services, more options, new experiences, and low prices for customers; increased efficiency, effectiveness, and creating new value and opportunities to enter new markets for organizations; more flexible working models, more extensive work participation, and more flexible lifestyles for employees; and more efficient and effective public administration and better public services for society.

2.1.6. Digital Transformation Strategies and Digital Maturity

In digital transformation, organizational strategies need to be established in the most accurate way possible and managed with maximum awareness of all stakeholders. Systems-driven roadmaps aimed at the future uses of the technology at an institution are available, but the transformation of the products, processes, and structural features that arise for the adaptation of these technologies is not being taken into consideration. Digital transformation strategies adopt a different perspective and pursue different goals. These strategies, which come from a business-centered perspective, focus on the transformation of products, processes, and organizational aspects made possible by new technologies, and are also designed with a broader and clearer scope (Chanias and Hess, 2016).

Digital transformation strategies make a clear difference in terms of automation and optimization of organizational processes, as they go beyond the process paradigm and include changes in product, service, and business models and their consequences from a holistic perspective. Strategic planning refers to the process of defining a plan as well as the resources and decision-making allocated to follow a plan to achieve the organizational goals. While classical approaches manage the development, implementation, and evaluation of digital transformation strategies, it is necessary to define how their content will be primarily due to them being newly emerging structures (Matt et al., 2015).

In their study, Matt et al. (2015) determined a digital transformation strategy consisting of four dimensions: use of technology, changes in value creation, structural change, and financial aspects. The use of technology emphasizes an organization's attitude towards new technologies as well as its ability to take advantage of these technologies and therefore includes technology's strategic role and future passion for an organization. From a business perspective, changes in value creation often mean changes in product or service creation. These changes are related to the effects of digital transformation strategies on the value chains of organizations and the extent to which new digital activities deviate from classical-analog activities. Structural changes are a way to provide an adequate basis for different forms of value creation and new operations with currently used technologies. The structural change covers the processes of placing new digital processes within the organizational structure of an organization. Whether the products, processes, or skills are most affected by these changes becomes even more

important. If the scope of change is limited, it makes sense to incorporate the new operations into existing organizational structures, while creating a separate unit in the organization gives good results for more extensive changes. However, the three dimensions mentioned above can be transformed by taking into account the financial aspects of the organization. These financial aspects are both a driving force and a limiting force for transformation. While less financial pressure on the organization's core field of activity reduces the perceived urgency to act, organizations that are already under financial pressure may also lack external support to finance a transformation. For this reason, organizations should face the need to make digital transformations and explore their options clearly and promptly.

Lahrmann et al. (2011) define organizational maturity as a state of complete and perfect readiness for a new process. Maturing systems or organizations develop their capabilities to achieve desired transformations over time. Digital transformation and digital maturity are sometimes used interchangeably, disregarding their differences. Digital maturity is the level of readiness of an organization to transform digitally (Kane et al., 2017). In another definition, digital maturity is defined as the adoption of this maturity by the organizational culture, especially for the digital transformation of an organization. Shahiduzzaman et al. (2017) stated that digital maturity can be used to explain what an organization has already achieved in terms of realizing its efforts for transformation and how it is systematically prepared to adapt to the digital environment. Digital maturity also reflects a managerial interpretation that goes beyond just technological interpretation, explaining to what extent an organization performs tasks, and what it has currently achieved in terms of carrying out digital transformation efforts, including changes in services, processes, skills, culture, abilities, and products related to their mastery of change processes. Similarly, Teichert (2019) listed the most common digital maturity areas as digital culture, technology, operations and processes, digital strategy, organization, digital skills, innovation, customer foresight and experience, management, vision, digital ecosystem, leadership, compliance, and security, products and services and business model in the articles he included in his systematic literature review under the title digital transformation maturity. Organizations reach the highest level of maturity when they have both a strong digital base and a good understanding of how to benefit from it (Shahiduzzaman et al., 2017). Furthermore, digital maturity is not a static concept; because the digital outlook is constantly changing. Therefore, an organization needs to regularly evaluate its digital maturity.

As a result, digital transformation, which consists of two simple words, is generally perceived as a transition to a more technological, more innovative approach while having connotations in every human mind. This transformation refers to a holistic change through the integration of human processes, business processes, and technological elements. Here, organizational culture is transformed more than technology, humans, organizational structure, and processes. Organizations engage in digital transformation processes to adapt to the change in digital culture and to fight against competitive conditions. The most important criteria in the transformation process are the desire of individuals to anticipate, participate, direct and adapt to change. Managers put forward a will bring transformation leadership at the forefront to want and manage change. To achieve the digital transformation desired in organizations effectively and efficiently, it is necessary to determine the organization's level of digital maturity and develop digital strategies based on the data obtained. Establishing an organizational structure compatible with the transformation strategy has a driving role in achieving digital transformation.

2.2. Digital Transformation in Higher Education

Societies and economies have undergone some transformations due to the invention of steam engines in the 18th century, the establishment of railways in the 19th century, the use of electricity in mass production in the early 20th century, and the Internet in the late 20th century. The general and digital economic activities that started towards the end of the 20th century and that have changed worldwide recently with developments in science and technology have led to an increase in globalization and global competition (Erdem, 2006; Safiullin and Akhmetshin, 2019). The revolution called digital transformation today has a deeper and more widespread effect on education, society, and the transformation of the economy than all other transformations that have occurred in history. Looking at the data obtained from IDC (2017) reports to better understand the impact of digital transformation, it is seen that investments in digital transformation tend to increase by 27% annually in the 2017-2020 period and are expected to reach approximately 6.3 trillion dollars in 2020 (cited in Pereira et al., 2020). With the effect of globalization, social changes occur in economic, cultural, political, and technological fields, and the rapid spread of the Internet, smartphones and personal computers in the globalized world has especially caused radical changes in the functioning of organizations. Digital transformation can be defined as a disruptive change in

organizations supported by digital technologies. While disruptive technologies transform different fields of activity, many organizations are moving towards digital transformation and taking a more innovative mindset to develop in this age. Organizations that do not benefit from this transformation to improve and change themselves are in danger of disappearing or leaving their place to more agile organizations. Digital transformation affects education, particularly higher education, very quickly. In this sense, digital transformation also improves usability and accessibility in the context of education and higher education (Fonseca, et al., 2017). Technology has always been present in education and training and has led to the unification and strengthening of the educational strategies used within a new educational framework in the last two decades (Dede, 2000; as cited in Pereira et al., 2020).

Higher education organizations have to activate digital transformation processes and help societies with digital transformation processes as digital leaders. Due to their nature, higher education organizations are undergoing significant changes due to globalization and the emergence of advanced technologies, and it is predicted that these changes will continue rapidly in the future. The first steps of the digital transformation and development process in higher education organizations started with the establishment of the organization's technology infrastructure, continued with the addition of educational technologies to educational processes, and then continued its development with social development and communication environments being carried to digital platforms. (Kukulska Hulme, 2012; cited in. Kır, 2020). For this reason, organizations have to undergo a compulsory transformation to reshape their structures, processes, and pedagogical and curriculum practices to be able to compete worldwide, provide for the needs of the information society, and meet students' learning preferences and academics' technological development (Bridgstock, 2016). With the spread of lifelong learning models, face-to-face education models with a focus on the teacher (teacher, instructor, etc.) are evolving towards more interactive and learner-centered hybrid models such as open education, online teaching, e-learning, distance education, and mobile learning, which is a model in which all of society can access education and training regardless of age, place and time. However, digital transformation has not only affected teaching models in terms of higher education organization, but also deeply affected the business processes, organizational structure, visions, strategies, and cultures of these organizations (Tosyalı, 2018).

Today's students are expected to develop competencies in creating and organizing data sources, creating eager collaborations, and converting data into valuable information to use than having classical educational outcomes. In this sense, in addition to skills such as computer and digital technology use, software, and coding, a report published by the World Economic Forum emphasizes the necessity of acquiring the 10 most critical skills in today's world (analytical thinking and innovation, active learning, creativity, originality, technology design, critical thinking and analysis, complex problem solving, leadership and social impact, emotional intelligence, causality, and system analysis and evaluation, etc.) (Ataş and Gündüz, 2020; Özdemir and Kılınç, 2019).

In general, the digitalization of higher education is a transformative process that significantly affects all activities of these organizations. Digital transformation in higher education affects and changes all processes, forms, and goals for teaching, learning, research, and study. This transformation includes the development of new infrastructure, an increase in the use of digital media and technologies for learning, teaching, research, support services, management, and communication, as well as the need to develop innovative (digital) skills for the current status and future employment of students and staff (Rampelt et al., 2018).

Higher education organizations, which are at the center of social change and transformation, are leading organizations in creating qualified human resources equipped with the modern skills needed by societies at both national and international levels. For this reason, higher education organizations need to predict all kinds of technological, sociological, and economic developments and adapt to these developments and manage and lead the changes in education, science, and even technology.

2.2.1. Components of Digital Transformation in Higher Education

Koral Gümüşoğlu (2017) emphasized that some of the components in higher education organizations need to be taken into account for digital transformation to take place in these organizations. These components are students, instructors, teaching process and environment, and management. For the transformation to take place successfully and efficiently, it is necessary to know the existing properties of these components and to design strategies and plans based on these data.

2.2.1.1. Digital Transformation from the Student's Perspective

It is thought that focusing on the characteristics of students who are at the center of the learning dimension is important in terms of transformation for digital transformation processes in higher education organizations. Prensky (2001) stated that students born in the early 21st century grew up with the technologies of the digital age and are currently students in higher education organizations. The author used the expression *digital natives (Generation Z)* for this generation. Many studies have been conducted on this subject and a lot of information has been obtained on the traits of these students. The most important assumption about digital natives is that the students are equipped with innate skills to cope with digital technologies. The educational needs of this generation, which understands the digital languages of technologies such as the Internet, video games, computers, and smartphones, and even go as far as developing some programs for them, differ considerably from those of previous generations. Kopackova (2015) emphasized that the educational techniques in existing higher education organizations are insufficient for this generation and that they need to be transformed to meet the generation's needs. Study findings have revealed that digital natives are a new generation that has a high tendency to use technology and social media, has developed motor skills, is creative, and can access information and data more easily, process data, and come together with digital technologies at any place and time to work and collaborate (Giunta, 2017; Kopackova, 2015; Williams et al., 2012).

Digital natives, who are referred to as digital students, are defined as young adult students who grow up with active participation in technology (Kopackova, 2015). The characteristics that define digital students include underestimating the usability of e-mail, instant messaging, and text messaging, and their use of unlimited online resources. Digital students, who tend to learn visually and socially with trial and error, prefer to do rather than to know due to their tendency to organize and integrate information using technology. For this reason, they have very special needs and expectations from learning environments. They enjoy improved interaction and connection with others and expect to learn in physical or virtual groups (Barone, 2003; cited in Andone et al., 2010). The above-mentioned characteristics of digital students will guide digital transformation processes in higher education organizations. During this process, it is necessary to identify and recognize student characteristics well, to design the technological and digital

infrastructures of organizations to adapt to the relevant characteristics, and to develop appropriate teaching methods.

On the other hand, the technological developments that occur affect not only the current students but also many people who have completed their studies and are actively working/not working. In this sense, higher education organizations are responsible not only for preparing students in their 20s for life but also for involving many individuals who want to keep up with the change in society in their lifelong learning processes and leading the transformations (Koral Gümüşoğlu, 2017). In a world where global competition is increasing and skills are changing very rapidly, organizations and employees find themselves under pressure to update and improve their skills throughout their careers. Moreover, given the increasingly accelerating change taking place in societies, normal educational programs cannot be expected to provide all the information an individual may need in work and life. Therefore, it is predicted that lifelong learning gains importance in individuals, and a necessity for higher education organizations to undergo digital transformation emerges. Employed adults I, in particular, can not be expected to participate in higher education in normal times. For this reason, it is thought that only a university that opens its doors to all learners will create the digital transformation process by adding it to its organizational structure (Taşlıbeyaz, 2020). Higher education organizations should focus on 21st-century skills by considering various student profiles and develop policies and practices in line with developments in digitally connected technologies that support learner abilities in the digital age (Saykılı, 2019).

2.2.1.2. Digital Transformation in Terms of Instructors

The effects of digital transformation in higher education organizations are important for the instructors who assume the responsibility of teaching. Faculty members, who are seen as the most important pillar in transformation processes, have important roles and responsibilities to adapt their organization and students to this process (Kır, 2020). According to Özen (2009), instructors should benefit from digital technologies that facilitate teaching in the age of digital transformation, use them where necessary, integrate digital materials with their lessons, and motivate themselves to keep up with this transformation in every sense. It is generally accepted that the task of instructors is not only to provide information to students but also to teach them how to access and use information when necessary. In terms of instructors, it is accepted that in the past, narrow and profound knowledge was

more prominently characterized as expertise, but today, it is more important to know and understand the whole process. However, instructors need to support students' creative, innovative and entrepreneurial abilities (Elçi et al., 2017).

Taylor (2014) found that instructors had limited skills and were reluctant to adopt digital skills. On the contrary, Price,and Kirkwood (2014) and Singh and Hardaker (2014) determined in their research that instructors tend to improve their teaching with the help of digital technology in general. What causes instructors to change their teaching techniques is often students' needs for changes in the teaching method. However, the lack of strategies and actions of the administrations of higher education organizations regarding digital technology makes it even more difficult for the instructors to work on adapting technology to their teaching (Singh and Hardaker, 2014). Odabaşı et al. (2010) emphasized that instructors should be equipped with new skills and traits in the digital age. Saykılı (2019) states that the role of the instructor in the teaching environment has changed, that they have ceased to be a source of information, and that we are now in an era in which information is distributed among digital networks and can be accessed wherever and whenever possible. For this reason, there is a period in which students in higher education organizations have the opportunity to access information and knowledge not only from lecturers or printed books in libraries but also from a pool of open-source course materials, websites, social media, online learning communities, and networks. Therefore, the role of the instructor has started to transform into mentoring and guiding students to reach the most accurate and effective content on digital platforms. They also have the role of ensuring that students access this content by producing digital content thanks to their current and future digital skills. In this context, instructors quickly performing routine operations such as checking homework, online evaluation, and grading by blending digital applications with the physical classroom will increase efficiency for both their students and themselves as well as save time (McKnight et al., 2016).

Elçi and Vural (2017) "Instructor 4.0: In their study titled "The Changing Role of the Instructor and Technology Enriched Learning", they pointed out the necessity of instructors to integrate Technology Enriched Learning (TEI) environments with teaching programs by improving themselves on learning and teaching technologies beyond just having information literacy in the digital age.

2.2.1.3. Digital Transformation in Terms of the Teaching Process and Environment

Before dealing with how digital transformation shapes learning environments and changes observed in learning environments in the digital age, emerging understandings of how learning occurs should be addressed. It is observed that there is a transition from traditional learning through information acquisition models to cooperative learning and information production models in the digital age. In parallel with pedagogical changes, informal learning plays a vital role in shaping the individual's learning activities in this age. For this reason, it is of particular importance to develop joint cultural practices for educational institutions, together with both organizational and physical structure to to support the process of producing collaborative knowledge (Lonka, 2015). Digital environments are appropriate learning management platforms where learning and interaction take place between instructors and students.

The use of learning management systems, in which the interactive education process is carried out at any place and time with the spread of the internet worldwide through smartphones, tablets, and computers, is used in almost all higher education organizations (Ohliati and Abbas, 2019). Watson and Watson (2007) defined learning management systems (LMS) as digital platforms that encompass all aspects of the learning process. According to Szabo and Flesher (2002), a learning management system is a digital platform that provides and manages all teaching-related content, describes individual and group learning and the main goals of education makes evaluations when necessary, monitors progress in line with the desired goals, and collects and presents all data to supervise all learning processes in an organization.

A robust and high-quality learning management system and the success of any online course can enhance the reputation of the higher education organization. Learning management systems not only need to provide students with content but also need to ensure timely and accurate communication between students, course materials, and other organizational stakeholders. A good learning management system must be dynamic, in other words, interactive, flexible, customizable, and adaptable. A learning management system, whether licensed or open-source, must be able to execute a variety of functions that work coherently to provide the user with a seamless experience. These functions include the ability to disseminate information, assess learner competence, and record student outcomes, as well as support for online social communities, communication tools, and system

security (Turnbull, 2019). According to Watson and Watson (2007), a quality learning management system should have features such as course and content management, evaluation, progress monitoring, a rating book, communication tools, connection to social networks, security and privacy, different language options, adaptiveness, being accessible at any place, and allowing cloud technologies.

The teaching process refers to the process in which instructional methods are used and information is conveyed to the student. Digital transformation practices advance learning actions in this process in a way that is coherent and flexible with the digital environment. Today, the teaching process generally exists on digital platforms with the help of digital content and materials. For this reason, learning environments need to be designed to allow learners to have simple, effective opportunities to gain advanced skills with less time and costs (Taşlıbeyaz, 2020).

2.2.1.4. Digital Transformation in Universities in Organizational, Management and Process Dimensions

One of the most important impacts of the digital age is organizations shifting from a scarcity of information to unlimited sources of information. Another impact is the hyper internet connection expected by students and academics. While the rate of change increases exponentially, organizations such as universities try to adapt to transformation at a linear rate at best. This impact leads to universities needing to develop innovative ways to adjust processes, be more agile, efficient, and technologically knowledgeable, or not lag. At the same time, creating a digital learning environment is among the important responsibilities of higher education organizations (Bryant, 2012).

Digital transformation and sustainability are the two most important realities of the current age. Although the individual and technology seem to be side by side, for now, this process will become intertwined in the future. In this sense, higher education organizations have many responsibilities (Yılmaz, 2019), and a comprehensive and versatile transformation management process should be carried out for digital transformation processes in these organizations by taking into account very different parameters. Gazi and Aksal (2011) pointed out that a successful transformation can be achieved in higher education organizations by creating basic management and organizational components in the organization such as planning and management processes, global organizational structure, external effects and stakeholders, economy, physical, digital and technological infrastructure,

learning and teaching environment and processes (learning management systems), technical and pedagogical support for students, research and project-based learning, and library services (digital library). However, the issues to be considered when creating a digital transformation strategy can be stated as follows (Gazi and Aksal, 2011):

- Meeting the student expectations and needs by the requirements of the present age,
- Establishment of appropriate learning management systems,
- Making the internet and digital infrastructure suitable by ensuring their continuity,
- Planning and managing all kinds of resources with maximum efficiency,
- Making necessary investments while ensuring financial compliance with the budget,
- Development of cyber and technological security solutions,
- Making management processes dynamic and more effective,
- Monitoring and evaluating the transformation process in every aspect.

Moreover, studies on management and organizational processes in higher education organizations during the digital transformation process have focused on dimensions such as identifying general strategies and the organization's basic needs on the issues of education, research, and social contribution and providing the necessary funding.

One of the most important processes for higher education organizations to keep up with the digital age is the need to determine new strategies in vocational education and processes within the organization. With the impacts of digital transformation, the existence of advanced technological tools and innovative pedagogy has profoundly impacted instructors, researchers, pedagogues, and academics and forced learning & teaching environments to change (Khan, 2014). For this reason, it is necessary to ensure the instructors' individual and professional digital transformations with the help of intra-organizational vocational training. This way, instructors can access accurate and reliable information with secure internet and technological tools and develop digital content for their courses in both face-to-face and remote education processes by using all kinds of technologies. In parallel with this, the concept of instructor training came to the fore in higher education organizations in the 2000s (Soran et al., 2006). This training

attempted to equip instructors with the necessary digital maturity in all dimensions of their professional development and transformation. Huang (2015) stated that in-service training can be provided online to give necessary training for transformation to large masses of people.

In addition to their mission to train qualified human resources, higher education organizations also have an important responsibility to lead academic research and contribute to science. In this sense, research environments should be created with a technological infrastructure suitable for the philosophy of open science. Open science is defined as open access to scientific publications as well as to data obtained or produced while conducting scientific research on which scientific publications are based (Tonta, 2015). This way, other researchers can use information flexibly and easily. Thus, the aim is to produce more information and inventions by facilitating scientific research. However, one of the most important steps to facilitate research is the transformation of libraries. Libraries can be transformed into a structure that will contribute to students, academics, and all other stakeholders by transferring books and printed materials to the digital environment and transforming them into e-books, e-journals, and e-materials while transforming classical readers into e-readers (Hufford, 2013).

Digital transformation is the transformation of societies. Public institutions and organizations play a significant role in this transformation. Higher education organizations have the greatest scientific role and responsibility. Universities have the responsibility to integrate with all segments of society, to evaluate all kinds of structures, knowledge, and human resources, and to support lifelong education processes. In this sense, universities make the biggest contribution to society in digital transformation processes, providing an uninterrupted learning environment to individuals from all walks of life, regardless of time and place, and supporting learners in gaining skills that are suitable for the requirements of the age (Gümüşoğlu, 2017).

Digitalization of management activities in higher education organizations and the acceleration of all processes by document management systems have a significant impact on the formation and development of organizational memory with all reporting being carried out in the digital environment and the most accurate information being reached through comparisons and similar processes. This way, the design and implementation of innovative business models and projects are provided with more opportunities. Organizations have started to create information management

systems to increase efficiency in processes such as strategy, execution, and supervision with fast and practical solutions to allow senior management to access all kinds of digital information. These systems contain information created by filtering digital data such as graphs, project data, and external information to determine policies and strategies (Mert, 2020). During the digital transformation process, university administrations can strengthen individuals across the organization to try new ways of working with digital technologies and transform their universities from a static organization into a dynamic organization with their own unique digital identity by providing them with the support and guidance they need (Obaid et al. 2020).

The most important contribution digital transformation makes to organizations is being able to carry out, monitor, and evaluate all processes more effectively. Thanks to the digital technologies and software used in higher education organizations, administrative, academic, and educational processes are recorded and can be used as digital data in all necessary processes. Some examples of this include applications such as e-signatures and e-documents (Güler and Ömürgönülşen, 2011). Furthermore, another example of the impact of digital transformation on the processes of higher education organizations is the concept of data-driven decision-making. Marsh et al. (2006) defined data-driven decision making as the collection and analysis of data on inputs, processes, and results using digital technologies such as artificial intelligence, the internet of things, big data, and learning analytics to guide various decisions that will help increase the success of the organization.

2.2.2. Digital Transformation Efforts in Systems of International Higher Education

The first steps towards achieving digital transformation in International Higher Education organizations have been taken by organizations such as the Higher Education Finance Council for England, UNESCO, Oxford University, the William and Flora Hewlett Foundation, the World Economic Forum, Grovo, and the Association of Independent California Colleges and Universities. They first created action plans and carried out certain initiatives involving relevant stakeholders to adapt higher education organizations to changing economic conditions and to contribute to the creation of human resources required by the industry (Özkul and Akgün Özbek, 2017). It is possible to give examples of digital transformation efforts in higher education organizations in different regions of the world. Digital

transformation efforts carried out in universities in Europe, Asia, and the US will be summarized in this section.

In Europe, Online Bridging Courses allow existing (prospective) students to prepare for higher education with a wide offering of courses that they can take online before starting their education (Rampelt et al., 2019). In the UK, the University College Birmingham offers courses to students who have completed a higher vocational training program and want to transfer to a full undergraduate degree. Students who want to follow this path are often allowed to earn enough credit through online programs. Another example from the UK is a private platform called "Engineering Academy", which helps engineering students prepare for their undergraduate programs. In Germany, a group of universities come together to offer online mathematics courses suitable for potential students in the fields of engineering, business studies, natural sciences, and computer science and prepare prospective students for university with online courses (Rampelt et al., 2019).

Launched by the European Commission, DigComp has become an important tool to help Europe respond to and anticipate the impact of everything digital. DigComp is a reference framework that describes what it means to be digitally competent. Within this framework, it reveals 21 competencies in 5 dimensions required to be digitally competent and maps them at 8 levels of competence. According to the report, being digitally competent is more than being able to use the latest gadgets or software. According to the authors, basic digital competence is a transversal competency that is to be able to use technologies in a critical, collaborative, and creative way (Carretero et al., 2017). The five dimensions and competencies are given in Table 2.2.

Table 2.2: The Five Dimensions of Digital Transformation

Dimensions	Competencies
Information and data literacy	Scanning, searching, and filtering of data, information, and digital content - Evaluation of data, information, and digital content - Management of data, information, and digital content.
Communication and Collaboration	Interaction through digital technologies - Sharing thought with digital technologies in mind - Establishing relationships with people through digital technologies - Collaboration through digital technologies - Managing digital identity.
Creating digital content	Developing digital content- Integrating and re-arranging digital content- Copyright and licenses- Competency in programming.
Security	Protection of devices - Protection of personal data and privacy - protection of health and welfare - Protection of the environment.
Problem Solving	Solving technical problems - Identification of needs and technological responses - Creative use of digital technologies - Identification of digital competence gaps.

Source: (Carretero et al., 2017)

It is important for universities in terms of their digital transformation to act with their organizational structures and goals on each of the five dimensions and their corresponding competencies stated in Table 2.2 in mind. Anglia Ruskin University (ARU) in England carried out an exemplary application in this regard. The university applied the DigComp framework seen in Table 2.2 to add content on digital literacy to staff development and the curriculum. Accordingly, a Digital Literacy Barometer was determined to include competency statements about a series of digital skills compatible with DigComp. Individuals scored one point for each of the five literacies in the framework using a test format alongside their overall self-reported competencies. Therefore, the results can be used to determine the current strengths and weaknesses of the staff for further development. The university also created a series of staff development activities appropriate to the framework, including short-term training following the participants' receiving digital badges. Placement of digital competencies in the curriculum was primarily attempted in one faculty. Digital badges were developed for each

area of digital literacy and level of competence. As part of a review process, course curricula were reviewed and then mapped to identify opportunities for the ARU online courses and digital literacy framework. Various stakeholders representing academics, administrative staff, and students have contributed to the development of this framework. Leicester University in England has identified the development of digital skills and capabilities as the most important priority in digital transformation strategies. In this sense, the elements determined to develop the digital skills and abilities of students and staff by the university are as follows: to create a forward-looking culture and to establish governance structures that will facilitate collaboration throughout the university, to develop digital leadership skills, to engage in interdisciplinary digital activities and national or international digital application communities, and to convey the vision and progress regarding digital fluency to stakeholders. During this process, they initially focused on the goal of creating a digital campus. Digital Campus is the way the university sees itself as a digital platform, but it is also a visual metaphor for organizing and monitoring its multiple projects and priorities. Secondly, thanks to investments in digital infrastructure for supporting digital efficiency, they created a more effective process of communication by introducing Microsoft Windows 10 and using tools such as Yammer and Skype for institutional purposes. In addition to that, Sharepoint and MyWorkspace were made available to university staff and students as a new staff Intranet. Digital reading rooms were developed to provide students with a completely personalized digital experience. Furthermore, a digital transformation consultancy office consisting of individuals from fields such as administration, the academy, and human resources were opened to guide digital culture and strategies. Moreover, they support skill-oriented development in students thanks to online digital literacy courses and Massive Open Online Courses (MOOCs). Under digital research and innovation strategy, online collaboration and video conferencing tools such as Office 365, Dropbox, Cisco 'Spark' have been made available to all staff, allowing all kinds of studies to take place (Leicester University, 2018).

Another example is the development of 3D anatomical models for medical students in a large-scale project by the University of Lyon in France. The models are open-coded and can be used and adapted by other users (Anotomie, 2020). A similar project was designed to create a pool of digital 3D anatomical models that is always accessible over the Web using a standard

Web browser in the "Anatomy 2.0" initiative carried out by Aachen University in Germany (Anatomy 2.0, 2020).

A study conducted to identify which digital environments are preferred in the digital transformation processes of universities in Germany revealed that learning management systems and search engines are the most preferred digital environments. The study pointed out that the digital and technological infrastructure of the relevant university was sufficient, but it was necessary to plan how to use this infrastructure more effectively and efficiently. In another study in Germany, Biedermann et al. (2020) conducted a study with students, instructors, and administrative employees as participants to create a conceptual map on digital transformation in German higher education. The expressions that participants formed by brainstorming were clustered, combined, and sorted according to importance and feasibility. The results reveal that there is a consensus among all groups that the issues of culture and mindset continue to be the biggest factors for higher education to successfully sustain its digital transformation. Although there is consensus between the groups on the importance of the themes, the employees' opinions on cultural changes were more negative than the students' opinions. Significant challenges include the integration of digital service platforms and the development of validated instructional concepts for digital learning offerings. According to these results, the researchers pointed out that the mindsets and attitudes towards digital transformation efforts should be considered just as important as the application of new technologies and services, and stated that applying technologies prematurely without considering the culture and mindsets would prevent the transformation.

The most important finding obtained in a study conducted to compare the digital transformation processes of higher education organizations in northern European countries such as Denmark and Norway is that digital transformation processes are carried out differently in both countries. Danish higher education organizations are more closely directed by the central government than Norwegian higher education organizations. In Denmark, the government's impact on and support for digitalization is reflected in referral documents, financial support, and general national policies on digitalization. Digitalization processes are carried out with less government support in Norwegian higher education organizations and the autonomy of organizations is maintained through competency in processes regarding the handling of digitalization's direction. Findings have been obtained on why Danish higher education organizations apply more conscious and diverse solutions to teach

and learn with technology than Norwegian higher education organizations. This may be due to decisions made by the central government. Another finding may be the result of university mergers that have resulted in merged campuses across Denmark. This may have raised awareness on the use of online and flexible solutions for teaching and learning among educational leaders responsible for the relevant programs. However, digitalization processes depend on general plans, strategies, and funding. One of the aims of this study is to raise awareness on how educational leadership can address problems related to the digitalization of higher education institutions and increase the digital awareness of academic leaders responsible for training and development programs (Tomte, 2019).

A study conducted at the University of Belgrade in Serbia measured certain physical measurements (temperature, humidity, carbon dioxide amount, etc.) in a smart classroom created by using the internet of things, which is the most important building block of digital transformation, using sensors and examined the effects of the obtained digital information on the students' focus levels. This study can be an example of a study conducted on digital transformation in the university (Horowitz, 2015).

The Digital Credentials initiative, which is an inter-university application, was launched in April 2019 with the mission of creating a reliable, diversified, and shared infrastructure by making academic credentials the standard for digitally publishing, storing, viewing, and verifying. This project is coordinated by MIT (USA) and also involves Delft University of Technology (Netherlands), Potsdam University (Germany), Hasso Plattner Institute, and Munich Technical University (Germany) from Europe. Other partners include the Harvard Division of Continuing Education (USA), University of California, Berkeley (USA), University of Irvine (USA), the Monterrey University of Technology in Mexico, and the University of Toronto (Canada). The project aims to create a centralized platform for storing student records, allowing students to be able to continue the lifelong learning process based on the latest developments in open key infrastructures, common platforms, and blockchains, and even to communicate with academics in different countries and access their online courses even after graduating (DCC, 2020).

Yureva et al. (2020) conducted a study to determine students' and instructors' levels of digital tools and technologies used in the teaching to determine the main problems and risks facing the digitalization of higher education in Russia. They found that both students and instructors used a

limited number of digital teaching resources in the Kazan (Volga) Federal Region. It was found that students preferred passive forms of using information and communication technologies (webinars, online courses). On the other hand, the instructors stated that they primarily use digital tools as a mechanism to organize their classes, rather than planning, downloading, and promoting advanced learning technologies. The researchers stated that the most important finding of the study is that the risks of the digitalization of education in universities are directly related to instructors' inability to use digital education technologies. Safiullin and Akhmetshin (2019) analyzed the experiences of Russian and foreign universities that successfully digitized various types of activities and selected the best practices in higher education. In the study, they developed a concept that aimed to optimize the activities of the university by introducing digital technologies through bringing solutions to the problems related to digitalization in Russian higher education and to understand the problem with Russian universities in detail. The essence of the concept proposed by the researchers is to create a university education platform with a user-friendly interface. The existence of a suitable user interface and mobile application is important because the platform is designed to centralize all university services and unite all users under a single social network. The platform allows users from all over the world to register for free on its website or download and install a mobile app, create their user profile, and access all the educational resources of the university. The educational content includes modern online courses. The main criteria consist of a user-friendly interface, video lessons, presentations, and interactive elements. There are also online courses on the interface for the development of new professions, applied knowledge, and practical skills. This way, users will be able to master every profession that concerns them and acquire the necessary knowledge and skills. The main indicators for assessing the platform's competitiveness will be the number of users enrolled in the course (including the number of users from other countries), the mobile app's number of downloads and ratings in the PlayMarket and AppStore, and the number of users who completed the online course and passed the final test. The user will be charged for the course completion certificate if they need one. In addition to this, the platform will allow each user to create their page on the platform's website and allow users to exchange messages. The interface will be just as fast as the interfaces of social networks such as Facebook, VKontakte, Instagram, etc. which are popular all over the world, but here, unlike them, the interface's emphasis will be on education.

A study conducted by Nugraha et al. (2018) in Indonesia emphasized that Islamic higher education organizations were affected by demographic demands and rapid technological developments to provide society with qualified and competitive human resources. Islamic higher education has a strategic role in maintaining its role and function in raising competent graduates. Therefore, Islamic higher education needs to adapt to the changes occurring in an international context. Islamic higher education should see demographic demands and the rapid development of technology as an opportunity for change. In this respect, digital transformation is a necessity in Islamic higher education. Islamic higher education will transform line with digital transformation's opportunities and challenges, strict competition, rapid changes, and unique technological developments. Qualified lecturers, change-sensitive curricula, and adequate infrastructure are required along with visionary leadership by higher education leaders to reinforce digital transformation efforts in raising competent, talented, and excellent graduates in Islamic higher education.

A study conducted on the digital transformation process of education and universities in China aimed to create high-quality online classes with digital language laboratories prepared to allow individuals to receive education and training in their native language. The digitalization in the education action plan was initiated and many online education platforms were opened as the first steps for the digital transformation of higher education, online courses were prepared in many languages and subjects, particularly in Chinese, and were offered to students free of charge (Huang, 2015).

Khalid et al. (2018) emphasized that digitalization encourages education, particularly higher education, in their study on the digital transformations of Malaysian higher education organizations. The findings of this study indicate that although many universities have certain digitalization plans and strategies in place, most higher education organizations simply do not implement them. Furthermore, the study indicated that these organizations needed to combat the effects of the increasingly digitalizing world. The study investigated emerging technologies and their effects on the establishment of a digital campus, evaluated potential obstacles, and discussed ways to use digitalization successfully. As a result, a digital model was proposed to implement a digital strategy to allow higher education organizations to benefit from technological developments. The present study is important in terms of understanding that strategic plans are mandatory for digital transformation in

higher education organizations and contributing to the adaptation of digital change.

In India, a single platform and portal called SWAYAM were designed using information and communications technology to host 2000 online courses which add up to 80 million hours that all students can benefit from free of charge informal, non-formal, undergraduate and graduate education covering all higher education subjects and skill courses. However, the Free/Libre and Open Source Software for Education (FOSSEE) project designed by MHRD (Ministry of Human Resources Development) aims to promote the use of open-source software in educational institutions to increase the quality of education and reduce the dependence on licensed software (Rani, 2019).

2.2.3. Digital Transformation Efforts in the Turkish System of Higher Education

Digital transformation in higher education has become the center of attraction in Turkey with digital transformation initiatives supported by the Digital Transformation Office of the Presidency of Turkey. A "Digital Transformation Office" was created in the Presidency in 2018 as a first step after the announcement of the *Digital Turkey Project Roadmap* included in the 2016 Action Plan. This office, which works mostly with the Ministry of Industry and Technology, was planned to collaborate with other ministries. It was announced that it would operate especially for the digital transformation of the economy, education, social life, and public services. The aim is primarily to focus on the development of digital transformation infrastructure in education and to increase the necessary programs to train human resources that will guide technology and digital transformation processes in universities, to encourage around 30 thousand students to acquire PHDs in these fields, to carry out basic studies to increase awareness on digital transformation, to implement steps such as bringing human resources with digital skills to industry and production with special government incentives, and to accelerate public services to reduce bureaucracy in the state to zero. In addition, this office, together with the ministry and relevant private and public institutions, will explain technology roadmaps in the basic areas of Industry 4.0 such as "cloud computing", "artificial intelligence", and "autonomous robots", as well as being authorized to establish nearly 50 applied research centers that will prioritize developing digital technologies, provide high-speed Internet for the industry, and ensure industrial cyber security (BİK, 2018).

YÖK has implemented the digital transformation project in higher education with the slogans "New YÖK" and "Digitalizing YÖK" and determined Ağrı İbrahim Çeçen, Bayburt, Siirt, Iğdır, Muş Alparslan, Munzur, Şırnak and Bingöl Universities as the pilot universities of this project. During the project's preliminary preparation phase, approximately 3,000 faculty members working at these universities were provided with the "Learning and Teaching in Higher Education in a Digital Age" course and were also informed about the creation of open course materials and the use of public course (İHAK) applications on the internet. Furthermore, a digital literacy course has been added to all programs of the pilot universities. This course aims to equip people with skills related to the use of technology and future technologies. Providing open access to research and using learning management systems (LMS) in assignments are also among the determined objectives. Today, the impact of Covid 19 seems to have spread these practices to all universities in Turkey (Taşlıbeyaz, 2020). The project "Digitalizing YÖK" is carried out with the support of YÖK and Anadolu University. One of the most important 100/2000 field scholarships given by YÖK (2020c) for the realization of digital transformation is stated as "Digitalization in Education". The number of pilot universities increased from eight to sixteen in this project. Again, one of the targets for 2020 was to increase this number to 20 (Ataş and Gündüz, 2020).

It has been stated that the 'Remote Education Platform' developed by Sakarya University, which is completely national and domestic, will be used by the 15 universities involved in the Digital transformation project. This platform consists of 5 main modules. These are; a learning management system module for creating weekly virtual classroom course schedules, a virtual classroom module for planning and conducting synchronous or asynchronous online course activities, an announcement module for making announcements to students in virtual classrooms, and online exam module for exams, and a reporting module with reports such as student attendance and several academics or virtual courses (YÖK, 2020c). Furthermore, with the decision taken by the Council of Higher Education on 18.12.2020, 30 universities will be added to the digital transformation project and the instructors in these universities will be allowed to participate in digital transformation training.

The Council of Higher Education Information System (YÖKSİS) is a successful project that will set an example for digital transformation in higher education in Turkey. In addition to being an institutional database where basic

data from students, graduates, instructors, and administrative staff are stored in higher education, the project launched by YÖK in 2013 also allows data sharing between institutions by working coherently with the information platforms of institutions such as the Ministry of National Defense, Social Security Institution, Ministry of National Education, Turkey Statistical Institute, and the Student Selection and Placement Center (Tosyalı, 2018).

Another effort carried out by YÖK in the context of digital transformation was the virtual fair event titled "Study in Turkey YÖK Virtual Fair 2020". With this event, prospective students from both Turkey and abroad were informed about Turkish higher education and universities by the representatives of the universities themselves. In this sense, the fair, which was organized by YÖK for the first time to welcome visitors from all over the world and attract great attention between July 20-22 2020, made Turkey the center of attention in terms of higher education. The fair, which included 190 institutions in Turkish higher education, was visited a total of 59,227 times by 38,544 unique visitors in the first three days. This fair attracted visitors from a total of 164 countries, with a total page visit count of 259,417. "Pakistan, India, Saudi Arabia, Indonesia, Iraq, Azerbaijan, Egypt, Bangladesh, Somalia, and the United States" showed the greatest interest in the fair (YÖK, 2020a).

Anadolu University, Turkey's most active university with the highest number of students, has carried out several efforts aimed at digital learning environments. Having put e-learning services into practice for the first time in 1994, the university created "trial exams" in 1999, "e-Exercises" in 2002, "e-Books" in 2003, "e-Television" in 2004, "e-Learning Portal" (http-16) in 2005, "Yunusemre Portal" in 2008, and started holding "e-Seminars" in 2013, initiating a comprehensive digital transformation process. AKADEMA, the Massive Open Online Courses (MOOC) platform, which started its first trials with four courses in 2014, was created in 2016 as a result of 34 years of experience and was opened to all Turkish-speaking individuals (Akgün Özbek, 2014).

Middle East Technical University (METU) established an Instructional Technology Support Office in 2005 and carried out several activities to provide technical support services for academics adapting to technology (Çağıltay, 2011). This is proof that the university started the digital transformation process very early. At the same university, a Learning and Student Development Unit was established in 2009 to support students. In the 2013-2014 academic year, the University presented a learning management system under the name ODTÜCLASS (METU Online-Netclass)

to students and instructors (Akgün Özbek, 2019). METU also implemented the BilgeİŞ project, a platform providing 100 online courses to everyone free of charge, with the support of the European Union and the Republic of Turkey in 2015. As of 2017, BilgeİŞ continues to work voluntarily to create 2023 courses in Turkey. Although the courses are specially prepared to support the professional development of employers and employees in Turkey through information and communications technologies, the bilgeis.net learning portal is open to anyone who wants to learn at any time (BilgeİŞ, 2020). The Digital Transformation Center, which operates under the name BİL-TİR in METU, aims to bring together researchers, implementers, and policymakers working in these fields with its activities. In the Digital Transformation and Intelligent Systems (DTSS) 2019 conference, topics related to the digital transformation such as Sensor Technologies, Internet of Things, Cyber security, Additive Production, Digital Transformation in Education, Technology and Innovation Policies for Digital Transformation, Digital Transformation Management, Supply and Value Chain Management, Cyber-Physical Systems, Smart Robots, Big data, Cloud computing, Artificial Intelligence / Machine Learning, Virtual / Augmented Reality, Horizontal-Vertical Software Integration, and Computer vision were discussed.

The Ebuliz VR-AR (Virtual and Augmented Reality) Center of Excellence was established by TOBB University of Economics and Technology in the Technology Transfer Office. In this center, local software is developed for many areas such as education, healthcare, transportation, industry and production, the defense industry, space technologies, and energy resources. The center also develops educational software on Virtual Reality, Augmented Reality, and Mixed Reality to develop technologies that will make education more qualified, practical, and impressive. The content produced is used by different stakeholders all over the world (Epsilam, 2020).

Atatürk University, which is one of the universities working on digital transformation, develops projects under the headings of digital education, research, and management in the digital transformation and software office established within its structure, complementing it with studies aimed at keeping up with the digital age. Furthermore, there are planned activities such as digital literacy courses and the development of public course platforms on the internet as well as artificial intelligence and coding workshops (Atatürk University, 2020).

Kuzu (2019) evaluated the strategic plans of 18 Turkish universities that ranked in the global top 1000 using the content analysis method to

determine the status of digital transformation in the strategic plans of universities in Turkey. The findings indicate that the statements about the components of digital transformation in the universities' strategic plans are grouped into 4 themes, 14 categories, and 35 codes. Universities' statements about digital transformation have been coded into the category of diversity and flexibility of learning technologies, particularly the theme of education and remote/open learning. It is seen that universities have a lower digital transformation strategy in terms of research and social service missions. For this reason, it was concluded that universities should have a holistic transformation model and strategic vision beyond updating technological infrastructure.

Sezgin and Karabacak (2020), emphasized in the study they designed to evaluate the Digital Transformation and Digital Literacy Projects, which is an important topic in Turkey, that the project should be implemented more comprehensively to increase efficiency through the evaluations and applications made by the universities in the project with the propositions "There is a need for practical arrangements within the scope of the digital transformation project implemented in the field of higher education in Turkey" and "There is a need for arrangements for the coordination and implementation of digital literacy courses applied in the field of higher education in Turkey" in consideration. Furthermore, it was observed that pilot universities formed units such as digital transformation coordination, digital transformation and software office, and digital education coordination.

Iseri (2019) examined the management structure, organizational structure, and technology use of Teaching and Learning Centers opened for the professional development of teaching staff in higher education organizations in Turkey for the learning and teaching process. As a result, he stated that even though Remote and Continuing Education Application and Research Centers are located in all universities, there are few Teaching and Learning Centers, which are only recently being established. The pioneering centers interviewed have prospective plans that they have not yet put into practice. It is understood that the centers are mostly management and organizational structure that is affiliated to the rectorate and that the workload is undertaken by the center manager. It has been stated that the most striking responsibility of learning and teaching centers is to increase the awareness of the instructors about developing themselves in technology and to ensure their participation in professional development activities.

In the workshop titled "Professions of the Future, the Future of Professions" held by YÖK, Arıboğan (2019) stated that "Reading the future correctly and reacting to this revolutionary transformation is the primary role and responsibility of universities. There is a need for certain structural transformations and innovations in terms of making Turkish universities active in the world of science, ideas, and research, where countries such as China, the USA, Russia, India, Germany, etc. compete with billions of dollars in budgets." and emphasized the necessity of opening digital transformation management departments under Faculties of Informatics in universities. In this sense, although no department has been established yet, it is possible to come across examples of courses related to digital transformation in private universities in Turkey. First of all, the "Digital Transformation Management" course was introduced to the Department of Business Administration curriculum at Yeditepe University, Faculty of Economics and Administrative Sciences to "inform about digital transformation and the factors that make up digital transformation, to raise awareness on the effect of the digital transformation process, especially industry 4.0, on business management and organizations, to explain new technologies and trends within the scope of digital transformation and to convey the critical points for a sustainable digital transformation culture in terms of corporate performance" (Yeditepe University, 2020). Secondly, in the Industrial Engineering Department of the Faculty of Engineering at the Turkish-German University, it was observed that courses on "Multifaceted evaluation of digital transformation in terms of management", which consisted of "Digital Transformation Management, Digital Technologies, Digital Competencies, Digital Leadership, New Work, Human-Machine Interaction, Digital Culture, Digital Roadmap, Smart Factory, Company Applications" were added to the curriculum (TAU, 2020). Finally, in the Gedik University Continuing Education Center, it is seen that training programs have been opened in order to "increase the awareness of professionals, especially business managers in the business world, about what digital transformation is, what the factors that caused digital transformation are, the relationship between digital transformation and management and organizational structure, the methodologies that businesses need for success in digital transformation, the technologies that trigger digital transformation and the effects of these technologies on business models, with the aim of enabling them to gain new knowledge and skills".

It is seen that studies on digital transformation in higher education have accelerated, especially abroad and that there are fewer studies in Turkey.

Toprak et al. (2020) developed a 5-dimensional (curriculum, graduate profile, university facilities and perspective, solution partnerships, and model of governance) digitalization index with 20 indicators to be used in public and private universities. Universities that score 100 points out of the 20 indicators are considered to have completed their digitalization process. The average digital preparedness level of Turkish universities is 4.1 out of 10 in evaluations made on university websites. This is a very low score. It can be said that the advent of online education in Turkish universities after the Covid-19 pandemic has caused an unsystematic increase in the score.

The Ahi Competence-Based Education Project (AYDEP), which was first conceived in Kırşehir Ahi Evran University four years ago and has been implemented as a pilot project for 3 years at the Faculty of Education, is being used to exemplify digital transformation projects in universities. The decisions taken by YÖK due to the pandemic caused all universities to resort to remote education processes, bringing along infrastructure problems. The university accelerated its remote education processes by activating the national and domestic AYDEP learning management system, developed with their equity capital. The most basic issue here is that a university founded in 2006 took steps towards digital transformation with its equity capital. Kırşehir Ahi Evran University continues to hold synchronous online classes smoothly in all of its academic units.

2.3. Digital Transformation in Public and Private Universities: A Theoretical Comparison

Turkish higher education includes 129 public universities, 74 private universities, and four private vocational schools. In addition, the Ministry-linked Higher Education Institutions National Defense University and Gendarmerie and Coast Guard Academy, as well as 16 universities in the Turkish Republic of Northern Cyprus and private state universities University and Kyrgyzstan-Turkey Manas University continue to operate under the roof of other higher education institutions of YÖK (YÖK, 2020b). As can be seen from the information, the numbers of public and private universities are approaching each other.

Evaluations on the development and success rankings of public and private universities are made by many organizations around the world, especially based on factors such as academic performance, innovation, and internationalization. The main global rankings are the Academic Ranking of World Universities, Times Higher Education World University Ranking

(THE), QS (Quacquarelli Symonds Limited) World University Ranking and finally the Webometrics (Ranking of World Universities in the Web) ranking (Khan et al., 2020).

Higher education organizations have taken the first step towards digital transformation by digitalizing classically organized business processes and spreading information systems to the organizational level. However, there is a need for a widespread transformation in faculty and university administration mindsets. Webometrics developed a ranking system by analyzing the universities' websites according to web presence (number of pages available), visibility (external links received), web access (number of citations to researchers' studies), and academic indicators (number of articles determined in 26 fields and included in the 10%). Furthermore, the evaluation is accepted as an indicator of the digital transformation processes of the relevant university (Kul and Gezen, 2020; Webotmetric, 2020). Turkish universities that ranked in the top thousand in the Webometrics Ranking are given in Table 2.3.

Table 2.3: Turkish Universities in the Top 1000 in the Webometrics Ranking

Rank in Turkey	Global Ranking	University	Type	Status Ranking	Impact Ranking	Openness Ranking	Excellence Ranking
1	473	Middle East Technical University	Public	638	503	552	607
2	604	Istanbul Technical University	Public	521	992	591	613
3	626	Boğaziçi Universit	Public	1105	898	736	649

		y					
4	641	Hacettepe University	Public	668	1111	494	647
5	738	Istanbul University	Public	453	1391	577	756
6	752	Ankara University	Public	462	1292	666	784
7	757	Bilkent University	Public	1030	885	678	985
8	884	Koç University	Public	2656	1309	603	1035
9	941	Gazi University	Public	914	2283	684	912

Source: (Webometrics, 2020).

As can be seen in Table 2.3, METU is the only university that ranks in the global top five hundred. Seven of the nine Turkish universities that rank in the top thousand are public universities and two are private universities.

Tosyalı (2018) states that public universities are affected by many developments and especially by increasing costs. Reduced public funding, global competition, society's increasing pressure for accountability, and social demands for access to higher education to be made more widespread to achieve equal opportunity also affect public universities. Public universities all over the world have funding problems. For this reason, it is becoming increasingly harder for public universities to afford the funding required for

high-cost processes such as digital transformation. On the other hand, private universities founded under a foundation by huge corporations and brands can develop stronger and more dynamic policies in comparison to public universities. This is also a factor that makes it difficult for public universities to transform.

3. CONCLUSION

The impacts of digital transformation are now felt in all areas from industry to tourism, from agriculture to banking, from production to education, and from healthcare to higher education. These sectors generally focus on increasing efficiency by digitalizing nearly all processes of organizations such as communications, production, or customer relations. The digitalization process brought on by technological development has caused profound changes in the business strategies of organizations. This process, referred to as digitalization, has made it compulsory to redesign organizational culture and business culture with a profound change and caused the process of digital transformation to accelerate. Universities are the organizations that feel the impacts of digital transformation the most.

The first section of this study, which is based on the national and international literature, included evaluations under the headings of digital transformation, historical development, significance-benefit, the individual, technology, business processes, and strategy and digital maturity. It was concluded that organizations that want to be successful in the digital transformation process need to use technology as a means instead of an end and to develop digital transformation strategies based on the level of organizational digital maturity.

The second section of the study includes digital transformation, the components of digital transformation, and the efforts carried out for digital transformation in international systems of higher education and the Turkish system of higher education. Digital transformation's dimensions of students, instructors, teaching process and environment, and organization-management-process were discussed as the components of digital transformation in higher education organizations based on the literature. It was concluded that Generation Z students, particularly referred to as digital natives, cannot acquire the knowledge, skills, and abilities required by the professions of the future with the current higher education structures. This study emphasized the necessity to equip the human resources needed by societies, systems, and most of all, industry, with digital skills. It was concluded that the roles of

instructors should change, become competent in digital learning environments such as remote or online education, and assume the role of moderator by guiding the learner rather than guiding them. It is thought that learning environments and processes in universities will add mobility to the individual and society as the central power of transformation in both national and global competition with the impact of digital transformation. It was emphasized that top management in higher education organizations needs to reconstruct organizational culture and the mental models of individuals to exhibit transformational leadership behaviors. It is understood that managers should activate their data-driven decision-making mechanisms with digital solutions in mind based on the study's findings and suggestions.

It is seen that countries such as European Countries, China, and the US have started their digital transformation efforts in universities and international systems of higher education earlyish their national policies. It is seen that Turkish higher education organizations have accelerated the digital transformation processes of both YÖK and universities in recent years with their innovative approach to higher education.

Findings obtained from studies on national and international systems of higher education indicate the universities have created diversity in the vision and mission of digital transformation efforts, leading to the emergence of different perspectives in the literature. It is understood that one part of universities focuses on practices that utilize technology such as the internet of things from a technical perspective under the roof of smart campus practices, whereas another part emphasizes online or remote education and technological applications inside and outside the classroom. Several studies indicate that universities using artificial intelligence-driven decision support systems are shifting their digital transformation focuses to these fields. On the other hand, other studies indicate that some universities have determined programs that can offer services (applications, document verification, etc.) to all stakeholders (students, instructors, citizens, etc.) designed with special software as their digital transformation focus.

The third section of the study involved a theoretical comparison of the digital transformation processes of public and private universities in Turkey. There are few studies on this issue in the literature. The digital transformation processes of universities were comparatively assessed based on the international rankings and official websites of private universities in Turkey. The findings reveal that two of the nine Turkish universities to rank in the

global top 1000 in the Webometric ranking are private universities, and the rest are public universities.

To conclude, it is seen that Turkish higher education organizations especially involve digital literacy activities, as well as that, have started and accelerated with the decisions and suggestions made by YÖK on February 19, 2019. However, the findings reveal that current efforts are only focused on technology, organizational culture, and other parameters are not being considered sufficiently, universities do not determine their digital transformation strategies, and remote education efforts are assumed to be enough for digital transformation.

REFERENCES

Akgün Özbek, E. (2014). The role of digital game based learning in enhancing social presence. *Proceedings of AECT 2014- Learning, Design, and Technology*, 37(2), 349-359.

Akgün Özbek, E. (2019). Dijital dönüşümde öğretim elemanlarının yetiştirilmesi ve geliştirilmesi [Yayınlanmamış Doktora Tezi]. Anadolu Üniversitesi.

Alieyan, K., Almomani, A., Abdullah, R., Almutairi, B., & Alauthman, M. (2020). Botnet and İnternet of things (IoTs). *Research Anthology on Combating Denial-of-Service Attacks*, 138-150. https://doi.org/10.4018/978-1-7998-5348-0.ch007

Anatomy 2.0. (2020). *Creating a pool of digital 3E models for teaching anatomy online*. http://dbis.rwth-aachen.de/cms/projects/creating-a-pool-of-digital-3d-models-for-teaching-anatomy-online/

Ancarani A., & Di Mauro C. (2018) *Successful digital transformations need a focus on the individual*. Schupp F., Wöhner H. Digitalisierung im Einkauf. Springer Gabler, Wiesbaden. https://doi.org/10.1007/978-3-658-16909-1_2

Andone, D., Vasiu, R., Maria, R., & Kurkela, L. (2010). Digital Students and Digital Tutors Profiles in Romania, Hungary, Finland and UK.

Andriole, S.J., 2017. Five myths about digital transformation. *MIT Sloan Management Review*, 58(3), pp.20–22.

Anotomie. (2020). Nos objectıfs - nos projets 2019-2020. http://anatomie3d.univ-lyon1.fr/webapp/website/website.html?id=3346735&pageId=223177

Apilioğullari, L. (2018). *Dijital dönüsümün yol haritası*: Endüstri 4.0 değişimin değiştirdikleri. Aura Yayınları.

Arıboğan, D. Ü. (2019). *Sosyal bilimler grup raporu*. https://www.yok.gov.tr/Documents/Yayinlar/Yayinlarimiz/2019/gelecegin_meslekleri_calismalari.pdf

Ataş, H., & Gündüz, S. (2020). Yükseköğretimde dijital dönüşüm. İsmail Erkan Çelik (Ed.), *Dijital Dönüşüm Ekonomik ve Toplumsal Boyutlarıyla içinde*. Gazi Kitabevi.

Atatürk Üniversitesi. (2020.). Dijital Dönüşüm ve Yazılım Ofisi. https://dijital.atauni.edu.tr/

Aydep. (2020). Kriz döneminde farklı bir yönetim yaklaşımı. Kırşehir Ahi Evran Üniversitesi. https://dosyayukleme.ahievran.edu.tr/dosyalar/aydep_rapor.pdf

Barone, C. (2003). Meeting the Needs of Today's İnternet-Defined Students. AAHEBulletin.May 2003

Bayrak, Y. (2017). https://digitalage.com.tr/dijital-donusum-efsanelerine-kapilmayin/

Berghaus, S., & A. Back (2016b). "Stages in digital business transformation. Results of an empirical maturity study." In: Proceedings of the 10th Mediterranean Conference on Information Systems. Paphos: Cyprus

Berman, S.J. (2012). Digital transformation: opportunities to create new business models. *Strategy & Leadership*, Vol. 40 No. 2, pp. 16-24. https://doi.org/10.1108/10878571211209314

Berman, S.J., Korsten, P.J. and Marshall, A. (2016). A four-step blueprint for digital reinvention.*Strategy & Leadership*, Vol. 44 No. 4, pp. 18-25. https://doi.org/10.1108/SL-06-2016-0042

Bıçakçı, S. (2019). Nesnelerin İnterneti. *Takvim-i Vekayi*, 7 (1) , 24-36 .

BİK. (2018). http://www.bik.gov.tr/cumhurbaskanligi-dijitaldonusum-ofisi-kuruldu/

Biedermann, D., Kalbfell, L., Schneider, J. & Drachsler, H., (2019). Stakeholder attitudes towards digitalization in higher education institutions. In: Pinkwart, N. & Konert, J. (Hrsg.), DELFI 2019. Bonn: Gesellschaft für Informatik e.V.. (S. 57-66). DOI: 10.18420/delfi2019_332

Bilge, B. (2018). Yıkıcı teknolojilerin belirlenmesi. *Savunma Bilimleri Dergisi*, 57-83. https://doi.org/10.17134/khosbd.404988

BilgeİŞ (2020). *Hakkımızda.* https://bilgeis.net/tr/page/sayfalar/13/hakkimizda

Bloomberg, J. (2018). Digitization, digitalization, and digital transformation: confuse them at your peril. https://www.forbes.com/sites/jasonbloomberg/2018/04/29/digitization-digitalization-and-digital-transformation-confusethem-at-your-eril/#2dd1ce842f2c

Bond, M., Marín, V. I., Dolch, C., Bedenlier, S., & Zawacki-Richter, O. (2018). Digital transformation in German higher education: Student and teacher perceptions and usage of digital media. *International Journal of Educational Technology in Higher Education*, 15(1). https://doi.org/10.1186/s41239-018-0130-1

Bonnet, D., Nandan, P. (2011). Transform to the power of digital—digital transformation as a driver of corporate performance. https://www.capgemini.com/resources/Transform-to-the-

Bonnet, D., Nandan, P. (2011). Transform to the power of digital—digital transformation as a driver of corporate performance https://www.capgemini.com/resources/tRansform-to-the--power-of-digital

Bosilj Vuksic, V., Ivančić, L., & Suša Vugec, D. (2018). A Preliminary Literature Review of Digital Transformation Case Studies. International Conference on Managing Information Technology, 737–742. https://doi.org/10.5281/zenodo.1474581

Bryant, P. (2012). *The modern university in the digital age*. Greenwich Connect Key Documents, Educational Development Unit, University of Greenwich.

Bridgstock, R., 2016. Educating for digital futures: What the learning strategies of digital media professionals can teach higher education. *Innovations in Education and Teaching International*, 53(3), pp.306–315. http://doi.org/10.1080/14703297.2014.956779

Brooks, D, C., & McCormack, M. (2020). Driving Digital Transformation in Higher Education. *ECAR research report.* https://library.educause.edu//media/files/library/2020/6/dx2020.pdf?la=en&hash=28FB8C377B59AFB1855C225BBA8E3CFBB0A271DA

Carretero, S., Vuorikari, R., & Punie, Y. (2017). DigComp 2.1: The digital competence framework for citizens with eight proficiency levels and examples of use (No. JRC106281). *Seville: JRC*. https://doi.org/10.2760/38842

Çağıltay, K. (2011). Üniversite ve öğretim teknolojileri destek ofisi: Mevcut durum ve Türkiye üniversiteleri için gerekliliği. Uluslararası Yükseköğretim Kongresi: Yeni Yönelişler ve Sorunlar, İstanbul, Türkiye. http://www.its.metu.edu.tr/yayin/2011- UYK-Cagiltay.pdf

Chanias, S., & Hess, T. (2016), Understanding Digital Transformation Strategy formation: Insights from Europe's Automotive Industry. *Pacific Asia Conference on Information Systems (PACIS) Proceedings.*

DCC (2020). Digital Credentials Consortium – We are building an infrastructure for digital academic credentials that can support the education systems of the future. https://digitalcredentials.mit.edu/

De la Peña, J., & Cabezas, M. (2015): La gran oportunidad. Claves para liderar la transformación digital en las empresas y en la economía. *Barcelona: EdicionesGestión* 2000,

Deloitte. (2018). Digital enablement turning your transformation into a successful journey.

Doğan, O. (2018). Dijital dönüşümün yönetimi sürecinde üniversite öğrencilerinin endüstri 4.0 kavramsal farkındalık düzeyleri [Yayınlanmamış Yüksek Lisans Tezi]. Ahi Evran Üniversitesi.

Elçi, A., & Vural, M. (2017). "Öğretim Elemanı 4.0: Öğretim Elemanının Değişen Rolü ve Teknoloji ile Zenginleştirilmiş Öğrenme", In Mediterranean International Conference On Social Sciences By Udg, 494-498.

Elçi, A., Vural, M., & Elçi, A. (2017). Changing role of faculty members in technology enhanced learning environments: Faculty members 4.0. *Turkish Online Journal of Educational Technology*, 1004–1009.

Epsilam. (2020). Ebuliz. https://www.ebuliz.com.tr/tr/about.html

European Commission (2019). EU policies – Delivering for citizens. https://www.europarl.europa.eu/RegData/etudes/BRIE/2019/633171/EPRS_BRI(2019)633171_EN.pdf

Fettke, P. (2020). Conceptual Modelling and Artificial Intelligence: Overview and research challenges from the perspective of predictive business process management. http://ceur-ws.

Fitzgerald, M., Kruschwitz, N., Bonnet, D., & Welch, M. (2013). *Embracing digital technology: A new strategic imperative (Case study) (PDF)*. Capgemini. https://www.capgemini.com/wp-content/uploads/2017/07/embracing_digital_technology_a_new_strategic_imperative.pdf

Gazi A, Z., & Aksal A, F. (2011). Handbook of online pedagogy. Germany:LAP.

Gartner. (2020). https://www.gartner.com/

Güler, M., & Ömürgönülşen, U. (2011). Türkiye'de e-imza alanındaki hukuki düzenlemeler ve bazı kamu kurumlarındaki e-imza uygulamaları. *Sosyoekonomi*, 14(14), 198-230.

Henriette, E., Feki, M., and Boughzala, I. (2015). "The Shape of Digital Transformation: A SystematicLiterature Review," MCIS (10). http://www.lusem.lu.se/library https://www2.deloitte.com/content/dam/Deloitte/ie/Documents/Technology/IE_C_HC_campaign.pdf

Horowitz, E. (2015). A peek at a 'smart' classroom powered by the İnternet of things. https://www.edsurge.com/news/2015-08-11-a-peek-at-a-smart-classroom-powered-by-theİnternet-of-things,

Huang, Q. (2015). Digital transformation of education publishing in China. *Publishing Research Quarterly*, 31(4), 258-263. https://doi.org/10.1007/s12109-015-9421-8

Hufford, J.R. (2013). A review of the literature on assessment in academic and research libraries, 2005 to August 2011. portal: *Libraries and the Academy* 13(1), 5-35. doi:10.1353/pla.2013.0005.

IDC (2017). Third Platform. Available online: http://www.idc.com/promo/thirdplatform

Ismail, M. H., Khater, M., & Zaki, M. (2017). Digital Business Transformation and Strategy: What Do We Know So Far? *In Manufacturer Article* (Issue November 2017). https://doi.org/10.13140/RG.2.2.36492.62086

İşeri, E. (2019). *Yükseköğretim kurumlarında öğrenme ve öğretme merkezleri: Yönetim yapısı, örgüt yapısı ve kullanılan teknolojiler* [Yayınlanmamış Yüksek Lisans Tezi]. Aksaray Üniversitesi.

Jakhar, D. ve Kaur, I. (2020) Artificial intelligence, machine learning and deep learning: definitions and differences. *Clin Exp Dermatol* 45:131–132. https://doi.org/10.1111/ced.14029

Belmudes, J. (2019). *The importance of digital transformation in your business strategy*. https://www.workana.com/blog/en/entrepreneurship/the-importance-of-digital-transformation-in-your-business-strategy/

Kane, G. C., Palmer, D., Phillips, A. N., Kiron, D., &Buckley, N. 2017. *"Achieving Digital Maturity.," MIT Digital Maturity: Conceptualization and Measurement Model* Thirty Ninth International Conference on Information Systems, San Francisco 2018 9 Sloan Management Review (59:1), pp. 1–29.

Kane, G., Palmer, D., Phillips, A, N., Kiron, D., & Buckley, N. (2017). *Achieving digital maturity. Research Report Summer 2017*. MIT Sloan Management Review & Deloittee University Press.

Karaman, S. ve Aydın, M. (2020). *Yükseköğretimde dijital dönüşüm*. Pegem Akademi Yayıncılık.

Khalid, J., Ram, B. R., Soliman, M., Ali, A. J., Khaleel, M., & Islam, M. S. (2018). Promising digitaluniversity: a pivotal need for higher

education transformation. *Int. J. Management in Education*,12(3), 264–275

Khan, D. I. (2014). Need of E-training for the academic staff of the universities in India. *Indian Journal of Applied Research*, 4(2), 9-14. https://doi.org/10.15373/2249555x/feb2014/51

Khan, H., Shah, K., Khalid, J., Harnmal, M.A., & Ali, A. (2020). Globalization and University Rankings: Consequences and Prospects. *The International Journal of Higher Education*, 9, 190. https://doi.org/10.5430/ijhe.v9n6p190

Kır, Ş. (2020). Dijital dönüşüm sürecinde yükseköğretim kurumları ve öğretim elemanlarının gelişen rolleri. *AUAd*, 6(3), 143-163.

Kohli, R., & Johnson, S. (2011). Digital transformation in latecomer industries: CIO and CEO leadership lessons from Encana Oil & Gas (USA) Inc. *MIS Quarterly Executive*, 10(4), 141–156. h

Kopackova, H. (2015). Characteristics of digital natives generation in the context of mobile learning. *2015 International Conference on Information and Digital Technologies*. https://doi.org/10.1109 /dt.2015.7222966

Koral Gümüşoğlu, E. (2017). Yükseköğretimde dijital dönüşüm. *Açıköğretim Uygulamaları ve Araştırmaları Dergisi*, 3(4), 30-42.

Kukulska Hulme, A. (2012). How should the higher education workforce adapt to advancements in technology for teaching and learning? *The İnternet and Higher Education*, 15(4), 247-254. https://doi.org/ 10.1016/j.iheduc.2011.12.002

Kul, S., Gezen, M. (2020). Dijitalleşmenin değerlendirilmesi. S. Kahraman (Ed.), *Yükseköğretimde Dijital Dönüşüm (1.Basım, ss.172 -183).* Pegem Akademi.

Kuzu, Ö. H. (2020). Digital transformation in higher education: A case study on strategic plans. *Vysshee Obrazovanie v Rossii = Higher Education in Russia*, 29(3), 9-23. https://doi.org/10.31992/0869-3617-2019-29-3-9-23

Lahrmann, G., Marx, F., Winter, R., Wortmann, F. (2011). Business ıntelligence maturity: development and evaluation of a theoretical model. In R. H. Sprague (Ed.), *Forty-Forth Annual Hawaii International Conference on System Sciences (HICSS-44)*. Koloa, Kaua'i, Hawaii: IEEE Computer Society. https://doi.org/10. 1109/HICSS.2011.90

Leicester Üniversitesi (2018). Our digital campus: developing a digitally confident community of discovery https://digitalcapability.jisc.ac.uk /case-studies/university-of-l

Li, L., Su, F., Zhang, W., & Mao, J. (2018). Digital transformation by SME entrepreneurs: A capability perspective. *Information Systems Journal*, 28(6), 1129-1157. https://doi.org/10.1111/isj.12153

Lonka, K. (2015). Innovative schools: teaching & learning in the digital era. Brussels: European Union. http://www.europarl.europa.eu/studies

Marsh, J. A., Pane, J. F., & Hamilton, L. S. (2006). *Making sense of data-driven decision making in education*. Santa Monica, CA: RAND Corporation.

Matt, C., Hess, T., & Benlian, A. (2015). Digital transformation strategies. *Business & Information Systems Engineering*, 57(5), 339–343. https://doi.org/10.1007/s12599-015-0401-5

McAfee, A., Welch, M. Being digital: engaging the organization to accelerate digital transformation. *Digital Transformation Review*, 4, 37–47 (2013).

Mckeown, N. (2017). A Step-by-Step Guide to Digital Transformation. https://www.slideshare.net/niallmckeown/digital-transformation-45738266.

Mcknight, K., Omalley, K., Ruzic, R., Horsley, M. K., Franey, J. J., & Bassett, K. (2016). Teaching in a digital age: How educators use technology to improve student learning. *Journal of Research on Technology in Education*, 48(3), 194-211. https://doi.org/10.1080/15391523.2016.1175856

Mell, P. M., & Grance, T. (2011). The NIST definition of cloud computing. https://doi.org/10.6028/nist.sp.800-145

Mert, G. (2020). Kurumların stratejik yönetim süreçlerinde dijitalleşmenin rolü. *Journal Of Social, Humanities And Administrative Sciences*, 6(22), 41-58. https://doi.org/10.31589/joshas.237

Morakanyane, R., Grace, A., & O'Reilly, P. (2017). "Conceptualizing digital transformation in business organizations. A systematic review of literature*." In: Proceedings of the 30th BLEC eConference*, pp. 427–443. Bled: Slovenia.

Nugraha, M. S., Sahroni, D., & Latifah, A. (2018). Digital transformation prospects in Islamic higher education: Opportunities, challenges and its impacts. *Proceedings of the International Conference on Islamic Education (ICIE 2018)*. https://doi.org/10.2991/icie-18.2018.26

Obaid, T., Abdaljawad, R., & Abumandil, M. (2020). Covıd-19 and the digital transformation of higher education: What ınsights palestinian ınstitutes can share? *International Journal of Applied Research* 6(8): 109-11

Odabaşı, H. F., Firat, M., Izmirli, S., Cankaya, S., & Misirli, Z. A. (2010). Küreselleşen dünyada akademisyen olmak [Being academician in globalizing world]. *Anadolu University Journal of Social Sciences*, 10(3), 127–142.

OECD. (2018). Going digital in a multilateral world. Online Searcher, vol. 43, no. 1, Available through: LUSEM Library website

Ohliati, J., & Abbas, B. S. (2019). Measuring students satisfaction in using learning management system. *International Journal of Emerging Technologies in Learning (iJET)*, 14(04), 180. https://doi.org/10.3991/ijet.v14i04.9427

Oracle. (2020). *What is digital transformation? Oracle | Integrated Cloud Applications and Platform Services*. https://www.oracle.com/cloud/digital-transformation.html

Özdemir, Ş. (2019). *Geleceğin meslekleri*. Abaküs.

Özen, E . (2019). Eğitimde dijital dönüşüm ve eğitim bilişim ağı (EBA) (editöre mektup). *Açıköğretim Uygulamaları ve Araştırmaları Dergisi*, 5 (1), 5-9.

Özkul, A, A., & Özbek, E. A. (2017). *Yükseköğretimde dönüşüm çalıştay raporu*. https://ab.org.tr/ab17/bildiri/234.doc

aavola, R., Hallikainen, P., & Elbanna, A. (2017). "Role of middle managers in modular digital transformation: *The case of Servu". In: Proceedings of the 25th European Conference on Information Systems, ECIS 2017*. Guimarães: Portugal, p. 887–903.

Pereira, C. S., Durão, N., Fonseca, D., Ferreira, M. J., & Moreira, F. (2020). An educational approach for present and future of digital transformation in Portuguese organizations. Applied Sciences, 10(3), 757. https://doi.org/10.3390/app10030757

Pirim, H. (2006). Yapay Zekâ. *Journal of Yaşar Üniversity*, 1(1), 81–93.

Prensky, M. 2001. "Digital Natives, Digital Immigrants." On the Horizon 9 (5): 1–6. https://doi.org/10.1108/10748120110424816.

Price, L., & Kirkwood, A. (2014). Using technology for teaching and learning in higher education: a critical review of the role of evidence in informing practice. *Higher Education Research & Development.* ;33(3):549–564. https://dx.doi.org/10.1080/07294360.2013.841643.

Rampelt, F., Birnkammerer, H., Röwert, R. & Suter, R. (2018). Opening up higher education in the digital age. on the potential to unite the social dimension and the digitalisation of higher education in Europe.*lnternationalisation of Higher Education – Developments in the European Higher Education Area and Worldwide*. Issue 3. pp. 27-42.

Rampelt, F., Orr, D., & Knoth, A. (2019). Bologna Digital 2020 White Paper on Digitalisation in the European Higher Education Area. https://hochschulforumdigitalisierung.de/ de/news/white-paper-bologna-digital-2020

Rani, N. (2019). Digitalization of higher education in India- A technological revolution. *International Journal of Applied Research* SP4: 282-285

Reddy, S. K., & Reinartz, W. (2017). Digital transformation and value creation: Sea change ahead. *GfK Marketing Intelligence Review*, 9(1), 10-17. https://doi.org/10.1515/gfkmir-2017-0002

Rogers, D. (2017). *Dijital dönüşümde oyunun kuralları*. Optimist Kitap.

Safiullin, M. R., & Akhmetshin, E. M. (2019). Digital transformation of a university as a factor of ensuring its competitiveness. *International Journal of Engineering and Advanced Technology*, 9(1), 7387-7390. Doi:10.35940/ijeat. A3097.109119

Schneider, S., Lansing, J., Gao, F., & Sunyaev, A. (2014). A taxonomic perspective on certifcation schemes: development of a taxonomy for cloud service certifcation criteria. *In Proceedings of the 47th Hawaii international conference on system sciences (HICSS),* Waikoloa, HI, USA, 6–9 January 2014 (pp. 4998–5007). Doi: 10.1109/HICSS.2014.614.

Schulz, Y. (2019). Digital transformation benefits for your organization https://www.itworldcanada.com/blo/digital-transformation-benefits-for-your-organization/41

Schwertner, K. (2017). Digital transformation of business. *Trakia Journal of Sciences*, 15(1), 388-393. https://doi.org/10.15547/tjs.2017.s.01.065

Sezgin, A, A., & Karabacak, Z. (2020). Yükseköğretimde dijital dönüşüm ve dijital okuryazarlık dersine yönelik betimsel bir analiz. *Kurgu*, 28 (1), 17-30.

Shahiduzzaman, M. D. (2017). Digital business: Towards a value centric maturity model. Part A. Queensland: PWC Chair in Digital Economy/Queensland University of Technology

Singh, A., & Hess, T. (2017). How Chief Digital Officers promote the digital transformation of their companies. MIS Quarterly Executive, 16(1)

Singh, G., & Hardaker, G. (2014). Barriers and enablers to adoption and diffusion of eLearning: a systematic review of the literature- a need for an integrative approach. *Education and Training*, 56(2–3), 105–121.

Solis, B., & Littleton, A. (2019). The 2017 State of Digital Transformation. Altimeter. https://www.prophet.com/wp-content/uploads/2018/04/Altimeter-_-2017-State-of-DT.pdf

Soran, H., Akkoyunlu, B., & Kavak, Y. (2006). Yaşam boyu öğrenme becerileri ve eğiticilerin eğitimi programı: Hacettepe Üniversitesi örneği. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi*, 30(30), 202-210.

Szabo, M., & Flesher, K. (2002). CMI Theory and Practice: Historical Roots of Learning Managment Systems. *E-Learn 2002 World Conference on E-Learning in Corporate, Government, Healthcare, & Higher Education*, Montreal, Canada

Taşlıbeyaz, E. (2020). Yükseköğretimde dijital dönüşüm. S. Kahraman (Ed.), *Yükseköğretimde Dijital Dönüşüm* (1. Baskı, ss.19 -34). Pegem Akademi.

TAU. (2020). *Türk-Alman Üniversitesi | web yönetim sistemi* http://3fcampus.tau.edu.tr/uploads/cms/ind.tau/5793_81.pdf.

Taylor, T. (2014). Tackling assumptions and expectations; ımplementing technology in higher education. International Journal of Learning, *Teaching and Educational Research*, 1(1), 1–13.

Teichert, R. 2019. Digital transformation maturity: a systematic overview of literature. *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis*, 67(6): 1673-1687. https://doi.org/10.11118/actaun201967061673

Thomas, J. (2019). An overview of emerging disruptive technologies and key issues. *Development*, 62(1-4), 5-12. https://doi.org/10.1057/s41301-019-00226-z

Tomte, C. E., Fossland, T., Aamodt, P. O. and Degn, L. (2019). Digitalization in higher education: Mapping institutional approaches for teaching and learning. *Quality in Higher Education, Taylor & Francis*, 25(1), 98-114. DOI: 10.1080/13538322.2019.1603611

Tonta, Y. (2015). Açık bilim ve açık erişim. U. Al ve Z. Taşkın (Yay. haz.). *Prof. Dr. İrfan Çakın'a Armağan* (ss. 235-250). Ankara: Hacettepe Üniversitesi Bilgi ve Belge Yönetimi Bölümü.

Toprak, M., Bayraktar, Y., &Özyılmaz, A. (2020). Covıd-19 pandemisi ve yükseköğrenimde dijital dönüşüm Endüstri 4.0 ve toplum 5.0 perspektifinden bir değerlendirme. D. Demirbaş, V. Bozkurt, S. Sorgun. (Ed.). COVID-19 Pandemisinin Ekonomik, Toplumsal ve Siyasal Etkileri. (1. Baskı, ss.233-250). İstanbul Üniversitesi Yayınevi.

Tosyalı, H. (2018). Dijitalleşmenin yükseköğretime etkileri. Telli Yamotomo, G ve Kalaç, M, Ö (Ed.), *Devletde Dijital Dönüşüm* (1. Baskı, ss.171-185). Kriter Yayınevi.

Turnbull, D., Chugh, R., & Luck, J. (2019). Learning management systems: An overview. *Encyclopedia of Education and Information Technologies*, 1-7. https://doi.org/10.1007/978-3-319-60013-0_248-1

Ueckermann, C. (2017, Ocak 27). *Digital transformation does not happen haphazardly*. ITWeb. https://www.itweb.co.za/content/Wdgp45qa644vX9l8

Verina, N., ve Titko, J. (2019). Digital transformation: conceptual framework. *International Scientific Conference, Contemporary Issues In Busıness, Management And Economıcs Engıneerıng'2019*. Vilnius, eISSN 2538-8711. ISBN 978-609-476-161-4 / eISBN 978-609-476-162-1

Wang, G., Gunasekaran, A., Ngai, E.W., & Papadopoulos, T. (2016). Big data analytics in logistics and supply chain management: certain investigations for research and applications. *International Journal of Production Economics*, 176(1), 98-110. https://doi.org/10.1016/j.ijpe.2016.03.014

Watson, W., Watson, S. (2007). An argument for clarity: What are learning management systems, what are they not, and what should they become? *TechTrends.* 51. 28-34. https://doi.org/10.1007/s11528-007-0023-y

Webometricss. (2020). *Ranking Web of Universities: Webometrics ranks 30000 institutions | Rankings updated every January and July: Universities, Webometrics, Bibliometrics, Altmetrics.* http://www.webometrics.info/en/About_Us

Williams, D. L., Crittenden, V. L., Keo, T., & McCarty, P. (2012). The use of social media: An exploratory study of usage among digital natives.

Journal of Public Affairs, 12(2), 127-136. https://doi.org/10.1002/pa.14146.

Yeditepe Üniversitesi. (2020). *Dijital Dönüşüm.* https://iibf.yeditepe.edu.tr/tr/isletme/dersler/3369.

Yılmaz, F. (2019). Dijital Dönüşüm ve Üniversitelerimiz. Dünya Ekonomi ve Politika.https://www.dunya.com/kose-yazisi/dijital-donusum-ve-universitelerimiz/459506

YÖK. (2020a). *YÖK Study in Turkey YÖK Sanal Fuarı Gerçekleştirildi*.https://www.yok.gov.tr/Sayfalar/Haberler/2020/study-in-turkey-yok-sanal-fuari-sona-erdi.aspx

YÖK. (2020b). *YÖK üniversiteler*. https://www.yok.gov.tr/universiteler/universitelerimiz

YÖK. (2020c). *YÖK "Uzaktan Eğitim Platformu" Sağlama Protokolü* https://www.yok.gov.tr/Sayfalar/Haberler/2020/uzaktan-egitim-platformu-saglama-protokolu.aspx

Yureva, O. V., Burganova, L. A., Kukushkina, O. Y., Myagkov, G. P., & Syradoev, D. V. (2020). Digital transformation and its risks in higher education: Students' and teachers' attitude. *Universal Journal of Educational Research*, 8(11B), 5965-5971. https://doi.org/10.13189/ujer.2020.082232

Zinder, E. & Yunatova, I. (2016). Synergy for digital transformation: Person's multiple roles and subject domains integration. Proceedings of the International Conference on Digital Transformation and Global Society, (TGS' 16), Springer, Cham, pp: 155-168. DOI: 10.1007/978-3-319-49700-6_16.

CHAPTER 6

OCCUPATIONAL SAFETY SPECIALIST SELECTION IN AN INTUITIONISTIC FUZZY ENVIRONMENT

Asist. Prof. Fulya ZARALI[1]

[1] Kayseri University, Develi Hüseyin Şahin Vocational School, Kayseri, Turkey;
e-mail: fzarali@kayseri.edu.tr, ORCID ID: 0000-0002-7796-1040

INTRODUCTION

The human factor is the primary factor that constitutes the main and dynamic structure of all work areas, including the development of institutionalization activities, increasing domestic and international markets, carrying out recognition activities methodically, and the operability of the necessary improvement for the effective (Vural at.al,2020). Businesses require employees with a variety of qualifications and personalities, from the lowest to the highest levels. Human resources has a dynamic structure because it provides solutions for a variety of situations such as job loss, retirement, resignation, and the need for additional labor. Because of the dynamic structure of the human resources function, the employment of personnel with the appropriate qualifications and personality in the enterprises has become an important process in achieving the enterprise's objectives (Efe,2019). Finding the proper employees has always been a major challenge for organizations. In this day and age, with the globalizing world, evolving technologies, and growing specialization, the human resources department might not be enough in selecting the correct individuals. Making the correct staff selection decisions becomes crucial and even more significant in commercial sectors where human life is at stake. The availability of decisions that incorporate personal judgments is one of the biggest issues faced during the hiring process. Due to these circumstances, in addition to the potential for selecting the incorrect employees, selecting the appropriate personnel during the decision-making process for key jobs can take a very long time. In some instances, the human resources department and the business may become dysfunctional (Çelikbilek,2018). Such personnel selection decisions are especially important in business lines where human life is at stake. One of these critical decisions is selecting an occupational safety specialist (OSS). Choosing the right employees is critical for both the company and the employees.

Understanding of occupational health and safety management in Turkey, as in the rest of the world, advances with industrialization and technology. Occupational accidents and diseases caused by poor working conditions and human error in enterprises place a significant burden on the enterprise by harming employees and lowering productivity. Occupational health and safety exists to protect and improve employees, as well as to protect and advance workplace productivity and profitability (Koçak,2019). OSSs are people with technical backgrounds who work in the field of OSS in workplaces (Sökmen,2019). OSSs are involved in workplace processes related

to occupational health and safety. It advises the employer by determining what needs to be done to ensure that employees work in a healthy and safe environment, the precautions to be taken, the equipment to be used, and the issues to be considered during the work. Furthermore, it monitors the stages of implementation of the determined measures and intervenes as needed in the event of an inappropriate situation (Erol at.al,2021) Class A, B, and C OSS certification are defined in Turkey's OSS system. Taking into account the main activity, workplaces are also divided into three hazard classes: less dangerous, dangerous, and very dangerous. While the C class OSS can serve in the less dangerous class, the B class OSS can serve in both the less dangerous and dangerous classes, and the A class OSS can serve in the hazard class workplaces (Sökmen,2019). Because mining operations are extremely dangerous, following occupational health and safety regulations and employing an OSS is both a legal requirement and a requirement of the job. The specialist is expected to provide the necessary conditions in order to understand the precautions to be taken, to do the necessary things, and to ensure their follow-up. At this point, selecting an OSS becomes a critical issue. An OSS is chosen for a mining operation in this study. The more the OSS's equipment is at the desired level, the more beneficial it will be for the business (Erol at.al,2021). Choosing the best candidate is a process that must take into account both objective and subjective criteria. The large number of criteria in this process makes making the best decision a little more difficult. To solve this difficult situation, multi-criteria decision-making (MCDM) methods are used. Furthermore, the selection of an OSS involves more than one decision maker (DM), resulting in a complex decision problem. DMs frequently have limited information about each candidate and may be unfamiliar with all of the criteria by which they will evaluate candidates. Decisions are made with uncertainty as a result of this situation. (Gaoa at.al.2020). Intuitionistic fuzzy (IF) sets are one of the most effective methods for making decisions in uncertain situations. In this study, the IF-WASPAS method is proposed for the selection of OSS. Furthermore, because the selection of OSS will be based on a scientific method, it will significantly benefit the business in terms of transparency and explainability. When studies in the literature are examined, MCDM methods are rarely integrated with the IF set, whether for personnel or OSS selection. The study is expected to contribute to the literature and the IF literature.

1. LITERATURE REVIEW

There aren't many publications on the choice of OSSs, according to our review of the literature. Efe (2019) used fuzzy TOPSIS and fuzzy AHP techniques to choose an OSS. Individual traits and looks, computer abilities, experience/work history, fluency in a foreign language, and educational attainment level were identified as the selection criteria. The selection criteria for OSSs have been established by Erol at.al.2021 and include professional knowledge-theoretical, professional knowledge-practice, specialization certificate, compliance with intensive working hours, knowledge of prevention and protection measures, problem-solving ability, dominance of field practices, and knowledge of maintenance management. The Pythagorean Fuzzy Analytical Hierarchy Process (PBAHP) approach is used to weight these criteria. The ideal OSS has been selected using the TOPSIS approach.

There are many MCDM selection techniques accessible in the literature for personnel selection. If we examine these studies; the TOPSIS method is recommended to be extended to the heuristic fuzzy environment in the study by Boran (2009), and it was then applied to the problem of selecting a sales specialist for an organization working in the IT industry. He took into account in his work the criteria of diction, experience, the capacity for expression, work ethic, self-assurance, and first impression. Aksakal and Dağdeviren (2010) viewed the hiring of industrial engineers to work in the factory of an international firm in Istanbul as a problem with personnel selection and used the DEMATEL approach to solve the problem. The selection process took into consideration experience, written and vocal communication skills, language proficiency, computer skills, teamwork, and strategic thinking. The TOPSIS method is employed by Ghaemi Nasab and Rostamy-Malkhalifeh (2010) to choose a systems analysis engineer for a software company. The selection process considers communication skills, personality, experience, self-confidence, and emotional stability. Fathi et al. (2011) used the fuzzy TOPSIS method to select personnel for a construction company. Appearance, age, general culture, general ability, decision making, time management, teamwork tendency, willingness, analytical thinking, graduation status, foreign language knowledge, and work experience are used as criteria. Bali (2013) used the fuzzy VIKOR technique to choose a lecturer, considering general appearance, ability to explain, leadership, work ethic, social standing, motivation, and scientific competency. Tepe and Görener (2014), in the selection of mid-level managerial personnel in the communication sector; They used the integrated AHS-MOORA method by

using evaluation criteria such as graduation, computer use proficiency level, foreign language level, evaluation test, projects related to job description, experience, references, face-to-face interviews, social activities. Sang et al. (2015) used the fuzzy TOPSIS method in the selection of a system analysis engineer for a company that provides services on software.The criteria used to determine the most suitable candidate are; emotional stability, communication skills, personality traits, work experience, self-confidence. Değermenci and Ayvaz (2016) selected assistant experts in the participation bank using the fuzzy TOPSIS method. They used analytical thinking ability, self-confidence, teamwork adaptation, corporate culture adaptation, age, banking knowledge, computer knowledge, foreign language knowledge, education, and work experience as criteria. Erdem (2016) evaluated the criteria of program knowledge, past experiences, education level, knowledge of a foreign language, analytical thinking, communication skills, willingness, teamwork, and crisis management when selecting personnel for an organization working in the information technologies sector. Efe and Efe (2018) used the IF-AHP and IF-VIKOR methodologies to choose employees for a logistics company. They used self-confidence, computer proficiency, prior experience, oral communication skills, and educational level as selecting criteria. Kuşakçı et al. (2019) proposed the fuzzy MULTIMOORA method for personnel selection, which included criteria such as adaptability to corporate culture, communication skills, teamwork proclivity, learning motivation, problem-solving approach, planning and organization, career development, knowledge and experience. In the Personnel Selection Process, Ayçın (2020) used the CRITIC and MAIRCA methods, with the criteria of foreign language knowledge, industry experience, communication ability, database management system knowledge, ability to use ERP software, ability to follow technological developments.

We can observe from the literature that there are many different decision-making techniques utilized in staff selection. Applications for uncertainty are often based on traditional fuzzy set theory. There aren't many research that combine MCDM techniques with IF sets. This paper suggests a IF- MCDM method for OSS choice. The suggested technique adds to the literature on OSS selection and IF sets. It is anticipated that this research will help businesses and academics better grasp the OSS selection issue.

2. METHODS

Due to increased competitiveness, decision making has emerged as one of the most rapidly rising academic subjects relating to real-world challenges. MCDM is an important aspect of the decision-making process since it allows you to rank options based on a large number of different criteria and then choose the best one. Because the criteria are different, there may not be a single solution that fits all of them at once. To obtain more plausible decision results, numerous MCDM techniques have been created. Due to the ambiguity and complexity of human thinking, fuzzy sets (FSs) introduced by Zadeh (1965) have recently garnered increasing attention from decision experts in the field of decision making. Later, fuzzy sets (FSs) were expanded to include intuitionistic fuzzy sets (IFSs) (Atanassov,1986). IFSs were introduced by Atanassov (1986), and they are highly effective for dealing with the uncertainty of MCDM situations. (Mishra,Rani, 2018). The degree of membership is where Atanassov's IFS theory differs from Zadeh's FS theory. In classical FS theory, only membership degree is defined; in IFS theory, non-membership degree is defined in addition to membership degree. The range of membership and non-membership degrees is [0,1]. In classic FS theory, the sum of membership and non-membership degrees is equal to one when seen from this perspective. In IFS theory, however, the sum of these two factors may be less than 1, but the total is equal to 1 when a third parameter called hesistancy degree is included. (Yıldırım,Çiftçi,2021).

The IF set A in X is expressed as $A = \{(x, \mu_A(x), \nu_A(x))|x \in\}$ when X is a non-empty set. It defined the degree of belonging of the element x to the set A as $\mu_A(x)$, the degree of non-belonging as $\nu_A(x)$, and the hesitation index as $\pi_A(x)$ in IF set theory. The total of the degrees of belonging and not belonging, according to IF set theory, takes a value in the range [0,1]. $0 \leq \mu_A(x) + \nu_A(x) \leq 1$. The level of hesitation is whether any element x belongs to set A or not. The equation is used to calculate it (Tırmıkçıoğlu,2021).

$$\pi_A(x) = 1 - \mu_A(x) - \nu_A(x) \quad (1)$$

Definition 1: Let $A = (\mu_x, \nu_x)$ and $B = (\mu_y, \nu_y)$ be two IFN with parameters and λ a constant number greater than zero. Operations with IFN are given below.

$$A \oplus B = (\mu_x + \mu_y - \mu_x.\mu_y, \nu_x.\nu_y) \quad (2)$$

$$A \otimes B = (\mu_x.\mu_y, \nu_x + \nu_y - \nu_x.\nu_y) \quad (3)$$

$$\lambda.A = (1 - (1 - \mu_x)^{\lambda}, {\nu_x}^{\lambda}), \ \lambda > 0 \quad (4)$$

$$A^{\lambda} = ({\mu_x}^{\lambda}, 1 - (1 - \nu_x)^{\lambda}), \ \lambda > 0 \quad (5)$$

Definition 2: Below are the score and accuracy functions for the IFN A and B.

$$S(A_1) = \mu_1 + \mu_1(1 - \mu_1 - \nu_1) \quad (6)$$

$$S(B_2) = \mu_2 + \mu_2(1 - \mu_2 - \nu_2) \quad (7)$$

$$H(A_1) = \mu_1 + \nu_1 \quad (8)$$

$$H(B_2) = \mu_2 + \nu_2 \quad (9)$$

2.1. IF-WASPAS

Zavadskas et al. (2012) pioneered the weighted aggregate product assessment (WASPAS) method, which is one of the new utility theory-based methodologies. The weighted sum model (WSM) and the weighted product model (WPM) are combined in this strategy. The WASPAS approach allows you to rank and assess alternatives based on their level of trustworthiness. Under various fuzzy theories, this approach has been extended. (Mishra, Rani 2018). It is used in this study by combining it with intuitionistic fuzzy numbers (IFN). It is hoped that by using IFN, the DM will be able to make successful decisions with the help of linguistic factors, while also overcoming the ambiguity of the decision process, such as uncertainty and lack of knowledge.

WSM, one of the forerunners of MCDM methods, has been used in a variety of decision issues as an approach that allows the weights of criteria to be reflected in the choice problem, and different approaches have been presented to be developed by researchers. In its most basic form, the WSM consists of multiplying the weight of the relevant criterion by the performance scores of each alternative in the decision problem. In contrast, the WPM uses the product of the performance scores of the alternatives based on the criteria by taking the exponentiation of the weights to obtain a single score in a similar manner. (Tırmıkcıoglu,2021). The WASPAS technique has been offered in the literature as a model that recommends the usage of both of these models together. The WASPAS technique begins by normalizing the decision matrix, assuming that the scores of the alternatives may be on different scales depending on the criteria in the choice problem under consideration. (Yıldırım, Çiftçi, 2021).

Below are the steps of the WASPAS approach combined with the IFN. (Tırmıkcıoglu,2021, Günter,2019)

Step 1: Determine the linguistic variables to be evaluated and the related IFN values in the decision-making model.

Step 2: Determine the weights of the DMs. Assume the decision group consists of one DM. Decision-makers' importance is viewed as linguistic concepts articulated within the context of IFN. To rate the kth DM, let $E_k = [\mu_k, \nu_k, \pi_k]$be an IFN. The weight of the kth DM can then be determined using the equation:

$$\lambda_k = \frac{(\mu_k + \pi_k\left(\frac{\mu_k}{\mu_k + \nu_k}\right))}{\sum_{k=1}^{l}(\mu_k + \pi_k\left(\frac{\mu_k}{\mu_k + \nu_k}\right))} \quad (10)$$

and $\sum_{k=1}^{l} \lambda_k = 1$

Step 3: The DMs analyse the decision making model's criteria using linguistic variables and their intuitionistic fuzzy counterparts.

Step 4: The DMs' criteria evaluations are combined with the heuristic fuzzy weighted arithmetic mean operator ($IFWA_\lambda$) using importance weights ($\lambda 1, \lambda 2, \ldots, \lambda k$).

$$IFWA_\lambda = \left[1 - \prod_{k=1}^{l}\left(1 - \mu_{ij}^{(k)}\right)^{\lambda_k}, \prod_{k=1}^{l}\left(\nu_{ij}^{(k)}\right)^{\lambda_k}, \prod_{k=1}^{l}\left(1 - \mu_{ij}^{(k)}\right)^{\lambda_k} - \prod_{k=1}^{l}\left(\nu_{ij}^{(k)}\right)^{\lambda_k}\right] \quad (11)$$

Step 5. The combined intuitionistic fuzzy criterion values are defuzzified by the score function defined for the IFN:

$$w_j = \mu_J + \mu_J(1 - \mu_J - \nu_J)(J = 1, \ldots., n) \quad (12)$$

Step 6: The criteria weights are computed by normalizing the found criteria score values:

$$\bar{w}_j = \frac{w_j}{\sum_{j=1}^{n} w_j} \quad J = 1, \ldots., n; 0 < \bar{w}_j < 1; \sum_{j=1}^{n} \bar{w}_j = 1 \quad (13)$$

Step 7: Alternatives are evaluated by each DM using the predetermined criteria, and the results are combined to form the combined decision matrix Y.

$\bar{Y}_{ij}^{k} = (\mu_{ij}^{(k)}, \nu_{ij}^{(k)}, \pi_{ij}^{(k)})$ $(k = 1, \ldots., l)$ k. the decision-maker j. in accordance with the criterion i. IFevaluation of alternatives;

$$\bar{Y}_{ij} = \left[1 - \prod_{k=1}^{l}\left(1 - \mu_j^{(k)}\right)^{\lambda_k}, \prod_{k=1}^{l}\left(\nu_j^{(k)}\right)^{\lambda_k}\right] \quad (14)$$

$$\bar{Y}^{(k)} = (\bar{Y}_{ij}^{k})_{mxn} = \begin{pmatrix} \bar{Y}_{11}^{k} & \cdots & \bar{Y}_{1n}^{k} \\ \vdots & \ddots & \vdots \\ \bar{Y}_{m1}^{k} & \cdots & \bar{Y}_{mn}^{k} \end{pmatrix}$$

$$\bar{Y} = (\bar{Y}_{ij})_{mxn} = \begin{pmatrix} \bar{Y}_{11} & \cdots & \bar{Y}_{1n} \\ \vdots & \ddots & \vdots \\ \bar{Y}_{m1} & \cdots & \bar{Y}_{mn} \end{pmatrix}$$

Step 8: The $\bar{Z} = (\bar{z}_{ij})_{mxn}$ combined normalized decision matrix is formed by normalizing the combined decision matrix. The benefit and cost criteria are represented by B and C, respectively, in the normalized decision matrix:

$$\bar{z}_{ij} = \begin{cases} (\mu_{\bar{x}_{ij}}, \nu_{\bar{x}_{ij}}) \; J \in B \\ (\nu_{\bar{x}_{ij}}, \mu_{\bar{x}_{ij}}) \; J \in C \end{cases} \quad (15)$$

Step 9: Using the weighted aggregate model, the relative relevance values of the alternatives are calculated. The IFWA operator is used to calculate the $\bar{Q}_i^{(1)}$value.

$$\bar{Q}_i^{(1)} = \sum_{j=1}^{n} \bar{z}_{ij} * \bar{\omega}_j \quad (16)$$

$$IFWA_w = \left[1 - \prod_{k=1}^{l} (1 - \mu_j)^{w_j}, \prod_{k=1}^{l} (\nu_{ij})^{w_j}\right] \quad (17)$$

Step 10: The weighted product model of the alternatives is used to calculate relative importance values. The IFWG operator is used to calculate the $\bar{Q}_i^{(2)}$value.

$$\bar{Q}_i^{(2)} = \prod_{j=1}^{n} \bar{z}_{ij}^{\bar{\omega}_j} \quad (18)$$

$$IFWG_w = \left[\prod_{k=1}^{l} (\mu_j)^{w_j}, 1 - \prod_{k=1}^{l} (1 - \nu_{ij})^{w_j}\right] \quad (19)$$

Step 11: The Q_i value for each alternative is calculated

$$Q_i = \lambda . \left(\bar{Q}_i^{(1)}\right) + (1 - \lambda)\bar{Q}_i^{(2)}, \quad (20)$$

$0 < \lambda < 1$ using the equation. The λ value is set at 0.5 in this study.

Step 12: Using the score function values, rank the relative values from largest to lowest. The best option is the one with the highest score value.

3. APPLICATION

In this study, an OSS choice is made for a mining business running in the province of Kayseri. Three DMs (M1,M2,M3) two senior managers and the process owner, are involved in the implementation to determine the criteria and alternatives, as well as the weighting. Together with the decision-makers, the criteria are decided. The decision-makers' prior experiences and the criteria listed in the literature overview are taken into consideration while picking the criteria. Eight criteria that can be used in OSS selections at all

times have been established by decision-makers. Determined criteria include work experience (C1), knowledge of a foreign language (C2), education (C3), computer expertise (C4), technical expertise (C5), communication ability (C6), problem-solving skills (C7), and understanding of risk assessment and prevention (C8). Four candidates are chosen for the OSS selection from among those who applied to the company and completed the preliminary exam (P1, P2, P3, P4).

The IF WASPAS model is utilized for the best OSS selection after the criteria and alternatives have been decided upon in conjunction with the decision-making team. The steps of the IF-WASPAS model are described below;

First, each DM is asked to evaluate the alternatives using the linguistic terms listed in Table 1. Table 2 displays the DMs' assessments.

Table 1: Linguistic Terms

Linguistic Terms	Linguistic Terms	IF Numbers
Very Important	Very Good	0.75-0.10-0.15
Important	Good	0.60-0.25-0.15
Medium	Medium	0.50-0.50-0.00
Unimportant	Bad	0.25-0.60-0.15
Very Unimportant	Very Bad	0.10-0.75-0.15

Table 2: DMs' Opinion

P1				P2			
Criteria	M1	M2	M3	Criteria	M1	M2	M3
C1	VG	M	G	C1	G	G	VG
C2	G	VG	M	C2	VG	VG	M
C3	VG	VG	VB	C3	VG	G	M
C4	G	M	M	C4	M	VG	VG
C5	VG	VG	M	C5	M	G	G
C6	G	G	G	C6	M	G	M
C7	G	VG	VG	C7	M	M	G
C8	G	G	VG	C8	M	VG	M
P3				P4			
Criteria	M1	M2	M3	Criteria	M1	M2	M3
C1	G	G	M	C1	G	M	G

C2	VG	G	G	C2	VG	VG	G
C3	VG	VG	G	C3	G	VG	M
C4	G	G	G	C4	G	VG	G
C5	G	G	M	C5	VG	VG	G
C6	VG	G	G	C6	G	VG	G
C7	G	G	M	C7	VG	M	G
C8	VG	VG	G	C8	G	M	G

The linguistic terms in Table 2 are used to evaluate each criterion by DMs. Table 3 presents the evaluation findings.

Table 3: Evaluations of the DMs for the Criteria

	M1	M2	M3
C1	VI	VI	VI
C2	I	VI	I
C3	I	I	I
C4	VI	VI	M
C5	VI	I	VI
C6	VI	I	M
C7	VI	I	VI
C8	VI	VI	I

Then, matrices for the decision and criterion weighting are built. First and foremost, the DMs' weights are required for this. Using the linguistic concepts in Table 5, the DMs' weights are calculated based on their levels and areas of responsibility.

Table 5: Lınguistic terms for weight value

LT	IFN
VI (very important)	0,80-0,10
I(important)	0,50-0,30
M (medium)	0,50-0,50
U (unimportant)	0,30-0,50
VU (very unimportant)	0,20-0,70

The DMs' linguistic values are M1: Very Important, M2: Important, and M3: Medium. The computations in equation 10 are performed using these values, and the results are shown in Table 6 along with each DM's weight value.

Table 6 : DM's Weight Value

	M1	M2	M3
Linguistic terms	VI	I	M
Weight value	0,428	0,332	0,24

The combined results with $IFWA_{\lambda}$ are shown in the Table 4, taking into account the DM's linguistic evaluations as well as their important weights. For the calculated Weight values, Clarification and Normalization operations are done using Equation 12-13, and the results are shown in Table7.

Table 7: Weight, Clarification and Normalization Values

	w			Si	Ni
C1	0,750	0,100	0,150	0,863	0,155
C2	0,653	0,184	0,163	0,759	0,136
C3	0,600	0,250	0,150	0,690	0,124
C4	0,730	0,148	0,122	0,819	0,147
C5	0,708	0,149	0,143	0,809	0,145
C6	0,673	0,169	0,158	0,779	0,140
C7	0,708	0,147	0,143	0,811	0,146
C8	0,718	0,125	0,157	0,831	0,149

Each DM assesses the options based on the predetermined criteria, and the results are pooled with the IFWA operator to produce a combined decision matrix. Every criterion is viewed as a benefit criterion.

Table 8: Combined Decision Matrix

C1			C2			C3			C4		
0,666	0,212	0,122	0,639	0,218	0,143	0,536	0,323	0,141	0,545	0,353	0,102
0,642	0,221	0,137	0,730	0,148	0,122	0,655	0,199	0,146	0,661	0,219	0,210
0,577	0,295	0,128	0,673	0,169	0,158	0,718	0,125	0,157	0,600	0,250	0,150
0,569	0,298	0,133	0,718	0,125	0,157	0,639	0,218	0,143	0,653	0,184	0,163
C5			C6			C7			C8		
0,597	0,293	0,110	0,600	0,250	0,150	0,692	0,163	0,145	0,642	0,221	0,137
0,560	0,336	0,104	0,525	0,397	0,078	0,526	0,423	0,051	0,621	0,293	0,086
0,577	0,292	0,128	0,673	0,169	0,158	0,577	0,295	0,128	0,718	0,125	0,157
0,718	0,125	0,157	0,653	0,154	0,163	0,666	0,212	0,127	0,569	0,298	0,133

The relative important values of the alternatives calculated using the weighted total model $\bar{Q}_i^{(1)}$ and the relative importance values of the alternatives calculated using the weighted product model $\bar{Q}_i^{(2)}$ are shown in the Table 9.

Table 9: $\bar{Q}_i^{(1)}$, $\bar{Q}_i^{(2)}$ Values

$\bar{Q}_i^{(1)}$			$\bar{Q}_i^{(2)}$		
0,669	0,201	0,130	0,611	0,257	0,132
0,669	0,220	0,111	0,614	0,280	0,106
0,690	0,164	0,146	0,641	0,213	0,146
0,699	0,153	0,148	0,643	0,207	0,150

The Q_i value for each option was calculated using equation 9 and clarified using the score function, with the results shown in Table 10.

Table 10: Results

Alternative	Q_i	Rank
P1	0,725	3
P2	0,712	4
P3	0,764	2
P4	0,773	1

According to the table results, it is P4>P3>P1>P2. The fourth-ranked candidate among the OSS candidates earned the greatest score, taking first place, and the second-ranked candidate earned the lowest score, taking last place.

4. ANALYSIS OF SENSITIVITY

A sensitivity analysis is performed by assigning different values to the coefficient in order to assess the rankings of the alternatives. Table 8 and Figure 1 show the findings of the sensitivity analysis.

Table 11: Sensitivity Analysis Results

	λ=0,1	λ=0,2	λ=0,3	λ=0,4	λ=0,5	λ=0,6	λ=0,7	λ=0,8	λ=0,9	λ=1,0
P1	0,198	0,373	0,519	0,635	0,725	0,795	0,847	0,887	0,916	0,938
P2	0,196	0,367	0,509	0,623	0,712	0,782	0,835	0,862	0,907	0,930
P3	0,215	0,403	0,556	0,675	0,764	0,831	0,879	0,900	0,939	0,957
P2	0,218	0,410	0,565	0,684	0,773	0,838	0,886	0,906	0,943	0,960

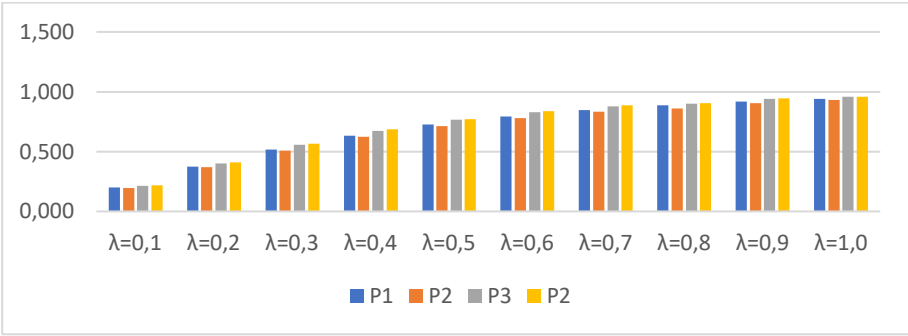


Figure 1. Sensitivity analysis results

Despite the fact that the coefficient varies based on the sensitivity analysis results in Table 11 and Figure 1, the ranking of the alternatives remains the same. The correctness of the decision model and the consistency of the calculations are demonstrated by these outcomes.

CONCLUCSION

To complete occupational health and safety works in businesses, OSSs are required. OSSs are involved in workplace processes related to occupational health and safety. It advises the employer by determining what needs to be done in order for the employees to work in a healthy and safe environment, as well as the precautions to be taken, the equipment to be used, and the issues to be considered while at work. In addition, it follows the implementation stages of the determined measures and makes the necessary interventions in case of an inappropriate situation. In our country, it is a legal obligation to have an occupational physician and occupational safety specialist in the workplaces. At this point, businesses must have appropriate occupational safety experts according to their hazard classes. In addition to this obligation, the role of the occupational safety specialist is great in creating a healthy working environment for the employees in the enterprises. Furthermore, it monitors the stages of implementation of the determined measures and intervenes as needed in the event of an inappropriate situation. OSS plays an important role in creating a healthy working environment for employees in businesses. Therefore, the right individuals for the company should be chosen in accordance with the expectations when picking an OSS (Emel et.al.,2021). In this study, OSS is chosen for a mining operation for this purpose. OSS is chosen and assessed among 4 candidates that the enterprise has determined. In practice, the criteria that will influence the selection are first determined. Work experience is the most important criterion, computer

knowledge is the second most important criterion, and technical knowledge is the third most important criterion. Each alternative, criterion, and the weights of the criteria are expressed with IF numbers during the evaluation process. The candidates' rankings are determined using the IF-WASPAS method. The extended WASPAS method with IF set is preferred in this study. Because the OSS selection is based on a scientific method, it is expected to make significant contributions to businesses in terms of transparency and explainability.

REFERENCES

Aksakal, E., & Dağdeviren, M. (2010). ANP ve DEMATEL yöntemleri ile personel seçimi problemine bütünleşik bir yaklaşim. Gazi Üniversitesi Mühendislik Mimarlık Fakültesi Dergisi, Vol. 25, No. 4.

Atanassov, K. (1986). Intuitionistic fuzzy sets. Fuzzy Sets and Systems.20(1), 87-96.

Ayçin, E. (2020). Personel seçim sürecinde CRITIC ve MAIRCA yöntemlerinin kullanılması. İşletme, Vol. 1, No. 1, pp 1-12.

Bali, Ö., 2013. Bulanık Boyut Analizi Ve Bulanık Vikor İle Bir ÇNKV Modeli: Personel Seçimi Problemi. Kara Harp Okulu Bilim Dergisi, Vol. 23, No.2, pp 125-149.

Boran, F., (2009), Personel Seçimi Probleminde Sezgisel Bulanık Küme Uygulaması (Yüksek Lisans Tezi), Gazi Üniversitesi, Fen Bilimleri Enstitüsü, Ankara.

Çelikbilek, Y. (2018). Using an integrated grey AHP-MOORA approach for personnel selection: An application on manager selection in the health industry. Alphanumeric Journal, Vol.6, No.1, pp 69-82.

Değermenci, A., & Ayvaz, B. (2016). Bulanık ortamda TOPSIS yöntemi ile personel seçimi: katılım bankacılığı sektöründe bir uygulama. İstanbul Ticaret Üniversitesi Fen Bilimleri Dergisi, Vol.15, No. 30, pp 77-93.

Efe, B., Efe, Ö. F. 2018. "Intuitionistic fuzzy number based group decision making approach for personnel selection", Uludağ University Journal of The Faculty of Engineering, Vol.23, No.3, pp 11-26.

Efe, Ö. F. (2019). Hibrid Çok Kriterli Karar Verme Yöntemi Temelinde İş Güvenliği Uzmanı Seçimi. Erzincan University Journal of Science and Technology, Vol.12, No. 2, pp 639-649.

Erdem, M. B. (2016). A fuzzy analytical hierarchy process application in personnel selection in it companies: A case study in a spin-off company. Acta Physica Polonica A, Vol.130, No. 1, pp 331-334.

Erol, E., Özcan, E., & Eren,T. (2021). Elektrik üretim santrallarında iş güvenliği uzmanı seçiminde hibrit bir karar modeli. Journal of Turkish Operations Management, Vol.5, No. 1, pp 615-629.

Fathi, M. R., Matin, H. Z., Zarchi, M. K., & Azizollahi, S. (2011). The application of fuzzy TOPSIS approach to personnel selection for Padir Company, Iran. Journal of management Research, Vol.3, No. 2, pp 1-14.

Gaoa, H., Ernesto, Y., Gonzalez, S., Zhang, W.(2020).Green supplier selection in electronics manufacturing: An approach based on consensus decision making. Journal of Cleaner Production. Vol.245, pp 118781.

Ghaemi, N. F., & ROSTAMY, M. M. (2010). Extension of TOPSIS for group decision-making based on the type-2 fuzzy positive and negative ideal solutions.

Gunter, Y. (2019). Sezgisel bulanık Kümelere Dayalı Çok Kriterli Karar Verme Yöntemleri. Yüksek Lisans Tezi, Selçuk Üniversitesi Fen Bilimleri Enstitüsü, İstatistik Anabilim Dalı.

Koçak, D. (2019). Bir kömür madeninde iş sağlığı ve güvenliği risk değerlendirmesi için uygun yöntem seçimi. Yüksek Lisans Tezi, Hacettepe Üniversitesi Fen Bilimleri Enstitüsü, Ankara.

KUŞAKCI, A. O., Ayvaz, B., Öztürk, F., & Feyza, S. O. F. U. (2019). Bulanik Multimoora İle Personel Seçimi: Havacilik Sektöründe Bir Uygulama. Niğde Ömer Halisdemir Üniversitesi Mühendislik Bilimleri Dergisi, Vol.8, No. 1, pp 96-110.

Mishra, A. R., & Rani, P. (2018). Interval-valued intuitionistic fuzzy WASPAS method: Application in reservoir flood control management policy. Group Decision and Negotiation, Vol.27, No. 6, pp 1047-1078.

Sang, X., Liu, X., & Qin, J. (2015). An analytical solution to fuzzy TOPSIS and its application in personnel selection for knowledge-intensive enterprise. Applied Soft Computing, Vol.30, pp 190-204.

Sökmen, M. E. (2019). Madencilik Sektöründe İş Güvenliği Uzmanlığı Eğitimlerinin Karşılaştırmalı Olarak İncelenmesi ve Değerlendirilmesi. Yüksek Lisans Tezi, Hacettepe Üniversitesi Fen Bilimleri Enstitüsü, Ankara.

Tepe, S., & Görener, A. (2014). Analitik hiyerarşi süreci ve moora yöntemlerinin personel seçiminde uygulanması. İstanbul Ticaret Üniversitesi Fen Bilimleri Dergisi, Vol.13, No. 25, pp 1-14.

Tirmikcioglu, N. (2021). Sezgisel Bulanık WASPAS Yöntemi ve Depo Yeri Seçimi Problemi. Afyon Kocatepe Üniversitesi Fen ve Mühendislik Bilimleri Dergisi, Vol.21, No. 6, pp 1330-1342.

Vural, D., Erkan, K. Ö. S. E., & BAYAM, B. (2020). AHP ve VIKOR yöntemleri ile personel seçimi. Yalova Sosyal Bilimler Dergisi, Vol.10, No. 21, pp 70-89.

Zadeh, L. A. (1965). Fuzzy Sets. Information and Control, Vol.8, No. 3, pp 338-353.

Zavadskas, E. K., Turskis, Z., Antucheviciene, J., & Zakarevicius, A. (2012). Optimization of weighted aggregated sum product assessment. Elektronika ir elektrotechnika, Vol.122, No. 6, pp 3-6.

CHAPTER 7

POSITIVE IMPACT OF CSR ACTIVITIES IN KAZAKHSTAN

Maya KATENOVA[1]

[1] DBA, PRM KIMEP University, Kazakhstan.

INTRODUCTION

For the last decades, more and more research and studies among top managers and academics have appeared around corporate social responsibility (CSR). CSR became an emergency topic for top executives, as an effective management regulation, which integrated social responsibility via close integration with stakeholders, but today it is widely considered a strategic regulation for companies to access advantages among other companies, to achieve better financial performance. The theme of the importance of CSR in companies is only now becoming a widely discussed topic in Kazakhstan.

Even in 2010, according to the UN Global Compact-Accenture CEO study (as cited in Cheng, Ioannou, and Serafeim, 2011), 93% of participant CEOs over the world stated that Corporate social responsibility an is "important" or "very important" factor for their organization's future success. Corporate social responsibility became not only a new method for social care, along with donations and various social benefits for employees, but a real strategic regulation to achieve competitive advantage among other companies. Many studies have investigated the positive correlation between the usage of corporate social responsibility and the financial performance of companies via different types of analyzes.

On the other hand, some academicians (Friedman, 1970; Aupperle, Carroll, and Hatfield, 1985; McWilliams and Siegel, 1997; Jensen, 2002, as cited in Cheng, Ioannou, and Serafeim, 2011), argue that CSR creates new expenditures and adds unnecessary cost for the company, which negatively affects financial statements of the company since it might put the company in a position of competitive disadvantage among other companies. In addition, rapid implementation of CSR might negatively affect relationships with other stakeholders, since it might impact relationships between managers and employers, investors, suppliers, and other interested parties, especially when these changes are made without agreement with other stakeholders.

The need for corporate social responsibility increased because people have become more socially and environmentally responsible, within more and more widely discussed themes of environmental issues and social inequality, and decided to spend money on those companies, which will direct them to positively impact society and the planet overall. For Generation Z it is more important that companies invest their resources and time to improve the wellness of society and consider different varistor to assist those improvements (Digital Marketing Institute, 2021). Companies that are criticized by trade unions, shareholders, consumers, the state, and other social

organizations, as a rule, do not apply CSR to the extent that it would satisfy the interests of all stakeholders (Jenkins, R. and Newell, P., 2013). CSR performance in a company affects the company's image and how consumers and investors view it.

Numerous authors from around the world have been actively researching CSR activities and how they affect corporate financial performance. By lowering air pollution and issuing green bonds, the corporation is referred to as being environmentally friendly. Simultaneously, environmental, social, and governance (ESG) activities address societal concerns including taking care of employees by offering favorable working conditions, successful human capital management, and health and safety initiatives.

Based on the information that was affected by the offensive research objectives and research question will be described. Main objectives of the study are related to issues of CSR. What is the attitude toward CSR in Kazakhstan?

Literature Review

Fatemi et al. (2018) used a two-stage approach to analyze the impact of ESG activities and their disclosure on firm market value for 403 US companies between 2006 and 2011. The authors found a clear positive correlation between ESG initiatives and organizations' financial performance. Additionally, they believed that ESG disclosure helped businesses stand out from less successful performers and avoid the negative impacts of adverse selection. Additionally, Fatemi et al. (2018) discussed the second conclusion, which shows that increasing ESG transparency may be perceived by the market as an attempt by the company to defend against high spending ding ongoing activities.

Bhaskaran et al. (2020) demonstrated that businesses investing in ESG projects typically increase their market value by looking at 4,886 corporations from emerging and developed nations and using a two-stage least square model. ESG efforts frequently result in higher share prices. The writers emphasized other elements supporting these connections. For instance, corporations with plenty of cash often invest more in environmental initiatives to lower air pollution emissions, which appeals to investors. Bhaskaran et al. (2020) further highlighted the fact that businesses actively invest in welfare programs to boost firm value and operating performance since highly motivated employees will produce more when working in a more pleasant environment.

Intriguingly, Duque-Grisales and Aguilera-Caracuel (2019), who examined the financial data of 104 multinational corporations with Latin American headquarters from 2011 to 2015, discovered a negative correlation between ESG efforts and firms' financial performance. The writers noted that managerial, cultural, ethical, and social behaviors set Latin American businesses apart from those in industrialized countries. Additionally, due to the lack of visibility and limited financial resources in the region, Latin American businesses may not prioritize ESG projects. Due to a lack of funding, Latin American businesses must prioritize running their operations over pricey ESGin ordeordersurvive. The authors do note that investing in ESG projects will start to have a favorable impact on corporate financial performance if finance becomes more readily available. According to Duque-Grisales and Aguilera-Caracuel (2019), the bigger the favorable impact of ESG activities on corporate financial performance, the greater the firm's foreign sales are. ESG activities can be brought by foreign companies and investors, who can then train local companies to carry them out. Foreigners may put pressure on local businesses to participate in ESG activities, and foreign investors may contribute additional financing for such efforts.

Elalfy et al. (2019) in their study analyzed the phenomenon of CSR, in particular its general concepts and concepts of sustainability. Scientists have found that companies who report on their economic, social, and environmental performance use CSR as a driver of their corporate reputation as well as their financial performance.

Previous empirical work on CSR and profitability demonstrates debatable results. Negative relations between them were confirmed by (Anderson et al., 1980), (Bowman et al 1975,) and (Bragdon and Marlin 1972). At the same time, (Roman et al., 1999), (Ullmann 1985) and (Wood and Jones 1995) argued that stable causal relationships were found between CSR and firm performance (Shapiro, 1987; Donaldson and Preston, 1995).

McGuire et al. (1988) f out a positive relationship between prior profitability and corporate social responsibility as well. They mentioned that firms with high productivity indicators can ensure the level of their social responsibility at a high level (Hammond et al., 1996). Mostly, those firms are large businesses with a strong credit rating. Margolish et al. (2003) noted that approximately half of the research did not find a correlation between corporate social responsibility and profitability. Mc Guire and Sandgren (1988) mentioned the fact that market returns have some advantages over accounting-based measures and other profitability ratios.

Mochales & Blanch (2021) emphasize that the brand capital projected by CSR initiatives has a positive impact on the strategic nature of CSR and can in addition contribute to the company's efficiency.

Cho et al. (2019) analyzed the systemic relationship between the results of corporate social responsibility (CSR) and the financial performance of the company. The researchers analyzed data on 191 firms from South Korea, researchers took into account the index of the Korean Institute of Economic Justice (KEJI) for 2015. At the same time, the firm's profitability and value were analyzed as a tool for measuring the company's financial performance. Return on assets was used as a proxy for profitability, and Tobin's Q was used as a proxy for firm value. They discovered a strong positive correlation between the growth of assets and the CSRin the active citof ies a company.

Waddock et al. (1997) argued that corporate social performance is found to be positively associated with priothe r performance of a company, while (McWilliams et al., 2000) mentioned the idea that the model should be properly specified. The results of their study support the idea of neutrality. They claim that CSR has a neutral impact on financial performance. Financial performance and CSR activities are two variables, which attract the interest of academicians nowadays. Two variables are related when the traditional statistical method is employed. However, when a time series fixed effect approach is employed, the results show a weaker correlation between CSR and financial performance.

In parallel, a meta-analysis was carried out to determine the association between corporate social performance and accounting-based and market-based measures (Orlitzky et al., 2003; Al-Malkawi et al., 2018). The findings of this study demonstrate a strong correlation between accounting-based measures and corporate social performance. However, there is no connection between corporate social responsibility and market-based metrics. Significantly good findings have been reported in studies exploring the connection between CSR and accounting-based performance measures (Bragdon et al., 1972; Bowman et al., 1975; Parket et al., 1975).

Cochran et al. (1984) emphasized the positive correspondence between the effectiveness of accounting after age control of assets and CSR. Cochran et al. explored the topic of CSR or, more recently, the relationship between a company's corporate social responsiveness and its financial and accounting performance, and they found that there were favorable correlations between CSR and asset age. They mentioned lower CSR scores for companies

with older assets. It was stated that older organizations' management is less responsive than younger firms' management in terms of both business and social dimensions. Younger companies are more adaptable in both the business and social spheres. According to (Baumann-Pauly, 2015), who revealed the findings of his qualitative empirical study of CSR in Swiss MNCs and SMEs, smaller businesses execute CSR strategies significantly less frequently than large businesses (Al Ani et al., 2015). The size does not matter. According to this author, small firms have several organizational parameters that pragmatically promote the internal implementation of CSR practices. At the same time, if we talk about large firms, the latter have characteristics that allow for the promotion of further external communication and reporting on CSR projects, but at the same time limit the processes of internal implementation. Accepting this fact, we hypothesize that large companies in Kazakhstan are more socially responsible.

Orlitsky (2005) emphasizes that today an increasing number of managers are convinced that the more systematically and actively companies and firms implement socially and environmentally responsible organizational actions, the more profitable it is for them. At the same time, threesome debtors dodo sharehishabecausea ecause they believe that corporate social responsibility is a direct cost factor. This issue is still debatable.

The phenomenon of CSR was also studied in the context of the following scientific vectors: 1) CSRs and excessive work ethic (Ali, 2021). The introduction of a higher level of organizational identification owing to work meaningfulness indirect ethics excess ethic with pro-environmental orientation as a moderator, the study's findings show that CSR perception of employees negates the excessive work ethic; 2) Firm acceptance of CSR initiatives and organizational commitment of employees to CSR (Lin et al., 2021); 3) The impact of OPR and reputation as mediators of perceived CSR motive and perceived CSR fit on supporting behaviors (Kim et al., 2021); 4) The strategic relationship between HR and CSR (Ikhide et al., 2021); 5) The importance of CSR to business strategy (New & Ozmel, 2021); and 6) The impact of the CSR committee and CEO compensation tied to CSR on CSR performance (Radu & Smaili, 2021). According to the study's authors, the CSR Committee positively impacts CSR both directly and indirectly, with CSR-related compensation serving as a mediator in the relationship; 6) Correlations between strategic management and CSR (Roszkowska-Menkes, 2021).

Recently, CSR research has expanded its geographical coordinates. In particular, scientific analyzes were carried out on: 1) A CSR-based of Spanish companies in Latin America (Farber & Charles, 2013); 2) CSR and investment efficiency in Western European countries (Ben Khediri, 2021); 3) CSR in the Scandinavian countries (Munkelien et al., 2018); 4) Legalization of CSR in the Philippines (Madanguit, 2021); 5) Prevalence of CSR reporting in Arab countries (Ismaeel et al., 2021); 6) CSR in BRIC countries (Crotty, 2014); 7) Internal and external determinants of corporate social responsibility practices in multinational subsidiaries in Ethiopia (Fufa & Roba, 2021); 8) Internationalization and internationalization of CSR practice for a Japanese multinational company (Perera & Hewege, 2021); 9) Overview of CSR activities in India (Dadas, 2021).

Methodology

This chapter presents the methodology used in this thesis work. Starting with the type of methodology which will be used in this thesis work, continuing with the research approaches, and ending with a discussion of the validity and reliability of collected information.

Yin (2003) states that exist three main approaches for case studies research: exploratory, deXPrlavatoryand xp lanatory.,

According to Yin (2003), explanatory research explains how events occur, and what effects bring causes. The explanatory research approach is suitable for cases, where the area of research is broad and complicated.To construct explanatory research, the hypothesis should be developed in advance and further analyze the outcome of the hypothesis.

According to Yin (2003), descriptive research presents a whole description of a subject of research, within its context. The descriptive research approach answers the questions: how, who, what, when, and where. The description research approach is usually used when existing large information about the subject of the research should be categorized into models. Moreover, this type of study focuses on investigating a few aspects of a larger subject.

According to Yin (2003), the exploratory research purpose is to determine the questions, hypotheses, and objectives of a subsequent investigation of the subject of research.

For convenience and to avoid misunderstandings on both sides, the interview will be conducted in Russian. The interview will be conducted with people who have some background and practical knowledge in CSR. The

interview will be conducted with a pre-prepared list of questions. The questions will be related to the main objectives of the study:

- Demonstrate the benefits that companies access after implementing CSR;
- Investigate the extent of CSR performance in Kazakhstan companies, within the example of KASE
- Does CSR become a necessary strategic regulation for the survival of companies?

The interview was taken by the head of the project management department of KASE, and the current head of the business intelligence department of the central depository of Kazakhstan, Ainagul Iskakova.

KASE is a unique organization and is familiar with the concept of CSR. Its uniqueness lies in the fact that KASE is a bridge between issuers and investors. In KASE, foreign companies can act as issuers, as well as large foreign investment funds can be investors. And the stock market is a place where the transparency of information, the company's image, and social responsibility are most important, so the topic of CSR has long been known to the stock market of Kazakhstan. Another factor why this company was chosen is that the author of the thesis had an internship in this company and saw its uniqueness, in addition, it was not difficult to directly contact the head of the project management department to request an interview since the author worked in the The interview was taken on July 8, 2022, in a face-to-face format. The interview was recorded on a dictaphone, with the permission of the interviewee, to avoid misunderstandings and to preserve the material. The approximate duration of the interview was 29 minutes.

According to Descombe (2000), there are three main methods of conducting interviews: structured, unstructured, and semi-structured. A structured interview is characterized when the interviewer follows the question list and does not deviate from the plan. An unstructured interview is characterized when the interviewer does not follow any list of questions and simply relies on the detailed monotonous opinion of the interviewee on the subject of research. A semi-structured approach combines both methods, structured and unstructured, which allows conducting a non-strict interview with the possibility of modifying the list of questions during the interview itself.

According to Yin (2003), when performing a case study, data can be evaluated in one of two ways: case analysis or cross case analysis. A case cross-caseysis within across-casey compares empirical theory. When performing a cross-case study, empirical data from various cases is compared.

Examples of the use of CSR in companies include the company's activities aimed at Charity, volunteering, environmental projects, consumer protection, fair competition, disclosure of information, and increasing transparency between investors and the company. Each company applies CSR differently, but the goal is the same - ensuring social responsibility towards stakeholders.

Johnson & Johnson, a giant in the pharmaceutical industry, which operates for over a century, apply CSR for a long time in various approaches. Since 2005, J&J has launched a program to reduce CO2 emissions from manufacturing and research sites, under which the company spends more than $40 million annually. Since the launch of the program, J&J has completed more than 250 projects and as a result, has reduced greenhouse gas emissions by 300,000 metric tons annually. Perhaps J&J's most commendable CSR project is the renewable electricity project. The company for 2022 has over 50 stations for the generation of renewable energy, in 14 different countries of the world. In the US, Canada, and Europe by 2023, 100% of the electricity used by the company in industrial and research facilities will be supplied from renewable energy sources. The company plans by 2025, 100% of electricity needs to be supplied from renewable sources. Talking about social responsibility, it should be mentioned ESG, which is predetermined by clear goals and results. Based on the J&J reporting data on the ESG strategy (2021), the company has achieved 16 out of 17 sustainable development goals. *Figure 2* presents examples of what the company sets goals to achieve in particular ESG focus areas.

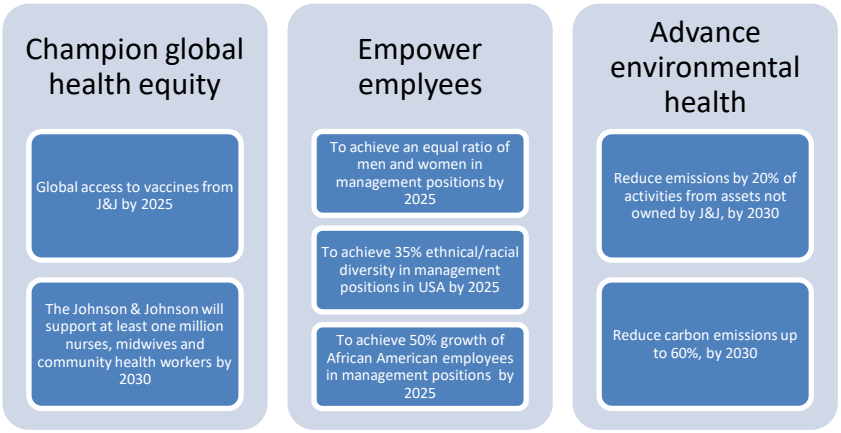
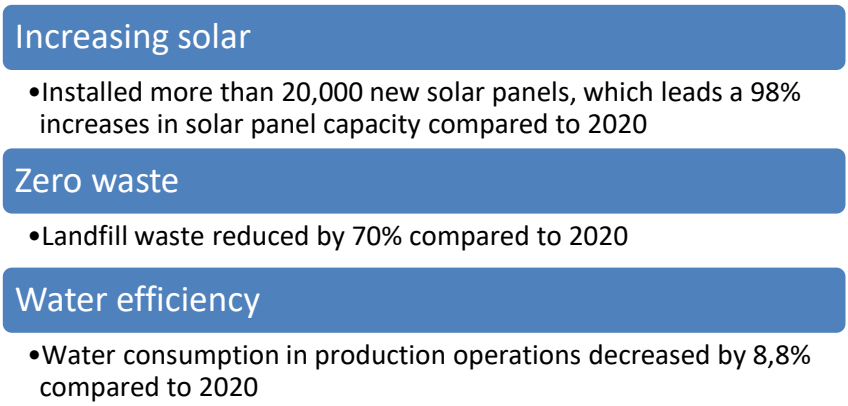


Figure 1.J&J ESG goals until 2030

In addition, the company is also engaged in other social projects. The company plans to use 100% natural cotton without chemical and genetic modifications in its products until the end of 2025, reduce carbon emissions in production, chemical-free mineral lenses for glasses, and more than 80% recycled materials in its products. (Sustainability at TOMS, 2022).

Let's look at examples of how CSR is applied in a company that tops the Global RepTrak 100 list in 2020 and 2021, a ranking that demonstrates the reputation and strength of the brand in the eyes of society, in terms of products, innovation, workplace, governance, citizenship, leadership, performance – The Lego Group (Global Reptrak 100, 2021). The company has developed new packaging bags for Lego toys that are made entirely from recyclable materials. New types of packaging bags will be introduced in 2022. It also created the first prototype of a fully recyclarecyclable which has previously been made of plastic for 80 years. In 2021, the company implemented over 20 projects related to renewable energy, the use of water, and the reduction of material waste in production, some of them presented in *Figure 3* (The LEGO Group Sustainability progress, 2021).



Figu re 2. The LE GOFigureSust ainabinabilityress goals achieved

Google L LC, an American multinational technological company, is recognized as the World's Most Reputable Company in CSR rankings in 2018, according to the Reputation Institute's CSR RepTrak (Sickler J., 2018). Google devotes a lot of resources to Accelerating achieving carbon-free and circular energy. For the third decade, the company has been working to achieve carbon-free energy generation using renewable energy sources. In 2021 Google achieved carbon-free sources in 66% of its data centers (Google Environmental Report, 2021), and use 50% less power, than other comparable data centers (Dudovskiy J, 2017). According to Google Environmental Report, as part of its social responsibility to society, Google set goals to replenish more water than it consumes across its offices and data centers and help restore and improve the quality of water and the health of ecosystems in the communities where it operates. By 2030 Google plans to: consume 100% of its electricity from renewable energy sources; operate on carbon-free energy; and support more than five hundred cities worldwide to reduce carbon emissions by 1 gigaton annually. To achieve these goals, the company issued the largest ever green bond package in history, amounting to $5.75 billion (Google Environmental Report, 2021).

Individual examples of how companies apply CSR in their operations were considered. Generalized examples of when a company spends resources to support the public interest are the use of recycled materials in its products, packaging materials, and cutlery, such as and tubes, glasses; sponsoring/organizing social projects.

4.2 Demonstrate benefits that companies access after implementing CSR

This part of the chapter will review other academics' past research on CSR, focusing on the positive impact of CSR brings to a company.

By using descriptive statistics and a correlation coefficient matrix, S. Wu, F. Lin, and C. Wu (2concludedlusion, that companies, which apply CSR in their operating activity, have a lower cost of capital, than companies without CSR. Wu et al. also studied companies, which apply CSR have a lower book-to-market ratio than companies without CSR. It means companies that practice CSR are less often underestimated in the stock exchange. The result of this study show, that company cost of capital may be decreased, when the company applies effective corporate governance by increasing transparency of information, decreasing information asymmetry, and reducing agency issues (Chen et al., 2009; Leuz, H., 2006). In addition, companies which apply CSR are more transparent, making it more difficult for management to manipulate with financial reports (Francis et al., 2005). According to Kurucz, Colbert, and Wheeler (2008), CSR plays a significant role in building a company's image. As a result of coordinating the needs of all stakeholders, a company's reputation, as a responsible business, grows. Kurucz et al. mentioned ethical values of the company make it more attractive for investors and funds, which share the company's value and would like to contribute to the company's success and gain returns.

There is a tendency among investors to increase their interest in green companies, which care and spend time and resources to exhibit social, environmental, and governmental responsibility (El Ghoul et al. 2011, as cited in Wu, S., Lin, F., and Wu, C. 2014). The growing interest in such green companies is due to the high level of trust in such companies from the government, trade union. Mutual investment investors and funds, including TIAA CREF, are paying more attention to CSR, including it as one of the requirements for inclusion in the investment selection. (Nelling, E., and Webb, E., 2008). According to Kapstein (2001), CSR performance in the company used to attract investments from similar socially responsible investors.

Companies, which apply CSR, attract higher-quality employees since CSR also aimed to satisfy the needs of employees, who may contribute goals and social values of companies (Greening and Turban, 2000). Advertising of products and services becomes more attractive to customers because CSR provides transparency of its operating activities, takes care of the community,

and contributes toward achieving social legitimacy (Fombrun, 1996; Hawn, Chatterji, and Mitchell, 2011).

According to Gupta and Sharma (2009), CSR practices in companies brought six main benefits in different approaches, presented in Figure 4.

Figure 3. Benefits of CSR to company the according to academicians Gupta and Sharma (2009*)*

CSR in Kazakhstan

Kazakhstan is a relatively young country, as are the companies that are based in it. There are not many sources that can describe the extent of CSR application in Kazakhstan, so findings will mostly rely on the qualitative research done with the KASE example.

Many domestic businesses haven't yet learned how to incorporate the idea of "the CSR of business" into their operations. High levels of political intervention, insufficient regulation, a lack of understanding of the CSR idea, and difficulty of the CSR concept are the main causes of Kazakhstan's delayed development of corporate social responsibility. Even in economically developed nations, businesses don't always agree on how to see the social actions of business (Danaeva, 2004, as cited in Moulotluri, R., Batima, Y. and, Madiyar, K. 2010).

According to Mouly Potluri, Batima, and Madiyar (2010), people in Kazakhstan are becoming increasingly aware that the country, which has set a lofty and ambitious aim for itself to join the competitive and successful nations of the modern world, cannot proceed with a development model based solely on the processing of natural resources.

CSR is an important component for any company in Kazakhstan, at all levels, be it a state organization, a quasi-state company, banks, international companies, and even more so an exchange such as KASE. In Kazakhstan, a lot of work is being done at all levels of the corporate system, to develop sustainable development, social responsibility an,d corporate governance.

CONCLUSION

The location of CSR in companies is a popular practice among large companies, which increase sustainable development and achieve principles of ESG, assuming additional investments. The objectives of this study were to determine: how the company applies CSR; demonstrate benefits that companies access after implementing CSR; investigate the extent of CSR performance in Kazakhstan companies, within the example of KASE; Does CSR become a necessary strategic regulation for the survival of companies? According to the results of the study, all goals were achieved and the answers were provided.

Different research approaches were used for different purposes. Findings from conceptual research were mainly used. The results of the interview were used to determine the extent of CSR performance in Kazakhstan companies, within the example of KASE; Does CSR become a necessary strategic regulation for the survival of companies?

Large companies constantly use CSR, when consumers themselves may not notice it. Even the minor Replacing plastic straws at Starbucks with paper straws is also the company's CSR prareect, where it meets its ESG goals and encourages demands to reduce the use of non-recycled products. Large companies such as The LEGO Group, J&J, Google have built their brand nds in part through CSR practices and sustainability strategies, placing them at the top of the lists of the most attractive brands for consumers.

Many useful benefits have been identified for companies practicing CSR. Reducing the asymmetry of information between the company and investors, as well as increasing transparency leads to a decrease in the cost of capital and a decrease in capital constraints. Companies positioned as socially responsible brands elevate the brand and trust in the eyes of consumers, which leads to increased sales and greater opportunities to find high-quality employees. Generation Z consumers value the company's vision, goals, and concern for society, not just the product it produces. And it is important to

note that not a single large investment fund will invest in a company that does not comply with responsibility towards its stakeholders.

In Kazakhstan, CSR is widely used and now many companies are pursuing sustainable development, corporate governance and, of course, social, responsibility. The development of CSR in Kazakhstani companies will also benefit companies, especially in attracting large foreign investors to the domestic market. KASE, being a unique infrastructure and the only one of its kind in Kazakhstan, applies CSR in various aspects of its activities and cannot operate without following this regulation.

It can be argued that CSR is necessary at present companies, given the positive effects it brings to companies, as well as the attitude of companies to the social sphere is important for consumers and investors. Neglect of CSR can lead to large measurable losses, as in the case of Deliveroo.

In conclusion, it should be mentioned that CSR is now a necessary introduction in companies, the use of which brings a noticeable competitive advantage among competing companies, and neglect can lead to large losses, both on the part of customers, employees, and on the part of investors.

REFERENCES

Al Ani, M., & Jamil, S. A. (2015). The Effect of Corporate Citizenship Activities (CCAS) on

Financial Performance and Market Performance: The Omani Experience. *South East European Journal of Esoutheastnd Business*, 10, 45–54. https://doi:10.1515/jeb-2015-0005.

Ali, M. (2021). The Problem of CSR: An Exploration of Relationship between CSR Initiatives

and Excess Work Ethic. *Journal of Global Responsibility*.

Al-Malkawi, H.-A., & Javaid, S. (2018). Corporate Social Responsibility and Financial Performance

in Saudi Arabia: Evidence from Zakat Contribution. *Managerial Finance*, 44, 648–664. https://doi:10.1108/MF-12-2016-0366.

Altaibayeva Z.K., Khamzina S.S., & Baltabayeva A.K. (2021). Development of corporate social

responsibility in Kazakhstan. *Central Asian Economic Review*, 2(2), 80–92. (In Russ.) https://doi:10.52821/2224-5561-2021-2-80-92

Anderson, J., & Frankle, A. (1980), Voluntary social reporting: an iso-beta portfolio analysis. *The*

Accounting Review, 55(3), 468–479.

Anderson, J.C., & Frankle, A.W., (2007). Voluntary social reporting: An iso- beta portfolio

analysis. *The Accounting Review*, 5, 467–469.

Baumann-Pauly, D., Wickert, C., Spence, L., & AndreaMann. (2015). Organizing Corporate Social

Responsibility in Small and Large Firms: Size Matters. *Journal of Business Ethics*, 115(4), 693–705.

Bhaskaran, R. K., Ting, I. W. K., Sukumaran, S. K., & Sumod, S. D. (2020). Environmental, social

and governance initiatives and wealth creation for firms: An empirical examination. Managerial and Decision Economics, 41(5), 710-729

Ben Khediri, K. (2021). CSR and invesKhedirafficiency in Western European countries. Corporate

Social Responsibility and Environmental Management, 28 (6), 1769–1784. https://doi:10.1002/csr.2151.

Boehe, D., & Cruz, L. (2010). How do leading retail MNCs leverage CSR globally? Insights from

Brazil. *Journal of Business Ethics*, 91, 243–263.

Botosan, C.A. 1997. "Disclosure Level and the Cost of Equity Capital." *Accounting Review*

72, no. 3: 323-349.

Bowman, E.H., & Haire, M.A. (1975). A strategic posture toward corporate social

responsibility. *California Management Review*, 18(2), 49–58.

Bragdon, J.H., & Marlin, J.A. (1975). Is poldonon profitable? *Risk Management*, 9, 9–18.

Campbell, J. T., Eden, L., & Miller, S. R. (2012). Multinationals and corporate social responsibility

in host countries: Does distance matter. *Journal of International Business Studies*, 43(4), 114–121.

Chen, K.C.W.; Z. Chen; and K.C.J. Wei. 2009. "Legal Protection of Investors, Corporate

Governance, and the Cost of Equity Capital". *Journal of Corporate Finance* 15, no. 3: 273-289.

Cheng, B., Ioannou, I., & Serafeim, G. (2014). Corporate social responsibility and access to finance. *Strategic Management Journal*, 35(1), 1-23. http://www.jstor.org/stable/24037207

Cho Sang Jun, Chung Chun Young, & Young, J. (2019). Study on the relationships between CSR

and financial performance. *Comparative Corporate Social Responsibility and Sustainable Development goals*, 11(2), 24–39.

Cohran, P., Goalsd, R. (1984). Corporate social responsibility and financial performance. *Academy*

of Management Journal, 27(1), 42–56.

Crotty, J. (2014). CSR in BRIC countries. *Social Responsibility Journal*, 10(1).

https://doi:10.1108/SRJ-11-2012-0143.
Dadas, Anand. (2021). Overview of csr activities in India. *VidyabhaCSRi International*
Interdisciplinary Research Journal, 12(1), 264–267.
Donaldson T., & Preston L. (1995). The Stakeholder Theory of the Corporation: Concepts,
Evidence, and Implications. *Academy of management Review*, 20(1), 65–91.
Dudovskiy J. (2017, June 8). Google Corporate Social Responsibility (CSR). *Business*
Research Methodology. https://research-methodology.net/google-corporate-social-responsibility-csr/
Duque-Grisales, E., & Aguilera-Caracuel, J. (2019). Environmental, social and governance (ESG)
scores an,d financial performance of Multilatinas: Moderating effects of geographic
international diversification and financial slack. Journal of Business Ethics, 168(2), 315-334.
ElAlfy A., & Weber, O. (2019). Corporate Sustainability Reporting Report, Subtitle: The Case of industry industryry. *Centre for International Governance Innovation Papers Series*, 211.
ESG strategy (2021). *Johnson & Johnson.* https://www.jnj.com/about-jnj/policies-and
-positions/esg-strategy
Farber, V., & CharESG, V. (2013). Is the perception of CSR country bound? A CSR based reputation
study of CSRCSR basedmpaniescompanies America. *Esic Market EconoCSR CSRd Business Journal*,
in 44. 9–35. https://doi:10.7200/esicm.144.0442.1.
Fatemi, A., Glaum, M., & Kaiser, S. (2018). ESG performance and firm value: The moderating role
of disclosure. Global Finance Journal, 38, 45-64Fonceca, C.M., & Jebaseelan, A.U.S. (2017). CSR Responsiveness vs. Corporate Business Ethics- A Critical Analysis. *Asian Journal of Management*, 8(2), 123–126.

Fombrun CJ. 1996. Reputation: Realizing Value from the Corporate Image. *Harvard Business*
School Press: Boston, MA.
Francis, J.; R. LaFond; P. Olsson; and K. Schipper. 2005. "The Market Pricing of Accruals
Quality." *Journal of Accounting and Economics* 39, no. 2: 295-327.
Fufa, T., & Roba, Y. (2021). Internal and external determinants of corporate social responsibility
practices in multinational enterprise subsidiaries in developing countries: evidence from
Ethiopia. *Future Business Journal*, 7 (7). https://doi:10.1186/s43093-021-00052-1.
Google Environmental Report (2022). *Google.*
https://www.gstatic.com/gumdrop/sustainability/google-2022-environmental-report.pdf
Global RepTrak100 (2021). *The RepTrak Company.*
https://ri.reptrak.com/hubfs/_2021%20GRT/2021%20Global%20RepTrak%20100%20-%20Report.pdf
Gupta, S., & Sharma, N. (2009). CSR- A Business Opportunity. *Indian Journal of Industrial*
Relations, 44(3), 396–401. http://www.jstor.org/stable/27768212
Hah, K., & Freeman, S. (2014). Multinational Enterprise Subsidiaries and their CSR: A Conceptual
Framework of the Management of CSThe framework Emerging Economies. *Journal of Business*
Ethics, 122(1), 125–136.
Hail, L., and C. Leuz. 2006. "International Differences in the Cost of Equity Capital: Do
Legal Institutions and Securities Regulations Matter?" *Journal of Accounting Research* 44, no. 3: 485-531.
Hajdu, A., Gagalyuk, T., Bukin, E., & Petrick, M. (2021). Determinants of corporate social
responsibility among farms in Russia and Kazakhstan: a multilevel approach using survey

data. *International Food and Agribusiness Management Review*. 24(4). 1–20.
https://doi:10.22434/IFAMR2020.0197.
Hammond, S., & Slocum, J. (1996). The Impact of Prior Firm Financial Performance on
Subsequent Corporate Reputation. *Journal of Business Ethics*, 15, 159–165. https://doi:10.1007/BF00705584.
Hawn O, Chatterji A, Mitchell W. (2011). How operational legitimacy conditions the impact
of changes in social legitimacy on firm's economic value: the Doa w Jones sustainability index addition and deletion. *Working paper, Duke University, Durham, NC.*
Heinze, D.C. (1976). Financial correlates of a social environment measure. *Akron Business and*
Economic Review, 7(1), 48–51.
Ikhide, J., Tarik Timur, A., & Ogunmokun, O. (2021). The strategic intersection of HR and CSR:
CSR motive and millennial joining intention. *Journal of Management & Organization*, 1–19. https://doi:10.1017/jmo.2021.47
Ingram, R.W. (1978). An investigation of the information content of (certain) social responsibility
disclosures. *Journal of Accounting Research*, 16(2), 270–285.
Ismaeel, M., Hadi, A., & Zakaria, Z. (2021). Prevalence of CSR reporting in Arab countries:
exploratory study and causal analysis. *International Studies of Management & Organization*,
51(20), 1–16. https://doi:10.1080/00208825.2021.1959877.
Janshanlo, R.Es., Kogut, O.Yu., & Czerewacz- Filipowicz, K. (2019). Human capital management
trends in the innovative economy of Kazakhstan. *Polish Journal of Management Studies*, 20, (2), 267–278.
Jenkins, R., & Newell, P. (2013). CSR, Tax and Development. *Third Wor,ld Quarterly*,
34(3), 378–396. http://www.jstor.org/stable/42002130

Kapstein EB. (2001). The corporate ethics crusade. Foreign Affairs 80(5): 105-119

Kim, H., Choi, Y. & Kim, B. (2021). The Role of Perceived CSR Motive and Perceived CSR Fit on

CSR Authenticity and Mediation Effect of OPR and Reputation on Supporting Behaviors. *The*

Korean Journal of Advertising and Public Relations. 23. 39–70. https://doi:10.16914/kjapr.2021.23.4.39.

Kolk, A., & van Tulder, R. (2010). International business, corporate social responsibility, nd

sustainable development,ment. *International Business Review*, 5, 119–129.

Kothari, C. R. (1990). Research Methodology: Methods & Techniques. *NEW AGE*

INTERNATIONAL (P) LIMITED, PUBLISHERS. https://www.academia.edu/36758257/research_methodology_methods_and_techniques_by_C_R_Kothari_pdf

Krishnan, S., & Nanjegowda, H. (2019). India's Experience of Management in the CSR

space. *Asian Journal of Management*, 10(4), 330–334.

Kurucz, E.C., Colbert, B.A., Wheeler d. (2008). "The Business Case for

Corporate Social Responsibility", in: Crane, A., McWilliams, A., Matten, D., Moon, J., Siegel, D.S. (Eds.), *The Oxford Handbook of Corporate Social Responsibility, Oxford University Press inc.*, New York, pp. 83 – 112

Lin, Y.-T., Liu, N., & Lin, J.-W. (2021). Firms' adoption of CSR initiatives and employees'

organizational commitment: Organizational CSR climate and employees' CSR-induced attributions as mediators. *Journal of Business Research*. https://doi:10.1016/j.jbusres.2021.11.028.

Lipiec, J. (2016). Does Warsaw Stock Exchange value corporate social responsibility?. *Social*

Responsibilityjournalal 12, 611–622. https://doi:10.1108/SRJ-08-2014-0109

Madanguit, H. K. (2021). Legalizing CSR: The Philippine Case.
https://doi:10.13140/RG.2.2.18756.96644.
Margolis J., & Walsh J. (2003). Misery Loves Companies: Rethinking Social Initiatives by
Business. *Administrative Science Quarterly*, 3(6), 268–305.
Márquez, A., & Fombrun, C. J. (2005). Measuring Corporate Social Responsibility. *Corporate*
Reputation Review, 7(4), 304–308. doi:10.1057/palgrave.crr.1540228
McGuire, J.B., Sundgren, A., & Schneeweis, T. (1988). Corporate Social Responsibility and Firm
Financial Performance. *The Academy of Management Journal*, 31(4), 854–872.
McWilliams, A., Siegel, D., & Teoh, S. (1999). Issues in the use of the event study methodology: A
critical analysis of corporate social responsibility studies. *Organizational Research Methods*, 2(4), 350–372.
Miethlich, B., & Ľudomír, Š. (2018, November). Creating shared value through implementing
vocational rehabilitation in the corporate social responsibility strategy: a literature review.
Vision 2020: Sustainable Economic Development and Application of Innovation Management. In Annals of the 32nd International Business Information Management Association Conference (IBIMA), Seville.
localess, G. & Blanch, J. (2021). Unlocking the potential of CSR: An explanatory model to
determine the strategic character of CSR activities. *Journal of Business Research*. https://doi:10.1016/j.jbusres.2021.11.002.
Moskowitz, M. (1972). Choosing socially responsible stock. *Business and society Review*, 1(1),
71–7Societyowitz, M. (1975). Profiles in corporate social responsibility. *Business and Society Review*, 1,
29–42.
Mouly Potluri, R., Batima, Y. and Madiyar, K. (2010), "Corporate social responsibility: a

study of Kazakhstan corporate sector", *Social Responsibility Journal*, Vol. 6 No. 1, pp. 33-44. https://doi.org/10.1108/17471111011024531

Munkelien, E., Goyer, P., & Fratczak, I. (2018). CSR in the Scandinavian countries. In I. Demirag

(Ed.), *Corporate Social Responsibility, Accountability and Governance: Global Per,spectives* (1st ed.). Routledge. https://doi:10.4324/9781351281720-11.

Nelling, E., & Webb, E. (2009). Corporate social responsibility and financial performance:

the "virtuous circle" revisited. *Review of Quantitative Finance and Accounting*, 1(4), 197–209.

Nwe, E. & Ozmel, U. (2021). CSR-enhancing Acquisitions: Investigating the Role of CSR in

Corporate Strategy. *Academy of Management Proceedings*. 2021 (1), 12553. https://doi:10.5465/AMBPP.2021.12553abstract.

Orazayeva A., & Arslan M. (2021). Development of corporate social responsibility framework for

developing countries: the case of Kazakhstan. *Central Asian Economic Review*. 3, 20–39. https://doi:10.52821/2224-5561-2021-3-20-39

Orlitzkiy, M.F. (2005). Payoffs to social and environmental performance. *Th. Journal of Investing*

1(1), 48–52.

Orlitzky, M., Schmidt, F., & Rynes, S., (2003). Corporate Social and Financial Performance: A

Meta- Analysis. *OrganizatioMeta-Analysis*), 403–441.

Parket R., & Eilbirt H. (1975), Social Responsibility: The Underlying Factors. *Business Horizons*,

18(4), 5–11.

Perera, C. & Hewege, C. (2021). Internalizing ainternationalizinging country-specific Practice countrspecificifice multinational company. *Critical perspectives on international business*, Vol.

ahead-of-print No. ahead-of-print. https://doi:10.1108/cpoib-02-2019-0013.

Preston, L.E. (1978). Analyzing corporate social performance: Methods and results. *Journal of*
Contemporary Business, 4, 135–149.
Radu, C., & Smaili, N. (2021). Alignment Versus Monitoring: An Examination of the Effect of the
CSR Committee and CSR-Linked Executive Compensation on CSR Performance. *Journal of Business Ethics*. https://doi:10.1007/s10551-021-04904-2
Rodriguez, P., Siegel, D., Hillman, A., & Eden, L. (2006). Three lenses on the multinational
enterprise. Politics and corporate social responsibility. *Journal of International Business Studies*, 37(6), 733–746.
Roman, R.M., Hayibor, S., & Agle, B.R. (1999). The Relationship Between Social and Financial
Performance: Repainting a Portrait. *Business and Society*, 38(1), 109–125.
Roszkowska-Menkes, M. (2021). Strategic Management and CSR. In *Encyclopedia of Sustainable*
Management. Springer.
Sharipo, S. (1987). *Policing Trust.* Beverly Hills, Calif.: Sage.
Sickler J. (2018, July 10). Powerful Corporate Social Responsibility (CSR) Examples.
Reputation Management. https://www.reputationmanagement.com/blog/corporate-social-responsibility-examples/
Sivasubramanian, G. & Jananai, M. (2021). CSR in the digital era. *International Journal of*
Innovative Technology and Exploring Engineering, 8, 689–693.
Solomon, R., & Hansen, K. (1985). It's good business. New York: Atheneum.
Srinivasan, V. (2011). Business ethics in the South and South East Asia. *Jou of Business Ethics*,
104(1), 73–91Srinivasansan, V., & Shocker, A. (1973). Linear programming techniques for multidimensional
analysis of preferences. *Psychometrika*, 38(3), 337–396.

Sturdivant, F., & Ginter, J. (1977). Corporate social responsiveness. *California Management*
Review, 19(3), 30–39.
Sturdivant, F.D., & Ginter, J.L. (1977). Corporate social responsiveness: Management attitudes and
economic performance. *California Management Review*, 19(3), 30–39.
Sustainability at TOMS (2022). *TOMS.* https://tomsaustralia.com.au/pages/sustainability
Tata J., & Prasad S. (2015). CSR Communication: An Impression Management
Perspective. *Journal of Business Ethics*, 132(4), 765–778.
Tiwari, U. (2013). A study on CSR for Industrial Image at ACC Cement, Madhya, Pradesh.
India. *Asian Jour. of Management*, 4(4), 308–311.
The LEGO Group Sustainability Progress 2021 (2021). *The LEGO Group.*
https://www.lego.com/cdn/cs/aboutus/assets/blt15f6010332752196/The_LEGO_Group_SustainabilityProgressReport2021.pdf
Turban, D.B. and Greening, D.W. (1997). Corporate social performance and organizational
attractiveness to prospective employees. *Academy of Management Journal*, 40, pp. 658–672.
Ullmann, A.E. (1985). Data in Search of a Theory: A Critical Examination of the Relationship's
among Social Performance, Social Disclosure and Economic Performance o,f US
Firms, *Academy of Manthe agement Review*, 10(3), 540–557.
Vance, S. (1975). Are socially responsible corporations' good investment risks? *Management*
Review, 64(8), 18–24.
Waddock, S.A., & Graves, S.B. (1997). The corporate social performance- financial performance link. *Strategic management journal*, 2(2), 303–319.
Wood, D. J., & Jones, R. E. (1995). Stakeholder mismatching: a theoretical problem in empirical

research on corporate social performance. *The International Journal of Organizational*
Analysis, 3(3), 229–267.
Wu, S., Lin, F., & Wu, C. (2014). Corporate Social Responsibility and Cost of Capital: An
Empirical Study of the Taiwan Stock Market. *Emerging Markets Finance & Trade, 50,* 107–120. http://www.jstor.org/stable/24475683
Yasir M., Majid A., Qudratullah H., Ullah R., & Khattak A. (2020). Participation of hotel managers
in CSR activities in developing countries: A defining role of CSR orientation. *Corp Social Responsibility and Environ Management*, 28(1), 239–250.
Yin, R.K. (2003). Application of case study research (2nd ed.). *United States of America: Sage*
publications, Inc.
Brands Doing Corporate Social Responsibility Successfully, (2021, September 1). *Digital*
Marketing Institute. https://digitalmarketinginstitute.com/blog/corporate-16-brands-doing-corporate-social-responsibility-successfully

APPENDICES

Appendix #1

Interview guide in English

- Do you believe that CSR performance in a company is essential for customers?
- yrDo y cu omers know about CSR engagement in the company?
- What benefits which bring implementing CSR in the company you may call?
- How does CSR affect employees in the company?
- How does the company work with CSR?
- Does CSR positively impact the financial performance of the company?

- Do you believe that companies that practice CSR, have a competitive advantage or disadvantage over their competitors?
    - In what way?
- How important is the development of CSR in Kazakhstan?
- What benefits can CSR bring to Kazakhstani companies?

CHAPTER 8

THE EFFECT OF DIVIDEND TAXATION ON FOREIGN DIRECT INVESTMENS IN EU

Assist.Prof.Dr. Neslihan YILMAZ[1]

[1] Uşak University, Faculty of Economics and Administrative Science, Uşak, Turkey, neslihan.yilmaz@usak.edu.tr, Orcid ID: 0000-0001-9350-9866.

INTRODUCTION

The factors of production, which have developed international mobility, have directed the tax systems of the countries to a process that can compete with each other. Particularly, European Union (EU) Member States attach importance to approximation and tax harmonization practices in the field of common tax policy. In this context, the effect of tax rate differences applied by countries on the behavior and investment decisions of multinational companies (MNCs) is decisive. EU Member States aim to alleviate the tax burden on the mobile tax base with low corporate tax rates. In this scope, dividend taxation has a directing effect on foreign direct investment (FDI) inflows as much as corporate income tax.

The existing practice and tax structure differences in the EU Member States regarding dividend taxation also lead to differentiation in FDI inflows to these countries. It is important how the taxation processes of dividends affect the behavior of natural person taxpayers and firms. Due to the fact that the Union has more or less mobile tax bases in the Member States, different practices can be applied in the taxation of dividends. Therefore, the impact of corporate income tax (CIT) and personal income tax (PIT) rates on dividend income differs from country to country. Dividend distribution and taxation are closely related to incentive policies. High tax rate has a negative effect on dividends. Investors whose dividend income is tax-exempt can exclude this effect and earn higher income. In this line, the legal regulations of the Member States and the priorities within the scope of EU tax policy are important in terms of dividend taxation. It is aimed to expand the application area of the Union provisions determined for the taxation of controlled foreign corporate earnings for Member States. The integration of Member States' PIT and CIT systems and the applicability of Union tax policy provisions are important for the taxation of dividends.

Taxes on dividend income have implications for the user cost of capital and increasing after-tax profit for taxpayers. The possible effects of dividend taxes on FDI decisions also accelerate the integration and harmonization process between Member States. For this reason, dividend taxes can provide advantages in different rates and forms from country to country, to the extent that they are included in the national legislation of the Member States.

There are different evaluations for the advantages offered in dividend taxation. While there are opinions that the change in tax rates increases the cost of equity financing, there are also opinions that make the high dividend

taxation level unimportant for investment decisions. Within the framework of international taxation, differences in tax structures as well as the current tax rates of countries are considered to have an impact on FDI inflows. Effective taxation of dividend income is determinative on foreign investments and decision-making processes of MNCs, as well as leading to an increase in public revenues.

In this context, Member States can be classified depending on their dividend taxation policies. The tax policy rules set by the Union for the taxation of dividend income may lead to different results in the context of differences between EU Member States' legislation. For the purpose of effective taxation of cross-border dividends, the EU is based on the harmonization policy towards the tax policy differences between the Member States, the approximation of the national legislation provisions of the countries and the commitment to international tax agreements. The aim of the study is to evaluate the effects of CIT and PIT rates in the taxation process of dividend income on FDI inflows in the context of selected EU countries with cluster analysis.

1. TAXATION OF INTERNATIONAL DIVIDEND INCOME

In case of owning shares from different companies, corporate earnings may be subject to multilateral taxation. It is aimed to prevent this situation, which is called multiple corporate tax in the field of international taxation. In this context, many countries propose the consolidation and group taxation of dividends and allowed corporate incomes to reduce multiple taxation, including inter-company exemptions and exceptions. When corporate income crosses national borders, there may be an additional and differential potential for international double taxation (Warren and Graetz, 2007: 4,5). Thus, it is tried to prevent the taxation of foreign direct investments both in the country where they are produced and in the country where they are distributed, and to prevent the possibility of double taxation.

Countries generally aim to avoid international double taxation by exempting foreign-sourced income. In addition, countries try to reduce the effects of international double taxation as well as the potential of multiple corporate taxation by allowing crediting of foreign taxes paid in accordance with domestic legal regulations or by making mutual tax treaties (Warren and Graetz, 2007: 5). There are different opinions on whether dividend taxes affect corporate investment.

Traditional dividend taxation models cover firms' cost of capital and dividend taxation level of corporate investment. In contrast, the new dividend taxation view suggests that investments are financed by retained earnings rather than new equity. It is argued that the dividend tax reduction has a directing effect on the dividend distribution. Accordingly, with the dividend tax deduction, firms with excess cash can invest less, while firms with cash constraints can invest more. Dividend taxes constitute an important cost for companies in terms of investment financing. By reducing dividend taxes, countries can improve the distribution of investment among firms (Alstadsæter, Jacob and Michaely; 2015:1)

Within the scope of dividend taxation theory, the effects of dividends are evaluated in three different ways. These; dividend tax deductions are the effects on equity value and firm behavior. The marginal source of capital financing is the issuance of new shares, and the tax deduction reduces the user cost of the firm and encourages the formation of extra capital (Auerbach and Hassett, 2006: 3). There may also be financial differences between countries in corporate dividend policies. It is evaluated that there is a negative relationship between the tax rates of the dividend holders and the dividend yield payment rates, and the relationship between leverage and dividend rates strongly supports this determination (Chang and Rhee, 1990: 30).

Dividends, capital gains, interest, rent, etc. capital income arising from savings; It is proposed to be taxed at the same rate as non-capital income. In this scope, the integration of PIT and CIT systems is extremely important. The potential effect of dividend taxes on real investments is mostly directed towards mitigating the potential effects of double taxation (Kenzie, 1996: 2,4).

Companies choose between dividend policy and decisions to pay shareholders and reinvest. So the dividend policy of companies is related to the size of assets, income and debt ratio. Different policy priorities are determined according to different equity structures. Thus, the after-tax profits of the shareholders can be increased (Abbadi et al., 2016). There are two different views on the taxation of dividend income. The traditional view explains that the taxation of dividends increases the cost of equity. According to the new view, the taxation of dividends does not have a decisive effect on investment decisions as it does not affect the marginal cost of capital (Dackehag & Hansson, 2015: 1).

Investors with large shares are most affected by tax rate variance on dividend income. For this reason, highly taxable corporate earnings are

expected to be more sensitive to changes in the tax structure of countries (De Angelo and De Angelo, 2008). Effective taxation of the remaining profit after dividend income preferences dividend tax reduction is targeted (Nam, Wang and Zhang, 2010: 291).

Long-term capital gains can be used by investors as a tool to lower tax rates and reduce the tax disadvantage on dividend income. Investor behavior can also change when the tax disadvantage of dividends differs among investors. For this reason, policy makers pay attention to the execution of an appropriate taxation process, especially among investors (Kawano, 2013: 2). Increasing public expenditures of the states can lead to deterrent effects on foreign investments. Firms tend to invest in less restrictive economies. In this context, it is evaluated that there is a positive relationship between regulations on capital flows and FDI (Caetano and Galego, 2009: 9). There are findings that effective and legal corporate tax rates have a negative effect on FDI (Hunady and Orviska, 2014: 249).

Profits are taxed first at the corporate level and into corporate earnings. When this income is then distributed to them as dividends, their after-tax profits are taxed again at the shareholder level under personal income tax. It is important that dividend income is taxed at a lower rate for the shareholder. For this purpose, an attribution system has been developed in which some or all of the corporate tax paid on the profit of the company is deducted against the personal income tax liability of the shareholders when receiving dividends (OECD, 2020). Thus, the possibility of double taxation of the distributed profits that may arise from international taxation will also be reduced.

1.1. Cross-border Dividend Income Taxation in the EU

In international taxation, the income differentiation arising in terms of source and residence countries is determinative in terms of preventing possible double taxation practices. The EU divides the Member States' legislation on dividend exemption into three within the scope of tax policy. These; exemptions provided without any conditions, exemptions provided provided that the criteria determined for the taxpayer are met, or partial exemption of 95% of this application. Dividend incomes, which are not exempted on the grounds that the specified conditions are not met, are taxed either within the global tax base or in a separate base (Dackehag and Hansson, 2015).

The EU Framework Regulation (FDI Regulation) is the mainstay for screening and coordination of foreign direct investments. While the relevant Regulation does not establish a mandatory screening mechanism to be used at EU level, it does allow Member States to adopt their internal policies that will secure them (Oplotnik, Vilela & Silva: 2021: 54). Accordingly, Member States can integrate their national priorities into the harmonization process, and cooperation between foreign direct investments can be ensured.

FDI is seen as an alternative economic strategy adopted. The Union makes a dual distinction between investments made by foreigners for FDI or investments in the form of foreign purchases of existing assets (Eurostat; 2013: 60). In this context, the effects of the Union on FDI are divided into two according to the shallow and deep integration dimension. Shallow integration is limited to economic integration and can be exemplified by the free trade zone model. Deep integration, on the other hand, is a form of integration that can be exemplified by the customs union, which deals with the combination of economic and political aspects (Bruno, Campos and Estrin, 2020: 7).

EU Member States' personal income tax systems also cover the taxation of various individual sources of income, including investment income such as dividends and capital gains. Since a dividend is a payment made to a company's shareholders from after-tax profits, in many countries such payments are subject to dividend tax (Asen, 2021). European countries pay attention to the following for taxation of corporate income for dividends that cross national borders (Warren and Graetz, 2007: 3):

- taxation of companies and shareholders in a single country,
- the presence of a single country and a single company in the taxation of income,
- non-multilateral taxation of transnational companies by different countries,
- the development of different forms of transnational companies,
- determining the taxation process of transnational income within the scope of different impartiality and anti-discrimination practices,

Taxation of companies and their shareholders is covered by taxes on income. The company's legal entity and individual shareholder's real person liability are evaluated separately within the scope of corporate tax and personal income tax. Generally, countries try to eliminate the double taxation effects of corporate tax and personal income tax with full or partial tax exemption or deduction mechanisms available in their tax systems.

It is in question that tax policy changes of countries create an investment opportunity in terms of dividend taxation level. Dividend tax burden can be planned with tax arbitrage. The current dividend tax rate in countries has a decisive influence on how many stocks are issued by new companies. According to the new view dividend taxation, corporate savings and investment decisions are not affected by dividend taxes as long as the rate is fixed (Korinek and Stiglitz, 2008: 31).

In theory, it is argued that companies should pay a compensatory tax for dividends that were not previously collected in order to tax income once. Thus, the deficiencies in the dividend payment are compensated. These compensatory taxes are ultimately to withhold taxes paid by individual shareholders. In order to reduce or eliminate the potential economic double taxation burden, some countries tax when corporate income is distributed (Warren and Graetz, 2007: 3,4). In this context, many countries try to reduce the tax burden by applying a lower rate for dividends or applying exemptions and exceptions. In terms of national tax policies of countries, the relationship between international taxation compliance processes, corporate tax and personal income tax rates may vary.

Withholding taxes, on the other hand, are the final taxes imposed by the source countries for dividends paid to foreign shareholders. It is observed that countries reach consensus on incoming and outgoing dividends through bilateral tax treaties. The simultaneous use of the financial sovereignty of the countries by two Member States strengthens the cooperation between the Member States in determining the corporate income (Warren and Graetz, 2007: 40-41).

While corporate income is subject to corporate tax at the corporate level, dividend tax or capital gains tax is applied at the individual level when this income is passed to shareholders as dividends. However, some member states have integrated the taxation of corporate earnings and dividends/capital gains to eliminate the possibility of double taxation (Asen, 2021).

Table 1 presents the profit corporate income tax (CIT), dividend tax and income tax retes of EU Member States for 2021. Accordingly, in addition to the corporate tax paid on the corporate profit, a three-stage taxation process is observed: dividend tax and income tax. It is observed that the income tax tariff structures of the EU member countries are progressive except for Hungary and Estonia, while the two countries mentioned have a flat income tax tariff structure.

Tablo 1: Tax Rates in EU (2021)

Countries	Profit CIT	Dividend tax	Income tax
Belgium	20 – 25%	30%	25% – 50%
South Cyprus Administration	12,5%	17%	0% – 35%
Denmark	22%	27%	22% – 54,5%
Germany	15%	25%	0% – 45%
Estonia	20%	20%	20%
Finland	20%	30% – 34%	0% – 31,25%
France	26,5%	12,8%	0% – 45%
Greece	24%	10%	9% – 44%
Hungary	9%	15%	15%
Ireland	12,5%	20%	20% – 40%
Italy	24%	26%	23% – 43%
Croatia	10%	10%	20% – 30%
Latvia	25%	20%	20% – 31%
Lithuania	15%	15%	20% – 32%
Luxembourg	17% – 24,94%	15%	0% – 45,78%
Malta	35%	27,5%	0% – 35%
Netherlands	15% – 25%	26,9%	37,5% – 49,5%
Austria	25%	27,5%	0% – 55%
Poland	19%	19%	17% – 32%
Portugal	21%	28%	14,5% – 48%
Romania	16%	5%	10% – 48%
Slovenia	19%	27,5%	16% – 50%
Slovakia	21%	7%	19% – 25%
Spain	25%	19%	19% – 47%
Czechia	19%	15%	15% – 23%
Sweden	20,6%	30%	0% – 52%
Romania	16%	5%	10%-48%

Kaynak: DBI, 2022 (https://www.doing-business-international.com/2022/05).

When the corporate tax is evaluated in terms of tariff structure, it is noteworthy that Belgium, Luxembourg and the Netherlands have a varying tariff structure. According to the table, the country with the lowest profit CIT rate for 2021 among the EU Member States is Hungary with 9%, while the country with the highest rate is Malta with 35%. When evaluated in terms of Dividend Tax, the country with the lowest rate is Romania with 5%, while the country with the highest rate is Finland with 34%. The country with the lowest Income tax rate is South Cyprus Administration, Germany, Finland, France, Luxembourg, Malta, Austria, Sweden, while the country with the highest rate is Austria with 55%.

1.2. European Court of Justice and Dividend Taxation

The EU has published a Communication aimed at providing guidance on the harmonization of Member States' tax policies with the Treaty of the European Communities. The Communiqué aims to direct Member States to a rapid cooperation on the issue. If Member States cannot agree on coordinated solutions, the Commission's dividend tax rules will require sanctions against Member States that are not in line with the Treaty. Member States apply different systems for taxing dividend income held by individual shareholders (EC, 2022a). Most EU Member States aim to avoid or reduce economic double taxation through the relevant provisions of the European Court of Justice (ECJ).

The provisions of the CJEU on cross-border dividends are generally on the follow-up of income tax policies left to Member States and adherence to the Treaties of the Union. EU income tax legislation is applied unanimously by all Member States. In this context, the CJEU is responsible for the compliance of tax policies with the Treaties. It also considers litigation matters brought to it by the European Commission or a national court regarding tax matters and the violation of freedoms guaranteed by agreements (Warren and Graetz, 2007: 2,3).

CJEU deals with this issue in its developing case-law within the framework of provisions on free movement of capital. It ruled that measures providing a different tax treatment between domestic and foreign dividends were in principle incompatible with the provisions of the Union. EU dividends to or from Member States are proportionally higher than national dividends. The Commission carries out its responsibility in accordance with the provisions of Article 226 of the Treaty of Union (EC, 2022b). Member States' income tax policies are based on non-discrimination based on basic tax policy norms.

In particular, a common application area has not been developed on whether the withholding tax on dividends will be accepted as institutional. The Union is based on the decisions of the CJEU on a non-discriminatory system for the taxation of corporate income distributed as dividends in European countries. Regarding cross-border dividends, the CJEU has invalidated the tax provisions aimed at reducing the total tax burden of the shareholders in the country where the dividend is paid (Warren and Graetz, 2007: 2,3). According to the EC (2022b) adopts a recommendation that outlines how it can facilitate investors residing in EU Member States to claim withholding tax relief on dividends, interest and other securities income.

Thus, while eliminating the tax barriers faced by financial institutions in their securities investment activities, effective collection of tax revenues is also foreseen. It has also been clarified who can benefit from the tax relief within the scope of the recommendations.

The only legislation directly related to the taxation of dividends is the Parent-Subsidiary Directive, which came into force regarding dividends paid at once by Subsidiaries. The Directive introduces regulations regarding the taxation of dividends distributed between the parent company and its subsidiaries located in different member states. Requires source countries to remove withholding taxes on cross-border movements. It is foreseen that the dividends coming from the subsidiary to the parent company are exempted in the resident countries (Warren and Graetz, 2007: 17). CJEU evaluates the taxation of foreign capital and dividends in accordance with the provisions of the Council of Europe Directive and Article 67 of the Community Treaty. In this context, it emphasizes that the dividend taxation of the Member States should also be compatible with national policies.

1.3. Dividend Income Taxation and Tax Theory

It is envisaged to apply a combined statutory tax rate on dividend income as a function of tax systems and rates. The said application takes place at the institutional and individual levels and in the interaction between the levels. The integration between the amount of corporate tax paid and personal income tax is important in determining the combined legal tax rate (Harding, 2013: 7-8). Since dividends are taxed first at the corporate level and then at the personal level, the deduction of the corporate tax amount paid by the countries and the entire personal income tax can be provided on the basis of reciprocity.

The most common approach to dividend tax is to determine the effective tax rate on marginal investors. Higher pre-tax rates of return are expected to compensate for the higher tax rate on dividends. Changes in dividend taxation have a significant impact on non-dividend price movements (Kenzie, 1996: 4). Before determining a dividend policy, countries evaluate the tax system components as a whole, such as the financial situation and capital structure of the companies, the relevant legislation provisions, and corporate priorities (Yee, 2017: 12).

Within the scope of dividend distribution policy, countries adhere to the profit distribution strategy they have determined and take care not to deviate from their targets in order to prevent possible problems (Ross, 2016).

In this context, countries and companies have different types of dividend policies, including cash dividends and equity dividends (Pandya, 2014). The dividend policy is extremely important as the retained earnings by the boards of directors of companies create a low-cost source of funding for possible future ventures (Abdo, 2021).

Dividends differ from country to country, but are taxed instantly and at a higher rate than capital gains. High dividend payments over the taxable income of shareholders lead fixed investors to retain profits rather than distribute them as dividends (Budagaga, 2017: 371). There are opinions that there is a significant positive relationship between return on equity and dividend, and it also makes positive contributions to firm performance. When companies pay dividend tax, there is an effect that reduces the accumulated profit (Banerjee, 2018: 35). Therefore, it is observed that there is a positive relationship between the equity capital of the companies and the dividend policy applied.

According to tax preference theory, investors may choose not to distribute distributions to companies if the sale of shares in capital gains is not taxable or if the tax rate on them is lower than the tax rate on cash dividends distributed. Afterwards, they may choose to distribute cash dividends to compensate the amount of tax that investors will pay (Kanakriyah, 2020: 533). There are opinions that the effect of the relative dividend tax rate on investments is increasing, but its effect on expenditures may vary (Torrez, 2006: 9-10).

According to the view that argues that the dividend policy of the companies has no effect on the company value, the said value depends on the income. Gains between dividends and retained earnings have different tax implications for dividend holders. Cash dividends are taxed at a higher rate than taxes on capital gains (Dhamija and Arora, 2019: 12).

2. MATERIALS AND METHODS

In this section cluster analysis is structured through the Ward method specific to hierarchical clusters and used the principal component analysis. The data of FDI and the determinants used in this text are taken from the EU, OECD and UNCTAD (2022). The periodicity of the data is yearly since 2000 until 2020, however data on FDI for some countries are not available or available for only limited periods. The common period that all the sample countries (22 countries) have complete data records are from 2000 to 2020. Romania, Bulgaria, South Cyprus Administration, Croatia and Malta were not

included in the analysis since data for the relevant years could not be accessed through the relevant database. Table 2 shows the three main variables that show the CIT ratio on distributed profits, the PIT ratio on dividends, and FDI inflows. The choice of variables is sufficient for an assessment in the field of personal income tax rate on dividends.

Table 2 Clustering Variables

Variable Name	Variable Description
Overall CIT and PIT rates	Personel income tax and corporate income tax rates on distributed profit
FDI inflows	FDI inflows (Million Dolars)

Source: Compiled by author from EU, OECD (2022).

Although the number of homogeneous groups called clusters is relatively small, it seems to allow multiple units to be classified simultaneously according to various criteria (Nikolay Velichkov and Kristina Stefanova 2017). The purpose of choosing this classification is to group the EU countries within the scope of two indicators that reveal different aspects and are considered as classification criteria. This grouping determines whether different practices are distinguished in countries and allows to draw conclusions about the differences and similarities between countries with similar practices. The main reason for choosing the method is its efficiency given the relatively large number of observations and clustering variables for the data set. Through cluster analysis, countries with detailed information can be divided into relatively homogeneous groups or clusters (Rosa Forte and Nancy Santos 2015). Accordingly, countries in the same cluster show more similarity to each other than countries outside the cluster.

3. RESULTS

While the effect of corporate tax rates on the effects of EU tax policies on FDI is determinant, it is seen that personal income tax on dividends has at least as much effect as corporate tax. Especially with the expansion of the free movement of capital and the increase in mobility among the Member States, the conditions of competition have led the countries to regulations in dividend taxes. When the CIT rate and PIT rate are evaluated on FDI inflows in EU Member States, it is observed that the proportional

change has a decisive effect. In addition to the decrease in corporate tax rates, countries can provide FDI inflows based on the decrease in personal income tax rates on dividends.

In this direction, it is seen that the average CIT and PIT rates of selected EU member countries between 2000 and 2020 have an effect on FDI inflows. Therefore, it is observed that FDI inflows increase as the average CIT and PIT ratios decrease. Figure 1 shows the average FDI inflows for the period 2000-2020. Accordingly, there are two main clusters for FDI inflows. These clusters are divided into subgroups within themselves. Countries in the first group; Austria, Czechia, Portugal, Finland, Hungary, Denmark, Estonia, Lithuania, Latvia, Slovenia, Greece, Slovak Republic, France, Spain, Italy, Poland, Sweden, Luxembourg. The countries in the second group are Belgium, Ireland, Germany and the Netherlands. The first group is divided into two subgroups in itself. The countries in the first subgroup are Austria, Czechia, Portugal, Finland, Hungary, Denmark, Estonia, Lithuania, Latvia, Slovenia, Greece, Slovak Republic, while the countries in the second group are France, Spain, Italy, Poland, Sweden, Luxembourg. . The second main cluster is divided into Belgium and Ireland, Germany and the Netherlands; Germany also forms a second group against Ireland and the Netherlands.

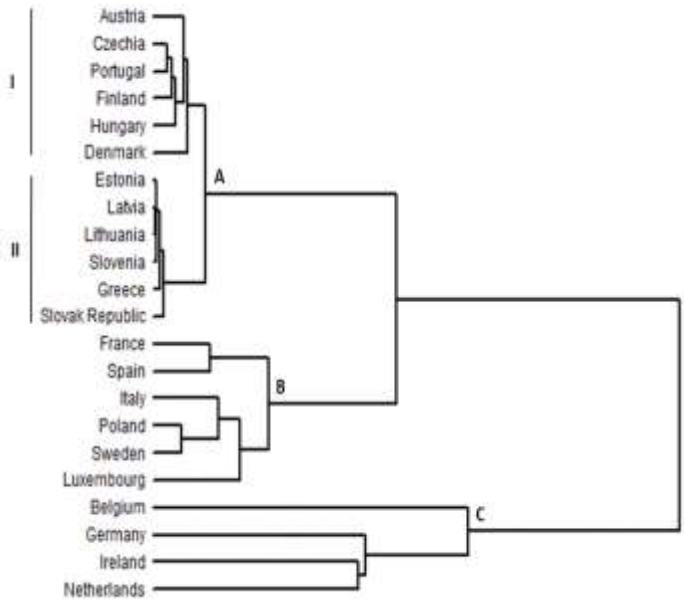


Figure 1. FDI inflows for the period 2000-2020.

According to the figure; There are three different clusters, A, B, and C. The common features of the countries that make up these clusters are that they show proportional proximity in terms of FDI inflows. The said FDI flow can be explained by similar tax policy practices. Therefore, it is observed that the pervasive FDI inflows for the countries that make up the subset of cluster A show the same level of development. The countries in the B and C clusters are similar in that they are the countries in which FDI flows show the most direction. Figure 2 shows the average PIT and CIT rates for the period 2000-2020.

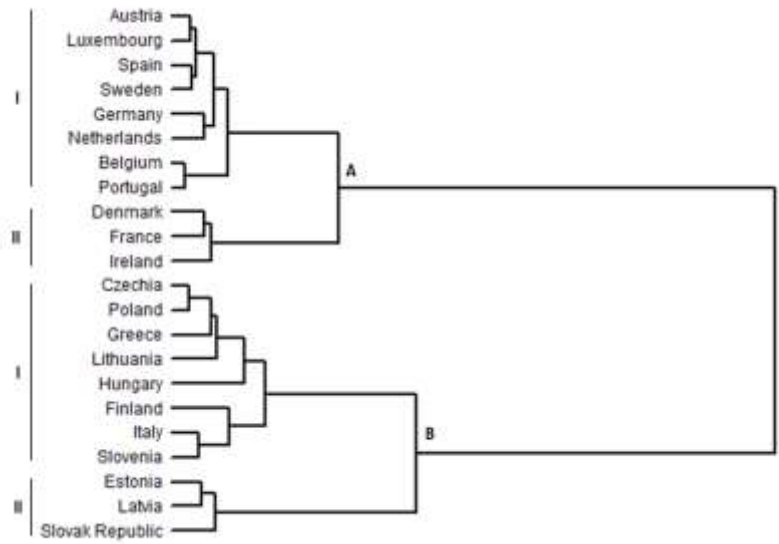


Figure 2. Average PIT and CIT rates for the period 2000-2020.

Countries are divided into two basic clusters regarding PIT and CIT rate aggregates. The countries in the first cluster are Austria, Luxembourg, Spain, Sweden, Germany, Netherlands, Belgium, Portugal, Denmark, France, Ireland. The countries in the second main group are Czechia, Poland, Greece, Lithuania, Hungary, Finland, Italy, Slovenia, Estonia, Latvia and the Slovak Republic. The first main cluster is divided into the first sub-cluster covering Austria, Luxembourg, Spain, Sweden, Germany, Netherlands, Belgium, Portugal and the second sub-cluster covering Denmark, France, Ireland. The second main cluster is divided into the first subgroup consisting of Czechia, Poland, Greece, Lithuania, Hungary, Finland, Italy, Slovenia and the second subgroup consisting of Estonia, Latvia and the Slovak Republic.

When the average CIT + PIT rates of country groups in similar clusters are compared, it is seen that they are similar in terms of tariff structure and rates. According to this, the common features of the countries in the A and B clusters are that they have similar practices towards the tax compliance policies of the Union, due to their being members of the Union at the same time. In this context, it is observed that they have similar corporate tax and personal income tax tariff structures.

The average corporate tax rates of the countries in cluster A are between 20-25%. The average corporate tax rates of the countries that make up the B cluster are 15-20%. When evaluated in terms of personal income tax, it is observed that the A and B clusters are divided into two separate groups. It is observed that the said distinction arises from the similarity of the tariff structure and the efficiency of the compliance processes with the Union tax policies rather than the tax rate proximity of the countries.

CONCLUSION

This study evaluates the effects of total corporate tax and personal income tax rates between 2000 and 2020 on FDI inflows in selected EU member countries. In this context, it analyzes the effect of dividend taxation process and thus corporate tax and personal income tax rates on FDI inflows. First of all, the determined variables were divided into groups by the cluster method. The spread of countries was also evaluated with the principal component analysis model. The results of the analysis show that the total corporate tax and personal income tax rates on dividends are determinant on foreign direct investment inflows. Accordingly, FDI inflows between the relevant years vary according to the total CIT and PIT ratios.

The need for the restructuring processes of the tax systems of the countries is based on the expansion of the competitive environment between the countries. In this context, the regulations of the tax systems of the countries regarding the taxation of dividend income have a decisive importance in terms of the direction of FDI inflows. In this context, the relationship between corporate tax and personal income tax rates of selected 22 EU member countries between 2000 and 2020 and FDI inflows is evaluated in this study. When examining countries with similar characteristics, results that do not apply to other countries may be specific to the country group. The taxation of dividends is regulated under the provisions of international tax law and national legislation of EU Member States.

The EU deals with the taxation of dividends distributed between the parent company and its subsidiaries in different member states in the international taxation of dividends and is aimed at taxing the global income of taxpayers. In addition, Member States aim to increase FDI inflows, which creates an important competitive element for many countries. The study contributes to other studies, as it examines the effect of total corporate tax and income tax rates on the profit share, unlike the practices made so far, in the selected EU Member States. The impact of EU tax policy on FDI was evaluated over total CIT and PIT ratios and its relationship was analyzed. The main findings of the study are as follows;

- It is seen that the EU tax policy practices and the tax rates of the Member States are guiding on FDI inflows. The results of the analysis show that FDI inflows increase as the total CIT and PIT ratios show a cumulative decrease. Similarities and differences have been identified for the 2000-2020 period, taking into account certain country groups and their distributions. It is observed that countries with similar tariff structure and rate application are included in the same groups.

- The overall PIT and CIT effect on dividends is that FDI inflows tend to increase as tax rates payable decrease. When certain country groups and their distributions are analyzed within the relevant variables for the 2000-2020 period, it is observed that it causes periodic increases in FDI inflows.

- The distribution of FDI differs between selected EU Member States. Since the contribution of valuation variables to FDI is at different levels, both variables and country groups can be classified separately. Therefore, the conclusion that taxes have a directive effect on the location and investment decisions of multinational enterprises is supported.

REFERENCES

Abbadi Abeer F.A., Al-Amarneh, Asma, Abuorabi , Marwan Mohammad "The Impact of the Dividend Policies on the Value of the Stock of Public Shareholding Companies in the Jordanian Industrial Sector", International Management Review 12(2): 29-36,74.

Abdo Khawla Kassed (2021). "The impact of the dividend policy on the market value of the shares of public shareholding companies listed on Amman stock exchange 2010-2019", Journal of Management Information and Decision Sciences, 24(S4), 1-10.

Alstadsæter, Annette; Jacob, Martin and Michaely, Roni (2015). "Do Dividend Taxes Affect Corporate Investment?", http://ssrn.com /2469680, (22.06.2 022).

Asen, Elke (2021). "Dividend Tax Rates in Europe", https://taxfoundation.org/ dividend-tax-rates-europe, (21.06.2022).

Auerbach, Alan and Hassett, Kevin (2006). "Dividend Taxes and Firm Valuation: New Evidence", NBER Working Paper No. 11959.

Banerjee, Arindam (2018). "Dividend Policy as a Corporate Communication and its Impact o Firm Value Evidences from listed companies in Qatar Stoc Exchange", Financial Markets, Institutions and Risks, Volume 2, Issue 4.

Budagaga, Akram (2017). "Dividend Payment and its Impact on the Value of Firms Listed on Istanbul Stock Exchange: A Residual Income Approach", International Journal of Economics and Financial Issues, 7(2), 370-376.

Bruno, Randolph Luca; Campos, Nauro Ferreira and Estrin, Saul (2020). "The Effect on Foreign Direct Investment of Membership in the European Union", Discussion Paper Series, IZA DP No. 13668.

Caetano, Jose and Galego, Aurora (2009). "FDI in the European Union and Mena Countries: Institutional and Economic Determinants", CEFAGE Working Paper, 2009/9.

Chang, Rosita P. and Rhee, S. Ghon (1990). "The Impact of Personal Taxes on Corporate Dividend Policy and Capital Structure Decisions", Financial Management, 19, (2), 21-31.

Dackehag, Margareta; Hansson, Åsa (2015). "Taxation of dividend income and economic growth The case of Europe", IFN Working Paper, No. 1081, http://hdl.handle.net/10419/129642, (20.06.2022).

Dhamija, Sanjay and Arora, Ravinder Kumar (2019). "Impact of Dividend Tax Change on the Payout Policy of India Companies", Global Business Review 20(5).

DBI (2022). Tax Rates in Europe, https://www.doing-business-international.com/2022/05/, (11.06.2022).

European Commission (2022a). https://ec.europa.eu/taxation_customs/ taxation-dividends-received, (25.06.2022).

European Commission (2022b). "EU Tax Policy Strategy", https://ec.europa.eu/ taxationcustoms/taxation-1/eu-tax-policy-strategy_en, (22.06.2022).

Eurostat (2013). *International Trade and Foreign Direct Investment,* European Commission, ISBN 978-92-79-27007-9.

Forte Rosa and Santos Nancy. 2015. "A Cluster Analysis of FDI in Latin America." Latin American Journal of Economics, 52(1): 25–56. https://doi.org/10. 7764/LAJE.52.1.25.

Hunady, Jan and Orviska, Marta (2014). "Determinants of Foreign Direct Investment in EU Countries-Do Corporate Taxes Really Matter?", Elsevier, Procedia Economics and Finance, 12, 243-250.

Harding, Michelle (2013). "Taxation of Dividend Interest, and Capital Gain Income", OECD Centre For Tax Policy and Administration.

Kanakriyah, Raed (2020). "Dividend Policy and Companies' Financial Performance", Journal of Asian Finance, Economics and Business, 17, (10): 531–541.

Kawano, Laura (2013). "Tax Policy and the Dividend Clientele Effect", Wharton Public Policy Initiative Issu Briefs. 21, https://repository.upenn.edu/ pennwhartonppi/21, (22.06.2022).

Kenzie, Kenneth J. Mc., Thompson, Aileen J. (1996). "The Economic Effect of Dividend Taxation", WORKING PAPER 96-7., Prepared for the Technical Committee on Business Taxation.

Korinek, Anton and Stiglitz, Joseph E. (2008). "Dıividend Taxation And Intertemporal Tax Arbitrage", Working Paper 13858, http://www.nber.org/ papers/w13858, (11.06.2022).

Nam, Jouahn; Wang, Jun; Zhang, Ge (2010). "The impact of the dividend tax cut and managerial stock holdings on corporate dividend policy", Global Finance Journal 21 (2010) 275–292.

Oplotnik, Zan Jan, Bessa Vilela, Noemia & De Jesus Silva, Natacha (2021). "EU Foreign Investment Policy – FDI Screening Mechanism to

Advert Genuine Threats or Introducing Hidden Protectionism", Contemporary Issues In International Economics, (22.06.2022).

Pandya, B. (2014). Association of Total Shareholder Return with other value based measures of financial performance. Journal of Entrepreneurship, Business and Economics, 2(2), 26-44.

The Organisation for Economic Co-operation and Development (OECD) (2020). Part II Taxation of corporate and capital income Document updated, https://www.oecd.org/tax/tax-policy/corporate-and-capital-income-taxexpl anatory-annex.pdf, (12.06.2022).

The Organisation for Economic Co-operation and Development (OECD) (2022). Foreign direct investment (FDI) - FDI flows - OECD Data, https://data.oecd.org/fdi/fdiflows.htm. (12.06.2022).

Torrez, Jimmy (2006). "The Effect of Dividend Tax Policy on Corporate Investment", Forum Empresarial 11, 1, ISSN 1541-8561.

United Nations Conference on Trade and Development (UNCTAD) (2022). World Investment Report, https://unctad.org/topic/investment/world-investment-report, (12.06.2022).

Velichkov Nikolay and Stefanova Kristina. 2017. "Tax Models in the EU: a Cluster Analysis." Economic Alternatives, 4: 573-583.

Warren, Alvin C. and Graetz, Michael J. (2007). "Dividend Taxation in Europe: When the ECJ Makes Tax Policy", Harvard Public Law Working Paper No. 07-18.

Yee, T. C. (2017). Dividend pay-out policy and Firm Performance. Journal of Arts & Social Sciences, 1(1), 42-52.

CHAPTER 9

THE EFFECT OF WOMEN'S ENTREPRENEURSHIP İN THE TECHNOLOGY SECTOR ON RURAL DEVELOPMENT: EXAMPLE OF SOLAR PANELS AND PHOTOVOLTAIC SYSTEMS INSTALLATION MAINTENANCE AND REPAIR TRAINING

Assoc. Prof. Hülya ÇAKIR[1]

[1] Yozgat Bozok University, Faculty of Arts and Sciences, Department of Sociology, Yozgat, Türkiye. E-mail:hulya.cakir@bozok.edu.tr

1. Rural Area

Rural area can be expressed as a structure in which the market mechanism almost does not work, the exchange mechanism that combines production and consumption markets is not sufficiently developed, and the production is largely used for the consumption needs of rural societies or families (Soysal, 2013: 165). Rural areas differ from the structural features of agriculture-based economy, domestic production, especially the capitalist economic system with its elderly population density, market-oriented mass production of liberal policies, consumption of products, competition, maximum profit, etc. The fact that the resources and the holistic structure of the system occur in natural processes creates periodic differences depending on being affected by external factors (drought, earthquake, flood, etc.). The fact that seasonal differences in rural areas are so sharp and people's difficulty in accessing resources causes poverty to be experienced more deeply.

2. Entrepreneurship

According to the Turkish Industrialists' and Businessmen's Association (TÜSİAD), the entrepreneur is "the person who innovates by taking risks", and entrepreneurship is "the name given to all the processes of entrepreneurs in taking risks, chasing opportunities, realizing and innovating" (TÜSİAD, 2002: 17). The entrepreneur is the person who manages the business by predicting the available resources and aims at profitability in the input and output balance (Silver, 1983: 7). The main characteristics of entrepreneurship are using initiative, turning resources into practice, organization of social and economic mechanisms, taking risks or taking risks (Hisrich and Peters, 1998: 9). Gender roles can also be decisive in entrepreneurship. According to Markantoni and Hoven (2012: 509), for women, initiatives are not an economic area that they isolate from family life, but an action that they integrate with their daily lives and transform their daily practices as income-generating activities. In this way, the main characteristics of entrepreneurship should be formed by considering the differences between genders.

> In addition to activities related to direct land and land use such as water resources, forest areas, local features, diversification of non-agricultural use of existing resources in rural areas such as tourism, carpentry, blacksmithing, wool spinning, etc. are also suitable for rural entrepreneurship. The combinations of these resources subject to the

initiative can be exemplified as tourism, sports and recreation facilities, professional and technical training, retail and wholesale, industrial applications (engineering, handicrafts), service (consultancy), added value (meat, milk, etc.) and the possibility of working off-farm (Yontar and Söztutar, 2018: 48).

When it comes to rural development, the list of sectors supported by the Yozgat Provincial Coordinator of the Agriculture and Rural Development Support Institution (TKDK), which ranks first with its support, is shown in Table 1.

Table 1. Supported Sectors in Yozgat Province-TKDK Yozgat Provincial Coordinatorship (Url-1)

Sector Code-Name	**Sub-Sector Code- Name**	
101 - Investments in Physical Assets of Agricultural Enterprises	**101-1**	Agricultural Enterprises Producing Milk
	101-2	Agricultural Enterprises Producing Red Meat
	101-3	Agricultural Enterprises Producing Poultry Meat
	101-4	Agricultural Enterprises Producing Eggs
103 - Investments in Physical Assets Related to Processing and Marketing of Agricultural and Fishery Products	**103-1**	Processing and Marketing of Milk and Dairy Products
	103-2	Processing and Marketing of Red Meat and Meat Products
	103-3	Processing and Marketing of Poultry Meat and Meat Products
	103-4	Processing and Marketing of Fisheries
	103-5	Processing and Marketing of Fruit and Vegetable Products
302 - Diversification and	**302-1**	Diversification of herbal production and processing and marketing of herbal products

Development of Farm Activities	**302-2**	Production, processing and marketing of beekeeping and bee products
	302-3	Craft and local produce businesses
	302-4	Rural tourism and recreation activities
	302-5	Aquaculture
	302-6	Machine Parks
	302-7	**Renewable Energy Investments**

An entrepreneur is a person above all else. For this reason, entrepreneurs are the product of the socio-economic environment they live in. (Arıkan, 2002: 59). If rural entrepreneurship is carried out directly in rural areas, it can serve regional development as well as reducing costs.

Noyan Yalman and Gündoğdu (2014), in their survey study on women entrepreneurs in Kayseri, Sivas and Yozgat, stated that women entrepreneurs encounter economic problems such as lack of capital as well as social problems such as domestic and family responsibilities. In women's entrepreneurship, investment areas vary according to local characteristics and it is seen that the investments of women entrepreneurs, especially agriculture, are concentrated in sectors such as food, textile, tourism, insurance, health and education (Şahin, 2006).

3. Women's Entrepreneurship in Technology Sector and New Market Areas

The technology sector, which has an important potential in terms of economic development, attracts attention in terms of innovation and is generally dominated by male entrepreneurs, can be expressed as one of the sectors in which female entrepreneurs have started to be active in recent years (Mayer, 2008: 30).

> Entrepreneurs who make the change by following the developing technologies also reveal the newly discovered market areas with innovation in the existing markets in the new products they create. Entrepreneurs who create new products can be at a level that can compete in the sector. New markets create more opportunities in terms of reaching the masses and entering new markets with the development of technology (Çeliköz, 2017: 21).

In the period from primitive agriculture to the information age of societies, changing conditions have created new needs, and there have been differences in the use of products from previous periods. These changes can be in material and spiritual elements as well as in energy resources, climate and environmental conditions. The use of scarce resources has made it necessary for the world to focus on renewable and sustainable development. The field of our research is the example of solar panels maintenance and repair training due to the need for renewable energy and sustainable development-oriented entrepreneurship in line with current changes, and most importantly, the density of female participants residing in the center and rural areas.

4. Women's Entrepreneurship in Rural Areas

While entrepreneurship is a very important development tool especially for developing countries, it is also an element that provides a solution to unemployment, enables women to take part in business life and breaks down gender stereotypes (Bedük, Eryeşil and Oğuz, 2016: 3).

> As an entrepreneurship condition, women in rural areas should also be accepted as entrepreneurs at every stage from the beginning of production/service; considering that they are active participants, decision makers and controllers. Female entrepreneur, on the other hand, defined it as a woman who owns her own business in the market economy, works alone or employs workers, produces and sells goods or services, researches credit sources, can overcome urgent work-related problems, can adapt to new conditions and tries to gain experience in the field (Dhillon, 1993).

"Labour exchange" in rural areas is an extremely common form of cooperation, and in the related cooperation, women work free of charge and socially insecure in different businesses outside their own businesses (Özbay, 1991, Alkan, 2018, cited in Alkan, 2018:198). Women who participate intensively in rural production efforts are seen as the main source of power for the rural economy in developing countries. However, this source of power is generally considered as an unpaid "unpaid family worker" or labor force (Kantar, 1999: 36-37). Children and women are among the disadvantaged groups in the status differentiation of traditional societies depending on variables such as age, gender, etc. While the atypical work of women in our country mostly causes negativities such as the spread of social insecurity, it

also poses an obstacle to women's entrepreneurship due to its distance from the structural characteristics of entrepreneurship.

Among the economic objectives; income increase, capital transformation, development of loan use, facilitation of investments, minimization of venture risks, increase in productivity, ensuring the functioning of the marketing chain and rationalizing the management and organization structure (Lashgarara, 2011: 5537). While difficulty in accessing resources in rural areas causes poverty to deepen, it also turns women's experience into a double disadvantage. For this reason, overcoming poverty can be more effective if rural women can turn their labor into wages, be entrepreneurs, meet the market and enter the market (Gülçubuk et al. 2012:360).

There is a significant difference between “the inclusion of women” and “the participation of women” (Cornwall, 2000). It is relatively difficult for women living in rural areas to become entrepreneurial women because women living in rural areas are more exposed to institutional, structural and cultural restrictions (Tambunan, 2008:342). Although it is thought that women living in rural areas play an important role in the agricultural economy, they are not at the desired level due to the inability of women to use their potential capacities and opportunities and to increase their productivity, lack of information, cannot be organized, and are economically dependent on men (Lashgarara, 2011: 5536).

> In rural areas, women also face problems such as social prejudices about entrepreneurship, support, incentive and gender inequality, difficulties in paying education debts and taxes, lack of knowledge, inexperience, lack of support and incentive, lack of trust, lack of social capital, small loans, professional distinctions, lack of experience, limited home-based activities, marketing problem, lack of demand, inability to find qualified personnel, etc. (Marangoz, Hız, and Aydın, 2016: 32).

In this context, it does not seem possible to define women in Turkey as "entrepreneurs" in the classical or contemporary sense. For Turkey, it is only possible to talk about a female entrepreneur that TÜSİAD defines in the context of the company opening process (Öztürk, 2018:3-4). The concept of entrepreneurship in rural areas is far from being brought together with women due to reasons such as inadequate access of women to property, financial resources and education in rural areas, low income level, limiting the

participation of traditional roles in the workforce and allowing women to be entrepreneurs only at a micro level, and the fact that women do not see themselves as entrepreneurs in parallel with their value judgments in the society regarding women's status (Gökdemir and Ergün). , 2012: 80)

5. Rural Development

> Rural development is defined by the United Nations Organization as "the process of combining the efforts of small communities to improve the economic, social and cultural conditions they are in with the efforts of the state, integrating these communities with the whole nation and ensuring that they contribute fully to national development efforts" (Dinçer et al., 2015:50).

Development is a dynamic concept that triggers change based on the current situation or the previous situation (Oakley and Garforth, 1985). The aim of regional development is to follow a balanced development policy by eliminating the development differences of the provinces in the region and also to try to eliminate the economic, social and cultural imbalances between the regions (Gündüz, 2006: 177). The development paradigm has gone beyond the promotion of development related to agricultural society, and has emphasized reflection and orientation on a new integrated approach that includes "social development" and "income growth" (Yontar and Söztutar, 2018: 47).

Sustainable development has been accepted and adopted as an element and requirement that ensures the efficient use of resources in the long term and prevents the unconscious and excessive use of natural assets by protecting them (Demir and Çevirgen, 2006: 95). The lands owned by the countries are divided into certain regions, and the increase in economic, social and cultural progress, development and productivity levels in these regions are called regional development. While the national plans realized in this direction deal with all the problems of the economy; regional plans focus on the problems of a particular region (Öney, 1980: 43). Rural entrepreneurship, which is an important factor in eliminating the development differences between regions in most of the developing countries and ensuring rural development, occurs in economically and socially underdeveloped regions with low income levels such as insufficient infrastructure, economic

stagnation, low education level and unskilled workers (Marangoz, Hız and Aydın, 2016: 29).

The relationship between entrepreneurship and development contributes to economic development in terms of providing flexibility to the industry, encouraging innovation, adding the individual unit to the economy and reducing unemployment, etc. (Çukacı, 2009: 80), while creating improvements in the development of social life (Bozkurt et al., 2012: 234) such as making innovations available and enjoying life, increasing social peace and well-being, etc., feeds development dynamics in both economic and social areas.

6. Rural Development and Women

With the industrial transformation of agricultural structures in Turkey, traditional knowledge of women and women has begun to be excluded from the soil (Yaman, 2020). In the developmental process of the development and women's phenomenon, three basic approaches can be mentioned: women in development in the 1970s, development at the end of the 1970s and after these two approaches, gender and development approach in the 1980s. Considering the periods from past to present, attention was drawn to the productive activities of women at the end of the 1970s due to the view that women were active in reproduction but not in production, and in the 1980s, they defended a more egalitarian and fair development approach by seeing women as an actor that triggered change in development (Rathgeber 1990). With the initiatives of individuals, rural development has the potential to be a driving force in the economic growth and development of the country in general. Therefore, with the development and globalization in information technologies, the importance of entrepreneurship (especially in rural areas) in terms of the country's economy and development level is rapidly increasing (Ergin and Sayın, 2018: 15).

7. Women's Entrepreneurship in Rural Development in Yozgat with Statistics

According to the current presentation data of the Agriculture and Rural Development Support Institution (TKDK) Yozgat Provincial Coordinator's Office entitled "Women's Labor Turkey's Future Meetings" in 2021, it was stated that the total investment amount realized by female investors since 2011 was 145 million TL and 101 projects were contracted and the support given to female investors was 79 million TL and the total

number of people employed was 252. Rural development grant support programs in the rural development literature encourage the masculine entrepreneurship model that is dominant among men (Little and Jones, 2000: 625). Contrary to the view, it is very promising that TKDK discriminates positively by giving an additional score in the rankings if the investment is made by a female entrepreneur or if the project owner is a woman, and determines the vision that this situation will continue by getting stronger in the IPARD III period (TKDK, 2021).

An important stakeholder in the process of TKDK and development agencies with their rural development-oriented approaches and policies is the public education centers that offer services to all segments of the society with their literacy courses, vocational technical courses, skill development and social-cultural courses.

8. Methodology

In the study, face-to-face and in-depth interviews were conducted with female entrepreneurs (15 people) who participated in the "Solar Panels and Photovoltaic Systems Installation Maintenance and Repair" course opened in Yozgat Public Education Center. In the program, which aims to provide individuals who have completed the course with knowledge and skills in solar panels and photovoltaic systems installation maintenance and repair, methods and techniques are mainly used to gain professional competence (Url-2). Semi-structured interview questions are presented in the annex. 4 of the participants are primary school graduates, 6 are high school graduates and 5 are university graduates. The excerpts from the interviews are encoded in the text. The research findings were made within the framework of the subheadings determined in accordance with the descriptive analysis technique and by including quotations. In this study, it is aimed to present information about the enterprises owned by women entrepreneurs (if any) in the villages of Yozgat, which is one of the provinces with a high number of villages affiliated to the center, and suggestions for improving the rate of women entrepreneurs in the rural area based on women's entrepreneurship education processes and their own processes.

Kızılaslan and Karaömer examined the entrepreneurial tendencies of women in their interviews with 120 women in 21 villages in the central and districts of Hatay province in 2015 and stated that economic thought was at the forefront in the entrepreneurial tendencies of women in rural areas, and that women's responsibilities in family life and social value judgments

prevented entrepreneurship tendency. Our research shows that the entrepreneurial tendencies of women in Yozgat rural have similar structural characteristics. In addition, the research findings also support the data of the study in which Bilgiç (2020: 80) conducted his field study in 2017. Accordingly, women stated that they expect to build policies that will make them the main actor of rural change instead of the reproduction of traditional gender roles that bind them, and that will involve them in decision-making processes that will enable agriculture to grow again.

9. Research Findings and Discussion

One of the common problems related to women entrepreneurs in the studies carried out in our country about entrepreneurship is the stereotyped role of women in the social and cultural environment, inadequate education, family reactions, high workload, difficulty in finding finance, the need for women to make more effort than men to ensure reliability, and the increase in the need for women to use their personal freedoms (Kutanis and Hancı, 2004: 458). Changes and improvements are needed for entrepreneurship to develop. As an example of women's entrepreneurship in the new market areas and technology sector, women's participation in solar panel maintenance and repair training is important in terms of being a concrete indicator of the roles that society attributes to gender and going beyond the boundaries drawn by traditional gender stereotypes.

9.1. Defining Entrepreneurship

While entrepreneurship is essentially the ability to create and create a vision from something that is not practical, while it is the ability to make a profit by producing goods or services for the purpose of providing services to the society. This vision involves doing everything possible to reduce the willingness to take calculated risks and the likelihood of failure. As a creative activity, entrepreneurship is the spending of energy on starting an enterprise or organization (Url-3).

"Producing something" (X,32, Married, High School)
"I love commerce and entrepreneurship. My interest is…" (F, 28, Single, University graduate)

"Trade…" (L, 34, Married, High School).

In the interviews, it is positive that the participants associate their definitions of entrepreneurship with the concepts of "risk and innovation" and idealize them as starting their own businesses, showing that the level of awareness of the process should be designed rationally in order to reach the targeted point.

> *"Tranforming opportunities into values, risk, innovation…" (Y, 23, Single, University graduate)*

> *"Part of my dream is to start my own business…" (M,37,Married, University graduate).*

9.2. Entrepreneurship Supports

Public institutions, local governments, non-governmental organizations, Public Education Centers organize training programs for women entrepreneurs, and some organizations offer financial support. To exemplify some of the supporting organizations; Turkey Employment Agency (İŞKUR), Small and Medium-Sized Enterprises Development and Support Administration (KOSGEB), Agriculture and Rural Development Support Agency (TKDK), Business Development Centers (İŞGEM), Women's Labor Assessment Foundation (KEDV), Women Entrepreneurs Association (KAGİDER), Credit Guarantee Fund (KGF) are among the public and non-governmental organizations aiming to empower women through entrepreneurship. In addition, state and private banks also provide credit supports. Participants think that special conditions should not be sought in supports and their support is not sufficient.

> *"There are a number of support activities, but I do not think they are sufficient" (N, 29, Single, High School).*

The majority of the participants think that the information about the supports should be made directly for the target audience and the updates should be announced through mass media in a way that everyone can easily access.

> *"It is supported, but no information is given. Unfortunately, many opportunities can be missed when learned late" (P, 38, Married, High School).*

9.2.1. Rural Entrepreneurship Supports

Among the support packages listed holistically in Table-1 of the Agriculture and Rural Development Support Institution (TKDK), which creates support packages focused on rural development, it has been observed that the opening of the title "Renewable Energy Investments" as the "302-coded sub-sector of the" 302-coded - Diversification and Development of Farm Activities "sector is effective in women's preference for education. Participants stated that they saw the support according to the entrepreneurship areas determined in rural entrepreneurship support packages as"limiting" . The common view of the participants who argue that new generation entrepreneurship cannot be supported through traditional production forms is to open training programs for current business sectors and then to create support packages in these areas.

> *"...In part, it can vary according to the determined entrepreneurship fields" (F, 28, Single, University graduate).*

> *"In my sector, entrepreneurship supports in the field of technology are very weak" (Z, 40, Married, University graduate)*

They stated that in order to develop women's entrepreneurship in our country, especially in rural areas, it is necessary to create either minimum conditions or unconditional support packages. Participants also stated that supporting institutions and organizations should increase sectoral diversity by evaluating in current conditions.

> *"I do not find rural entrepreneurship supports sufficient, while being an entrepreneur in our country is an important decision in itself, it is necessary to increase the support in order to create the conditions" (X,32, Evli, Lise).*

9.3. Women's Entrepreneurship - Employment Relationship

Since women have traditional knowledge, collective action and communication skills, they are very active in the development of rural communities (Markantoni and Hoven 2012: 508). The relationship between female entrepreneurship and employment supports the view in the literature that increasing entrepreneurship supports should be evaluated considering the effect of increasing employment both in entrepreneurship and through female entrepreneurs. In the study of Güner and Korkmaz (2011), the activities of the Business Development Center (İŞGEM) model, which is one of the methods

of supporting entrepreneurs, to support and develop entrepreneurs and therefore the small and medium-sized enterprises they have established, are focused on both the development of new startups and their contribution to employment growth. In the study of Bayramoğlu and Dökmen (2017), it was evaluated that micro-credit applications reduce unemployment in women, prevent migration from rural to urban areas, increase household income and women's decision-making power in the family and society, and generally affect the unemployment and labor force participation rates of poor and low-educated women positively, but it could not have a very positive effect on informal employment.

> *"Informing and supporting women to be entrepreneurs and their participation in the economy and production will have a positive effect on women's employment. Production and entrepreneurship are activities that complement each other and are meaningful when they come together" (Y, 23, Single, University graduate).*

In the interviews, the participants emphasized the role and importance of employment in social development as gender discrimination should not be in any other field and stated that it should be avoided from discriminatory practices and even equal opportunities should be created with egalitarian policies.

> *"It contributes to general employment without discrimination between men and women with its individual dimension in the short term and social dimension in the long term" (Y, 23, Single, University graduate).*

9.4. Women's Entrepreneurship in the Context of Obstacles and Opportunities

In our country, barriers and opportunities related to entrepreneurship in general can also differ for men and women in themselves. Particularly in rural women entrepreneurship, traditional beliefs and pressures of the society, sexual and emotional harassment, low level of education, gender stereotypes, lack of capital, role conflict, lack of role model can be counted among the obstacles arising from gender (Soysal, 2010: 98-104). In the interviews, it was seen that the participants analyzed the process in terms of rational and pragmatist, which did not consider the limited space of movement offered by

the roles attributed by the traditional social structure as an obstacle in the individual. Almost all of the female participants see the low level of education as the biggest obstacle (lack of appropriate conditions, lack of opportunities, being prevented or interrupted, etc.) and aim to solve this problem. While listing the obstacles, it was seen that they made economic and rational evaluations and included the negativities in the market conditions in the first place. The transition to a rational, pragmatist perspective by getting rid of the boundaries of gender discrimination is very promising for the future.

> *"Entrepreneurship is very important for investment and marketing areas. However, the desired levels cannot be reached due to economic factors such as the lack of development of the capital market, low capacity to create funds, etc." (Y, 23, Single, University graduate).*

> *"I think that the low level of education and lack of capital hinder entrepreneurship" (F, 28, Single, University graduate).*

> *"Commercial risks negatively affect entrepreneurship" (L, 34, Married, High School).*

Since it is known that the effect of the obstacles that have continued in the past has a negative effect on the development of entrepreneurship, opportunities are offered and positive discrimination is made in some topics for women. Since being the founder of his/her own business, making the mechanism of financial freedom, equal treatment and equal pay work are the most attractive factors for women in entrepreneurship, the opportunities offered should also nurture these thoughts. If the expectations are mutually satisfied, women will not be prevented from participating in production by encouraging them. Participants also stated that they expect women to be employed in sectors that are registered, secured, and high standards, not at home piecework, flexible production, low wage, and insecure in informal employment.

> *"No one wants to take the risk. In addition, encouraging people about entrepreneurship, especially women should receive and produce sufficient support instead of doing small jobs...I think entrepreneurship will increase as production increases" (M, 37, Married, University graduate).*

9.5. Preference for Education in the Technology Sector

There are two different opinions in the literature about the future of women's employment, especially with the development of information and communication technologies. While the first of these emphasizes that technology will include especially disadvantaged groups in the system with its anti-discrimination structure, the other view is based on the fact that the active use of technology can exclude women from the labor market on the basis of gender since it is in the hands of men from past times. In the study of Cafrı and Selci (2020), the result obtained that all variables used to represent technology positively affect women's employment supports the thoughts that technologies create jobs for women and labor markets become more flexible and transparent for disadvantaged groups. It is also emphasized that technology can be a solution to prevent gender inequality. In this context, it is thought that it is important to develop projects that will enable women to adapt to technological developments, learn technology or increase their level of technology use. Participants who participated in the Yozgat Public Education Center "Solar Panels and Photovoltaic Systems Installation Maintenance and Repair" course, which constitutes the field of our research, also think that technological developments prevent discrimination and create expansion and sectoral diversity in the labor market.

> *"I want to contribute to myself and our country by establishing a panel"(X,32, Married, High School).*

> *"I would like to establish a GES by ensuring that solar energy, which is one of the leading renewable energy sources, is an inexhaustible resource, protects the ecosystem, is taken from nature without releasing harmful gases (transferring to people and the desire to produce something after being a consumer in the world for years) and meets the other necessary conditions after obtaining the certificate" (Y, 23, Single, University graduate).*

Participants stated that they wanted to demonstrate in practice by receiving their training because they thought that women could not be excluded from men's monopoly in the follow-up, education, use and employment of technological developments. As in the title of renewable energy investments of TKDK, it hopes that both sectors will be developed by making large investments in developing and changing technological developments by other organizations and entrepreneurship supports will be expanded to cover these

sectors. However, they think that they will not encounter employment problems after their training in this way.

"I want to invest in my own farm as GES" (L, 34, Married, High School).

"Thanks to my wife, I learned that there is such an education. I want to take my certificate and think about what I can do and realize this project" (P, 37, Married, University graduate).

9.5.1. The Effect of Women's Entrepreneurship in the Technology Sector on Rural Development

The dynamics of change in rural sociology is quite weak. The strong bond between material and spiritual elements, especially with spiritual elements (tradition, custom, tradition, value, etc.), causes the process of change to continue in addition to the future and spread over a long time. Value dependence is high in institutions such as family, religion, economy, education, etc. and this situation remains valid for social phenomena and events. Habitus' predisposition system feeds acclimatization and internalization.

Participants also talked about creating an invisible network of daily routines. Especially as a result of the widespread use of technological developments in daily life, they stated that they spend less time on housework and are more followers of labor force participation and employment opportunities. The fact that the participants prefer women as their colleagues in the enterprises will also serve the development as it increases the employment of women in the rural areas.

"...After my university education, I prepared for the exam for the civil service, but I had difficulties, and I am very unlikely to be appointed in my field. My ideals don't match my parents' expectations. I don't want my education to go to waste. After the course, I would like to establish spp with the support of my family and organizations and to provide this service to the surrounding villages. Of course, I also want to work with the women around me." (R, 26, Single, University graduate).

Women stated that the information they acquired during their education about the topics of solar energy, renewable energy, electricity production equipment from solar energy, solar panel, solar panel, battery charging systems etc., which they did not have knowledge about before, was

important for their personal development and that the idea that it is possible to design the future in the light of this information motivated them for the future. In the interviews, it is seen from the statements of the participants that they also found this education useful in terms of home economy and budget planning.

> *"...Even if we do not think too much, making these systems functional can also make a profit for the family economy. We have experienced an increase in the number of electrical household appliances due to the development of technology, and environmentally friendly alternative energies can both reduce cost and protect the environment."(S, 42, Evli, Elementary School).*

> *"When its infrastructure is created and its use is disseminated, it attracts my attention because it is the most important source of functional energy that can be the friendliness of both the individual and the community budget." (T, 38, Married, High School).*

> *"...We did what we were told from an early age, and it was always said not to leave the courtyard... I want to get out of the courtyard and do what I want with love."(V, 48, Evli, Elementary School).*

> *"...There's not much left to do in the village, and people are dying. Especially young people don't go out and come back to study. After our generation, the population does not come from behind, so people should be given reasons to stay in their villages or return." (Ş, 40, Married, Primary Education).*

Among the post-training goals of the participants is to establish a Solar Power Plant (GES). Solar energy is produced in solar power plants thanks to solar panels. Although solar power plants are costly to install, they may vary depending on the material to be used and the size, soil characteristics and geographical location of the plant (Url-4). Women participants see especially the geographical advantage of the Central Anatolian countryside and the cleanliness of the system as attractive reasons. In addition, since solar energy systems are an easy and unlimited resource to store, their promise is attractive for women.

CONCLUSION

The fact that Yozgat has many villages connected to it and is close to metropolitan cities such as Ankara and Kayseri makes the city suitable for rural development-oriented studies. Since the inadequacy of employment opportunities in Yozgat causes immigration, entrepreneurship also means increasing employment opportunities for the province. The "Solar Panels and Photovoltaic Systems Installation Maintenance and Repair" course, which was opened in Yozgat public education center and aims to provide professional skills and competence to its participants, is programmed to start at the end of working hours on weekdays in order to reach a wide audience (male, female, public/private sector employees, tradesmen, job seekers, etc.). Fifteen female participants, who constituted the criterion sampling of our study, were between the ages of 26-48. 4 of the participants are primary school graduates, 6 are high school graduates and 5 are university graduates. When the participant profile is analyzed, it is seen that age ranges are quite young and education levels are relatively increasing with the number of higher education graduates. From this point of view, if sectoral diversity can be created by using methods and techniques to gain competence in vocational training and rehabilitation courses, on-the-job training programs and entrepreneurship trainings, it is seen that entrepreneurship potential can be increased by providing advantages in the process with young and dynamic trainees with a high level of education.

Considering the sociological structure of our country, in the early periods of women's entrepreneurship, the focus was on the sectors that feed the stereotypes about the gender roles attributed by the society such as maintaining the traditions that we can see as the main subject of the socialization process in rural areas in line with the traditional approach, being effective in maintaining their local wealth, etc. In this period, women's participation in production in areas where they are not foreigners without anxiety and stress played an important role in the spread of entrepreneurship. However, today, in line with the parameters of change and development, it is necessary to revise the support areas according to the sectoral diversity created by globalization and the liberal market economy. Since women, who are among the disadvantaged groups, have problems in social, cultural, economic (participating in working life, taking part in decision-making mechanisms, etc.) areas that prevent them from taking initiatives, the desired results cannot be obtained in rural development efforts related to entrepreneurship. In order to achieve a successful rural development goal with

women's entrepreneurship in rural areas, women need to take an active role in decision-making mechanisms.

In the research findings, it is seen that the participants defined entrepreneurship as "establishing their own businesses " and dreamed of being in a founding and employment-generating position. However, it should also be emphasized that almost all of the participants stated that they found it risky to be an entrepreneur in newly developing sectors and should be among the topics that should be improved in order to develop entrepreneurship. Even if it is not possible to reset the risks, an environment of trust can be established by building state supports and a special subsidy mechanism for entrepreneurs at a level that will minimize them.

While the primary purpose of the first period rural women's studies is to inform women about their rights due to the size of the problems they experience in education and health rights, today, women's financial contribution to family budgets at the micro level as the subject of process management such as establishing their own businesses, creating employment, etc. with an entrepreneurship-oriented development policy, and their increase in their social status at the macro level will be decisive in the steps to be taken in the future by showing both the positive change from the past to the present and the importance of the subject.

REFERENCES

Arıkan, S. (2002). Girişimcilik: Temel Kavramlar ve Bazı Güncel Konular. Ankara: Siyasal Kitabevi.

Bayramoğlu, Tay, A. ve Dökmen, G. (2017). Türkiye'de Kadın İstihdamı ve Mikro Kredi Uygulamaları İlişkisi Üzerine Bir Değerlendirme. Bartın Üniversitesi İ.İ.B.F. Dergisi, 8(16).

Bedük, A., Eryeşil, K. ve Oğuz, H. (2016). Kadın ve Erkek Girişimcilerin Algılama Farklılıkları, Selçuk Üniversitesi Sosyal Bilimler Meslek Yüksekokulu Dergisi, 19: 1-15.

Bilgiç, N. D. (2020). Yeni Bir Kırsal Kalkınma, Bilindik bir Kırsal Annelik: Ticarileşen Yöresel Yemeklerin Toplumsal Cinsiyet Rollerine Etkisi. İstanbul Üniversitesi Sosyoloji Dergisi, 40.

Bozkurt, Ö., Kalkan, A., Koyuncu, O. ve Alparslan, A.M. (2012). Türkiye'de Girişimciliğin Gelişimi: Girişimciler Üzerinde Nitel Bir Araştırma. Süleyman Demirel Üniversitesi Sosyal Bilimler Enstitüsü Dergisi, 1(15).

Cafrı, R. ve Selci, F. (2020). Teknolojik Gelişmeler ve Kadın İstihdamı İlişkisi: AB Ülkeleri ve Türkiye Açısından Bir Değerlendirme. İnsan ve Toplum Bilimleri Araştırmaları Dergisi, 9(5).

Cornwall, A. (2000). Making a difference? Gender and participatory development. IDS Discussion Paper #378 from the Institute of Development Studies.

Çeliköz, S. (2017). Türkiye'de Kadın Girişimciliğinin Gelişiminde Devlet Destekleri Girişimcilik Eğitimi Alan Kadın Girişimcilerin Analizi. İstanbul Kültür Üniversitesi, Sosyal Bilimler Enstitüsü, İşletme Anabilim Dalı, Yüksek Lisans Tezi.

Çukacı, Y.C. (2009). Girişimcilik ve Küçük İşletmeler. (Ed: Mehmet Tikici ve Ali Aksoy). Ankara: Nobel Yayınları.

Demir C. ve Çevirgen A. (2006). Turizm ve Çevre Yönetimi - Sürdürülebilir Gelişme Yaklaşımı. Ankara: Nobel Yayın Dağıtım.

Dhillon, P.K. (1993). Women Entrepreneurs, Blaze Publishers and Distributors PVT Ltd., Hirsrich and Brush, Researchers on Entrepreneurship:A Review.

Dinçer, M.Z., Türkay, B., Avunduk, Z.B. (2015). Kırsal Turizm Politikaları: Avrupa Birliği ve Türkiye'deki Politikaların Değerlendirilmesi, Uluslararası Sosyal ve Ekonomik Bilimler Dergisi 5 (1).

Ergin, Z. B. ve Sayın, C. H. (2018). Ekonomik Kalkınma ve Büyüme İçin Bir Fırsat Olarak Kadın Girişimciler. GSI Journals Serie B: Advancements In Business And Economics, 1(1).

Gökdemir, L. ve Ergün, S. (2012). Kırsal Kalkınmada Kadının Rolü. İnönü Üniversitesi Uluslararası Sosyal Bilimler Dergisi, 1(1).

Gülçubuk, B., Savcı, İ. vd. (2012). Kırsalda Yoksulluğu Azaltmanın Bir Aracı Olarak "Kadın Girişimciliği". 10. Ulusal Tarım Ekonomisi Kongresi, Konya.

Gündüz, A. Y. (2006). Bölgesel Kalkınma Politikası. Bursa: Ekin Kitabevi.

Güner, H. ve Korkmaz, A. (2011). İstihdamın Arttırılmasında Girişimciliğin Önemi: Girişimcilik Destekleme Modeli Olarak İŞGEM'LER. Çalışma İlişkileri Dergisi, 2(1).

Hisrich, R. D. Peters, M. (1998). "Entrepreneurship", McGraw- Hill Higher, New York.

Kantar, M. (1999). Girişimcilik ve Kırsal Kadınlar. Tarım Ekonomisi Dergisi, 1999 (4).

Kızılaslan, N. ve Karaömer, M. (2015). Hatay İli Kırsalındaki Kadınların Girişimcilik Eğilimlerinin İncelenmesi. Türk Tarım - Gıda Bilim ve Teknoloji Dergisi, 3(6).

Kutanis, Ö. R. ve Hancı, A. (2004). Kadın Girişimcilerin Kişisel Özgürlük Algılamaları. Osman Gazi Üniversitesi İİBF 3. Ulusal Bilgi, Ekonomi ve Yönetim Kongre Bildirisi, Eskişehir.

Lashgarara, F., Roshani, N. ve Omidi N.M. (2011). Influencing Factors on Entrepreneurial Skills of Rural Women in Ilam City, Iran. African Journal of Business Management, 5(14).

Little, J. ve Jones, O. (2000). Masculinity, Gender and Rural Policy. Rural Sociology,65(4).

Marangoz, M, Hız, G. ve Aydın, E. A. (2016). Kırsal Alandaki Kadınların Girişimcilik Eğilimi Üzerine Bir Araştırma. ASSAM Uluslararası Hakemli Dergi, 5.

Markantoni, M. ve Hoven van B. (2012). Bringing 'invisible' side activities to light. A case study of rural female entrepreneurs in the Veenkoloniën, the Netherlands. Journal of Rural Studies, 28(2012).

Mayer, H. (2008). Segmentation and Segregation Patterns of Women-owned High-tech Firms in Four Metropolitan Regions in the United States. Regional Studies, 42(10).

Noyan, Y.ve Gündoğdu, Ö. (2014). Kadın Girişimciliği ve Bölgesel Kalkınma: TR72 (Kayseri, Sivas, Yozgat) Bölgesinde Uygulama. Girişimcilik ve Kalkınma Dergisi, 9(1).

Oakley, P. ve Garforth, C. (1985). Guide to Extension Training. FAO Training Series, No:11, FAO, Italy.

Öney, E. (1980).İktisadi Planlama. Ankara.

Öztürk, S. (2018). Türkiye'de Kadın Girişimciliğinin İktisadi ve Kültürel Normlar Çerçevesinde Değerlendirilmesi. Girişimcilik ve Kalkınma Dergisi, 13(1).

Rathgeber, E.M. (1990). WID, WAD, GAD: Trends in Research and Practice. The Journal of Developing Areas, 24(4).

Silver, D. A. (1983). Entrepreneurial Life. New York: John Wiley.

Soysal, A. (2010). Türkiye'de Kadın Girişimciler: Engeller ve Fırsatlar Bağlamında Bir Değerlendirme. Ankara Üniversitesi SBF Dergisi, 65(1).

Soysal, A. (2013). Kırsal Alanda Kadın Girişimciliği: Türkiye İçin Durum Değerlendirmesi. Eskişehir Osmangazi Üniversitesi İİBF Dergisi, 8 (1).

Şahin, E. (2006). Kadın Girişimcilik ve Konya İlinde Kadın Girişimcilik Profili Üzerine bir Uygulama (Yüksek Lisans Tezi). Selçuk Üniversitesi, Sosyal Bilimler Enstitüsü, İşletme Anabilim Dalı, Konya.

Tambunan,T. (2008). Women Entrepreneurship Development in Asian Developing Economies, Kırgızistan- Türkiye Manas Üniversitesi. İktisadi ve İdari Bilimler Fakültesi, İkinci Uluslararası Ekonomi Kongresi Kitabı, Bişkek.

Türk Sanayicileri ve İş İnsanları Derneği (2002). Türkiye'de Girişimcilik. İstanbul: TÜSİAD Yay.

Yaman, M. (2020) Tarımsal üretimde kadın emeği: Tarihte kısa bir gezinti. Aramızda kalmasın: Kır, kent ve ötesinde toplumsal cinsiyet içinde (s. 57–61). Aramızda Toplumsal Cinsiyet Araştırmaları Derneği Yayınları.

Yontar, G. İ. ve Söztutar, M. (2018). Kırsal Alanda Girişimcilik, Üretim Ve Kalkınma Boyutlarıyla Tarım ve Kırsal Kalkınmayı Destekleme Kurumu (TKDK) – Manisa İl Koordinatörlüğü Örneği. Sayıştay Dergisi, 111.

Reports

Gıda, Tarım ve Hayvancılık Bakanlığı (2012). Kırsal Alanda Kadının Güçlendirilmesi-Ulusal Eylem Planı (2012-2016).

Web Sources:

Url 1: Tarım ve Kırsal Kalkınmayı Destekleme Kurumu (TKDK) Yozgat İl Koordinatörlüğü. https://yozgat.tkdk.gov.tr/Tedbirler.aspx (Erişim Tarihi: 03.09.2021).

Url-2: Halk Eğitim Merkezinde bir kurs daha. https://www.yozgathakimiyet.com.tr/haber/halk-egitim-merkezinde-bir-kurs-daha (Erişim Tarihi:11.06.2022).

Url-3: Girişimcilik Teknikleri Ders Notu. https://www.siirt.edu.tr/dosya/personel/girisimcilik-teknikleri-ders-notu-siirt-201842795924378.pdf (Erişim Tarihi: 14.06.2022).

Url-4: Güneş Enerjisi Santrali Nedir? https://www.solarrelax.com/ges-nedir-gunes-enerjisi-santrali-nedir (Erişim Tarihi: 15.06.2022).

Annex-1

The Impact of Women's Entrepreneurship in the Technology Sector on Rural Development: Example of Solar Panels and Photovoltaic Systems Installation Maintenance and Repair Training

Semi-Structured Interview Questions

Socio-Demographic Information

Age:
Marital Status:
Educational Status:
(If any) Occupation of Your Spouse:
Number of Children (if any):
How many people work in the household? (Number of men and women)
Your monthly income?

Interview Questions

1. What are the factors that lead you to entrepreneurship?
2. What does entrepreneurship mean to you?
3. Can women's participation in working life be increased with the support and development of entrepreneurship?
4. Do you prefer to work in a paid job or start your own business with entrepreneurship?
5. Do you think individual or social processes are more effective in the development of entrepreneurship?
6. Have you benefited from the Micro-credit application, which aims to increase entrepreneurship with positive discrimination for women?
7. Do development agencies and local governments have entrepreneurial support? If so, do you find it sufficient?
8. Are gender roles decisive in entrepreneurship supports (sectorally)?
9. Is entrepreneurship supported in rural areas? Do you think there is a connection between production and entrepreneurship?
10. Does entrepreneurship contribute to the marketing of agricultural products and the formation of production investments?
11. What do you think is the reason for the low entrepreneurship rates in our country?

12. What are the factors that affect your orientation towards solar panel training? What kind of a process do you plan to operate with a post-training certificate?

CHAPTER 8

RETURN AND RISK SPILLOVER

Assist. Prof. Dr. Zeynep İLTÜZER[1]

[1] İstanbul Topkapı University, Faculty of Economics, Administrative and Social Sciences, Business Administration, İstanbul, Kazlıçeşme, Turkey, zeynepiltuzer@topkapi.edu.tr

INTRODUCTION

Since the early 1990s, financial markets have been experiencing that a crisis originating in one market spreads to other market. Possible explanations for this phenomenon are the increase in financial flows, portfolio investments and international trade among countries due to financial liberalization and globalization of the world. More interestingly, markets witnessed the spread of crises among countries that did not have significant financial and trade link such as 1994 Mexican currency crisis which spread to Asian countries. This drew the attention of many researchers and practitioners to the issue of international transmission of shocks among countries.

Substantial part of the literature focuses on the nature of the transmission mechanism of crises among countries such as Kaminsky and Reinhart (1999), Han, Lee et al. (2003), Imbs (2004), Collins and Gavron (2004), Suliman (2011), Baur (2012), Horta, Lagoa et al. (2016), Devereux and Yu (2020). In 1994, the crisis starting with the devaluation of Mexican Peso had severely affected most of the Latin American countries as well as some emerging East Asian countries such as Philippines and Vietnam (Frankel and Schmukler, 1997; Mathur, Gleason et al., 2002). Asian crisis in 1997 started in Thailand and rapidly transmitted to the East Asian countries (Chancharoenchai and Dibooglu, 2006) while the transmission of 1998 Russian crisis to Brazil is an example of contagion between two economies in which there was no significant international trade and direct financial link (Goldfajn and Baig, 2000). In 2008, financial crisis originated in the US was transmitted to Europe and emerging countries and affected many mature and emerging economies (Kim, Kim et al., 2015). Above mentioned literature has a consensus on the contagion and/or spillover among countries despite the fact that crises were originated from different sources in each case and spread via different transmission channels whether it was international trades or widespread irrational investor behaviors or changes in the dynamics of capital flows. Therefore, it is important to gain insight into the degree of interdependence and spillover among markets for both policy makers and investors in order to develop strategies that incorporate the effects of spillover patterns among international markets.

Dungey, Fry et al. (2004) and Rigobon (2019) provide extensive literature reviews on the contagion and spillover among the markets by especially focusing on the methodological issues. The methodologies in the literature mostly based on how the authors or researchers define the interdependence of the markets, i.e., contagion and/or spillover. Contagion is

usually defined as a significant increase in correlation among markets during crises, while the spillover is defined as the existence and persistence of correlation between the markets during tranquil periods. From this perspective, contagion is defined as a shift in the correlation that exists across the markets. By using a simple one factor model, Corsetti, Pericoli et al. (2001) developed a general framework for correlation tests, which involves the test statistic of the previous studies as a special case, to examine the contagion and reported that tests were biased toward the null hypothesis of interdependence vs. the alternative hypothesis of contagion and needed to be adjusted. They reported that many results in the literature up to that point were severely affected by this bias and empirically examined the contagion between Hong Kong and ten emerging economies together with G7 countries during Asian Crisis and provided evidence of contagion from Hong-Kong to Singapore and Philippines, among emerging countries and developed countries and among developed countries. Forbes and Rigobon (2002) contributed by showing that heteroskedasticity in returns causes an upward bias in cross-market correlations in a test framework for contagion by employing a correlation analysis. Therefore, evidences of contagion based on correlation analysis that does not account for heteroskedasticity in returns suffer from the fact that the increase in the conditional correlation coefficient during crisis can be due to the increase in market volatility rather than an increase in unconditional correlation. This implies that the high correlation is not due to contagion rather due to interdependence. Bekaert, Harvey et al. (2005) applied two factor model with time varying factor loadings and with asymmetric heteroskedasticity in returns to test if the shocks of the model exhibit significant correlation to detect contagion among twenty-two countries from Europe, Asia, America and the contagion between each country and its region. They found statistical evidence that there was a contagion from the US to Asia region and contagion among Latin American countries. They also examined the contagious effects of Mexican and Asian crisis and their model did not provide any evidence of additional contagion during Mexican crisis while providing evidence of contagion during Asian crisis. Gebka and Serwa (2006) studied the spillover between U.S. and Asian countries with two-regime threshold VAR model in which regimes were denoting the tranquil and turmoil periods. They found that spillovers from the US to Asian countries except South Korea exist under both regimes while the intensity of the spillover increases in turmoil periods except to Taiwan and reported that

the spillover pattern from the US to Taiwan is relatively stable compared to other countries under both regimes.

Although the majority of the existing literature on spillover and contagion among countries are focusing on contagion and/or spillover among the US, Asian and Latin American countries as in Edwards and Susmel. (2001), Chancharoenchai and Dibooglu (2006), Morales and Andreosso-O'Callaghan (2012), Kenourgios, Asteriou et al. (2013), Jung and Maderitsch (2014), Kim, Kim et al. (2015), Wang, Xie et al. (2016), Leung, Schiereck et al. (2017), Akhtaruzzaman, Abdel-Qader et al. (2021), the literature also provides some evidence on the spillover and contagion between European countries and the US and among European region as in Xiao and Dhesi (2010), Syllignakis and Kouretas (2011) and Horta, Lagoa et al. (2016). Syllignakis and Kouretas (2011) analyzed the contagion from the U.S. as a global factor and from Germany as a regional factor European countries during the US subprime mortgage crisis by employing DCC-GARCH model and provided evidence of contagion due to herding behavior in financial markets. Horta, Lagoa et al. (2016) analyzed the contagion of the US subprime crisis to European countries by the copula models to estimate the correlations by filtering the returns through ARMA-GARCH processes and they reported that interdependence between European countries and the US was higher for those who have larger markets, that is, France showed the highest correlation with the US market, followed by Netherlands, Belgium and Portugal. Xiao and Dhesi (2010) examined the volatility spillover from the US to Germany, France and the UK by employing bivariate BEKK-GARCH models and provided evidence of spillover from the US to Europe. Lastly, to the best of my knowledge, Beirne, Caporale et al. (2013) provides the most comprehensive study by analyzing the spillover dynamics of forty-one emerging markets with developed markets and among their regions from the causality perspective by employing a GARCH-BEKK model. They reported a significant evidence of volatility spillover from developed markets to all of the emerging markets in Asia, all countries in Latin America and all developing countries in MENA region.

Based on this substantial literature on spillover/contagion among international markets, which is mostly concentrating around the past crises especially, Asian and Latin American crisis and US subprime mortgage crisis, it is not wrong to say that there is a consensus on the spillover among international markets while there is still some debate on contagion. This paper aims at analyzing the spillover pattern between emerging markets and

developed markets by using most recent data to gain insight into how the international transmission between emerging and developed markets changes over time with the methodology, namely the spillover indexes of Diebold and Yılmaz. (2012), that is not commonly preferred but does not carry the weakness of methodologies involving factor models. The spillover indexes developed in Diebold and Yılmaz (2012) allows one to see how the magnitude and the direction of spillovers among markets evolve and change over time and provide insights into whether the spillovers among markets are stable or not, whether the spillovers show structural changes or not. The existence of structural changes in the spillover indexes provides evidence on the contagion and insights for the expected effectiveness of many financial, investment and policy decisions. The study involves BRICS countries and G7 countries and mainly focuses on figuring out the spillover patterns from developed countries to developing countries.

The paper is organized as follows: Section 2 explains the methodology. Section 3 presents the data and preliminary analysis. Section 4 reports and interprets the results of the empirical analysis. Section 5 provides the summary of the study with its major findings.

METHODOLOGY

Generalized Forecast Error Variance Decomposition

Pesaran and Shin (1998) provides generalized forecast error variance decomposition for unrestricted VAR models. The variance decomposition provides measures for the effects of shocks hitting the system at time t on the state of the system at time $t+n$. It gives the portion of the n-step ahead forecast error variance of variable i that is accounted by the shocks to variable j. Consider stock market returns (or volatilities) are modeled via VAR(p) model, the forecast error variance decomposition matrix comprises measures for how much a shock to the returns (or volatilities) of the market i in the specified VAR model affects the n-step ahead forecast error variance of the returns (or volatilities) of market j in its off diagonal elements, which builds a transmission channel among markets, while the diagonal elements present the n-step ahead forecast error variance of the returns (or volatilities) of the market i is due to the shocks to variable i. Consider m variable VAR(p) model as in the equation (1).

$$x_t = \sum_{i=1}^{p} \varphi_i x_{t-i} + \varepsilon_t \qquad t = 1,2,\ldots,T \tag{1}$$

where $x_t = (x_{1t}, x_{2t}, x_{3t}, \ldots, x_{mt})$ is $mx1$ vector of variables, φ_i is the mxm coefficient matrices with the assumptions that $E(\varepsilon_t) = 0$, $E(\varepsilon_t \varepsilon_t') = \Sigma$ for all t where $\Sigma = \{\sigma_{ij}, i = 1,2,\ldots,m, j = 1,2,\ldots,m\}$. Under the assumption of covariance stationarity, the infinite moving average representation of VAR(p) model can be written as:

$$x_t = \sum_{i=1}^{\infty} B_i \varepsilon_{t-i} \tag{2}$$

in which B_i is the mxm coefficient matrices and can be obtained by the following recursive relation:

$$B_i = \varphi_1 B_{i-1} + \varphi_2 B_{i-2} + \ldots + \varphi_p B_{p-1} \tag{3}$$

with A_0 is an mxm identity matrix and A_i = 0 for $i < 0$. Shocks of size $\lambda = (\lambda_1, \lambda_2, \ldots, \lambda_m)'$, where λ is a $mx1$ vector, is hitting the system at time t, generalized impulse response function of x_t at horizon n is:

$$GI_x(n, \lambda) = B_n \lambda \tag{4}$$

If variable j only receives a shock at time t, denoted by λ_j, instead of shocking all variables in the system and assuming that ε_t has multivariate normal distribution, the generalized impulse response function of variable j is:

$$\omega_j(n) = \sigma_{jj}^{-1} B_n \Sigma e_j \lambda_j \tag{5}$$

where e_j is the selection vector with jth element is equal to 1, otherwise is 0 and σ_{jj} is the variance of ε_j. For the derivation of equation (4) and (5), Koop, Pesaran et. al. (1996) and Pesaran and Shin (1998) are

referred. By setting $\lambda_j = \sqrt{\sigma_{jj}}$, the generalized impulse response function is obtained as follows:

$$\omega_j(n) = \sigma_{jj}^{-0.5} B_n \Sigma e_j \tag{6}$$

The generalized forecast error variance decomposition is the ratio of n-step ahead forecast error variance of variable i caused by the shock to variable j to the total n -step ahead forecast error variance of variable i:

$$\mathrm{I}_{ij}(n) = \sigma_{jj}^{-1} \frac{\sum_{k=0}^{n} (e_i' B_k \Sigma e_j)^2}{\sum_{k=0}^{n} e_i' B_k \Sigma B_k' e_j} \tag{7}$$

Covariances between shocks are not zero, therefore, $\sum_{j=1}^{m} \mathrm{I}_{ij}(n) \neq 1$.

Spillover Indexes

Diebold and Yılmaz (2012) develop spillover indexes based on the generalized forecast error variance decomposition explained in section 2.1. Firstly, the generalized forecast error variance decomposition is normalized by dividing each element by the row sums:

$$\mathrm{Z}_{ij}(n) = \frac{\mathrm{I}_{ij}(n)}{\sum_{j=1}^{m} \mathrm{I}_{ij}(n)} \tag{8}$$

implying that the sum of all the elements in the normalized generalized forecast error decomposition matrix equal to number of variables in VAR system, that is $\sum_{i,j=1}^{m} Z_{ij}(n) = m$ and the row sum of the matrix is equal to 1, that is, $\sum_{j=1}^{n} Z_{ij}(n) = 1$.

Total spillover index: Total spillover index represents the sum of spillovers in the VAR system in percentage terms

$$\mathrm{E}(n) = \frac{\sum_{i,j=1, i \neq j}^{m} Z_{ij}(n)}{m} . 100 \tag{9}$$

Directional spillover index: The spillover to market i *from* the other markets in the VAR system is the sum of the elements in each row of normalized generalized forecast error variance decomposition matrix when $i \neq j$, $j = 1,2,\ldots,m$. The formula for the directional spillover received by the market i from the others is:

$$\mathrm{E}_{i\leftarrow}(n) = \frac{\sum_{j=1;\, i\neq j}^{m} \mathrm{Z}_{ij}(n)}{m}.100 \qquad (10)$$

The spillover from market i to the other markets in the VAR system is the sum of the elements in each column of normalized generalized forecast error variance decomposition matrix when $i \neq j$, $j = 1,2,\ldots,m$. The formula for the spillover transmitted by the market i to the others is:

$$\mathrm{E}_{i\rightarrow}(n) = \frac{\sum_{j=1;\, i\neq j}^{m} \mathrm{Z}_{ji}(n)}{m}.100 \qquad (11)$$

Net spillover index: Net spillover of market i is the difference between the directional spillover that market i is transmitted to others and the directional spillover that the market i is received from the others. Positive values of net spillover index imply that the market i is the net transmitter of shocks which means that the market transmits more than it receives, negative values imply that the market i is the net receiver of shocks which means that market receives more than it transmits. Net spillover index is calculated by subtracting the index values of the equation (10) from (11) as follows:

$$\mathrm{E}_i(n) = \mathrm{E}_{i\rightarrow}(n) - \mathrm{E}_{i\leftarrow}(n) \qquad (12)$$

DATA AND PRELIMINARY ANALYSIS

The directional spillovers between emerging markets and developed markets are examined both at the return level and risk (volatility) level. BRICS countries, which represent almost 42% of the world population, is chosen as the representatives of emerging markets and G7 countries are chosen as the representatives of the developed markets. The closing prices of

stock indexes of the US (SP500), the UK (FTSE100), Canada (GSPTSE), France (CAC40), Italy (FTSEMIB), Germany (DAX), Japan (NIKKIE225), Brazil (BOVESPA), Russia (MOEX), India (NIFTY50), China (SHCOMP) and South Africa (JSE) are obtained from www.wsj.com in the period between 02/01/13 and 07/06/21. The missing data were filled by assuming that the indexes remain the same since the last trading day. The logarithmic returns are calculated by $r_t = ln(p_t/p_{t-1})$ where p_t is the price of the relevant stock market on day t. The descriptive statistics and unit root test (ADF) of returns of each stock market are presented in Table 1. For volatility spillover indexes, the observed volatilities are estimated as mean adjusted daily squared return as $\sigma_t^2 = (r_t - \mu)^2$ and then annualized by $\sigma_t = 100\sqrt{365\sigma_t^2}$ where σ_t is the annualized daily observed volatility at time t in percentage terms and μ is the mean of the return, r. The descriptive statistics and Dickey-Fuller test of volatilities of each stock market are presented in Table 2. The ADF test of return and volatility of each market is statistically significant with p-values lower than 0.001, which indicates the stationarity in the time series.

The spillover between developed markets and emerging markets is examined for each emerging market separately. That is, spillover indexes in equations (10), (11), (12) are calculated by pairing each emerging market with G7 markets in 8-variable VAR system. For instance, to examine the spillover from developed markets to Brazil, firstly the optimal lag is determined by Akaike Information Criteria (AIC) for the 8-variable VAR system, which includes Brazil, the US, the UK, Canada, France, Italy, Germany and Japan. Then the spillover indexes given in equations (10), (11) and (12) are calculated according to methodology explained in the section 2. Due to different optimal lag values for each emerging market - G7 pair and the substantial number of parameters that would have been needed to be estimated if all markets had examined in a single 13-variable VAR system, the empirical analyses are performed for each emerging market by pairing them with G7 markets in an 8-variable VAR system. The specific to general approach is employed when determining the optimal lag for VAR(p) according to AIC. Table 3 presents the AIC values and corresponding optimal lags for VAR(p) in which the spillovers from G7 to specified emerging market are examined. The optimal lags for the analyses of return spillovers are 2, 4, 7, 4 and 6 for Brazil-G7, Russia-G7, India-G7, China-G7 and South Africa-G7, respectively. The optimal lags for the analyses of volatility spillovers are 11,

11, 11, 11 and 8 for Brazil-G7, Russia-G7, India-G7, China-G7 and South Africa- G7, respectively.

Table 1: Descriptive Statistics of Returns

Panel A: Developed Markets							
	US	**CANADA**	**UK**	**FRANCE**	**ITALY**	**GERMANY**	**JAPAN**
Mean	0.0005	0.0002	0.0001	0.0003	0.0002	0.0003	0.0005
Median	0.0005	0.0006	0.0003	0.0004	0.0004	0.0006	0.0001
Max	0.0897	0.1129	0.0867	0.0806	0.0855	0.1041	0.0773
Min	-0.1277	-0.1318	-0.1151	-0.1310	-0.1854	-0.1305	-0.082
Std. Dev.	0.0106	0.0094	0.0100	0.0119	0.0147	0.0122	0.0131
Skewness	-1.0691	-1.9063	-0.9122	-0.9800	-1.5628	-0.7346	-0.2871
Kurtosis	26.109	52.372	17.477	15.279	21.053	14.452	8.0054
ADF	-55.89*	-53.247*	-47.03*	-47.04*	-50.66*	-47.39*	-48.99*
Panel B: Emerging Markets							
	BRAZIL	**RUSSIA**	**INDIA**	**CHINA**	**S. AFRICA**		
Mean	0.0003	0.0005	0.0004	0.0002	0.0002		
Median	0.0000	0.0000	0.0002	0.0000	0.0001		
Max	0.1302	0.1124	0.084	0.056	0.0726		
Min	-0.1599	-0.1227	-0.139	-0.0887	-0.1023		
Std. Dev.	0.0160	0.0176	0.0111	0.0134	0.0107		
Skewness	-0.9940	-0.1528	-1.1881	-1.1182	-0.8056		
Kurtosis	17.347	6.6526	21.263	10.818	12.882		
ADF	-52.66*	-45.044*	-49.62*	-44.686*	-48.288*		

Note: * indicates p-value of ADF test statistic is lower than 0.001

Table 2: Descriptive Statistics of Volatilities

Panel A: Developed Markets							
	US	**CANADA**	**UK**	**FRANCE**	**ITALY**	**GERMANY**	**JAPAN**
Mean	12.3129	10.4275	12.7352	15.2799	19.1159	15.6774	16.9404
Median	7.7898	7.094	8.8735	10.4391	13.5275	10.4864	11.3696
Max	244.804	252.1385	2220.07	250.730	354.5866	250.0258	158.544

			5	7			2
Min	0.0052	0.0037	0.0116	0.0033	0.0153	0.0138	0.0024
Std. Dev.	15.9776	14.6746	14.2241	16.9053	20.4509	17.1183	18.3735
Skewness	4.9444	7.461	3.9487	3.6878	4.4637	3.488	2.4563
Kurtosis	47.1891	94.1524	37.15	31.5543	51.2454	30.3624	12.5255
ADF	-21.523*	-21.026*	-23.337*	-24.214*	-23.729*	-25.495*	-24.289*

Panel B: Emerging Markets

	BRAZIL	**RUSSIA**	**INDIA**	**CHINA**	**S. AFRICA**
Mean	20.934	23.9144	14.1442	0.0002	14.0505
Median	15.6667	17.4005	10.4638	0.0000	10.2611
Max	306.2011	235.4074	266.4636	0.056	195.8366
Min	0.0073	0.0146	0.01	-0.0887	0.0136
Std. Dev.	22.372	23.5475	15.8152	0.0134	14.7515
Skewness	4.2153	2.1346	4.5591	-1.1182	3.4333
Kurtosis	39.2453	11.536	47.1554	10.8182	27.5277
ADF	-22.146*	-24.458*	-24.342*	-44.686*	-24.284*

Note: * indicates p-value of ADF test statistic is lower than 0.001

Table 3: The determination of optimal lag for each VAR(p) system

Panel A: AIC values of VAR(p) estimations for return series

p	**BRAZIL-G7**	**RUSSIA-G7**	**INDIA-G7**	**CHINA-G7**	**S.AFRICA-G7**
1	-121320.63	-118170.54	-123012.46	-121235.15	-123963.25
2	-121454.78*	-118298.52	-123195.02	-121360.1	-124114.72
3	-121449.44	-118302.69	-123228.27	-121368.58	-124134.98
4		-118309.97*	-123264.24	-121382.85*	-124161.31

5		-118291.42	-123294.01	-121365.57	-124182.04
6			-123334.48		-124199.6*
7			-123342.56*		-124197.43
8			-123330.17		

Panel B: AIC values of VAR(p) estimations for volatility series

p	**BRAZIL-G7**	**RUSSIA-G7**	**INDIA-G7**	**CHINA-G7**	**S.AFRICA-G7**
1	136944.66	136275.12	136197.01	137182.56	135253.18
2	136221.27	135556.86	135556.21	136381.35	134551.42
3	135882.18	135153.2	135187.97	135962.01	134195.55
4	135758.99	134997.12	135012.79	135835.9	134023.47
5	135718.98	134965.19	134927.82	135778.2	133953
6	135686.59	134954.05	134896.67	135776.18	133934.38
7	135568.25	134886.4	134815.07	135705.53	133864.03
8	135568.25	134867.52	134718.57	135679.82	133850.81*
9	135551.55	134857.02	134718.57	135679.82	133854.7
1					
0	135546.09	134852.86	134675.72	135656.31	
1					
1	135534.73*	134847.36*	134665.08*	135653.29*	
1					
2	135553.03	134875.78	134682.12	135677.47	

Note: * indicates the AIC value for optimal lag p according to specific to general approach

RESULTS

The return and volatility spillovers from developed markets to emerging markets are examined in two ways. First, by using the full sample, the return and volatility spillover indexes for each emerging market-G7 pair are estimated. Secondly, the rolling-sample estimations of spillover indexes are performed with a rolling window of 200-day. The spillover estimations both in full-sample approach and in rolling-sample approach are based on 10-day ahead forecast error variance decomposition. While full-sample estimations provide insights into the

average values of spillover indexes, the rolling-sample estimations of spillover indexes provide insight into how the spillovers, i.e., the degree and direction of spillovers, evolve over time.

Full-sample Analysis

The results of full sample analyses for return and volatility spillovers among markets are presented in Table 4 and Table 5, respectively. Panel A in these tables reports the estimations of the equation (10), Panel B reports the estimations of the equation (11) and Panel C reports the estimations of the equation (12). Each column in the tables shows the directional spillovers from the analysis of each emerging market, stated in the column name, - G7 pair. For instance, BRAZIL column of Panel A in Table 4 reports the directional spillover to each country stated in the row name, namely, EMERGING = BRAZIL, US, CANADA, UK, FRANCE, ITALY, GERMANY and JAPAN, from the others. The first element of BRAZIL column in Panel A in Table 4, which is 7.52%, is the directional return spillover to BRAZIL FROM the other countries. 7.52% is the total contribution to 10-day ahead forecast error variance of BRAZIL stock market return coming from the shocks to returns of developed markets (the US, Canada, the UK, France, Italy, Germany, Japan). The second element of BRAZIL column in Panel A in Table 4, which is 9.08%, is the directional return spillover to the US from Brazil, Canada, the UK, France, Italy, Germany and Japan. 9.08% is the total contribution to 10-day ahead forecast error variance of the US coming from the shocks to other countries (Turkey, Canada, the UK, France, Italy, Germany, Japan). And Russia column presents the results of Russia-G7 pair, India column presents the results of India-G7 pair and so on. The columns in Panel B in Table 4 present the directional spillovers from the market whose name is stated in the corresponding row to the rest of the markets in each emerging markets-G7 pairs. For instance, the first element in BRAZIL column of Panel B in Table 4, 4.96%, is the directional spillover transmitted by BRAZIL TO the other markets in the VAR system, that is, the US, Canada, the UK, France, Italy, Germany, Japan. The second element in Brazil column, 9.66% is the

directional spillover transmitted by the US TO the others (Turkey, Canada, the UK, France, Italy, Germany, Japan) and so on. Panel C in Table 4 reports the net spillover values for each emerging market-G7 pair. Net spillover is the difference between the spillover that the emerging market transmits TO others and the spillover that the emerging country receives FROM others, which is 4.96%−7.52% = −2.57% for BRAZIL. The negative values indicate that the market is the net receiver of shocks, positive values indicate that the market is the net transmitter of shocks. The same is valid for the Table 5 in terms of reading the table, only difference is that the table 5 reports the values for volatility spillovers among the markets.

The return spillovers from developed markets to South Africa and Brazil are the highest ones, while the return spillover from developed markets to Russia and China are the smallest ones. According to the results in Panel B in Table 4, the return spillovers from South Africa and Brazil to developed markets, which are 4.96% and 9.94% respectively, are larger compared to the return spillovers from the other emerging markets to developed markets. On the other hand, the return spillovers from Russia and China to developed markets, which are 1.02% and 0.86%, respectively, are smaller compared to those of others. As a result, Brazil and South Africa markets are the most connected emerging markets to developed markets with both high directional return spillovers FROM them and TO them, while China and Russia are the least connected emerging markets to developed markets with low directional return spillovers FROM them and TO them according to the full-sample results.

When the results of directional volatility spillovers between emerging markets and developed markets are examined in Table 5 both FROM and TO directions, similar conclusions are obtained as in those obtained from return spillovers. Brazil and South Africa are the most affected ones from shocks to developed markets with the volatility spillover values of 6.31% and 7.6% respectively, while Russia and China are the least affected emerging markets from shocks to developed markets with 1% and 1.78% volatility spillovers, respectively.

The most consistent finding is that all of the emerging markets are net receivers both at the return and volatility level, which is indicated by the negative net spillover values for each emerging market in Panel C of Tables 4 and 5. That is, emerging markets are the net receivers of shocks from developed markets rather than being net transmitter of shocks to developed markets. India has the highest absolute net spillover values compared to others both at the return and risk level with absolute net spillover values of 4.85% and 5.55%, respectively. This result is interesting in the sense that Brazil and South Africa are the most connected emerging markets to developed markets both FROM and TO directions according to directional spillovers, however India turns out to be the most affected one from this bidirectional interdependence with developed markets according to the net spillovers.

While the full sample analyses provide insights into the average values of spillover indexes, the rolling-sample estimations of these spillover indexes, which will be presented in the next section, provide insights into how the spillovers evolve over time and whether they show any pattern.

Table 4: Full Sample Spillover Indexes For Returns

Panel A: Directional Spillovers for returns: FROM					
	BRAZIL	**RUSSIA**	**INDIA**	**CHINA**	**S.AFRICA**
EMERGING*	7.52	2.77	6.59	3.04	8.67
US	9.08	8.78	8.72	8.78	8.96
CANADA	9.06	8.74	8.77	8.72	8.96
UK	9.5	9.36	9.38	9.35	9.63
FRANCE	9.72	9.62	9.64	9.6	9.85
ITALY	9.26	9.18	9.18	9.14	9.38
GERMANY	9.55	9.47	9.48	9.44	9.7
JAPAN	7.46	7.41	7.41	7.41	7.56
Panel B: Directional Spillovers for returns: TO					
	BRAZIL	**RUSSIA**	**INDIA**	**CHINA**	**S.AFRICA**
EMERGING*	4.96	1.02	1.74	0.8	6.94
US	9.66	8.79	9.87	9.09	9.27
CANADA	9.63	8.58	9.56	8.66	9.07
UK	10.99	10.81	11.16	10.83	11.21
FRANCE	12.38	12.39	12.66	12.35	12.54

ITALY	10.11	10.14	10.33	10.01	10.05
GERMANY	11.43	11.62	11.7	11.49	11.65
JAPAN	1.99	1.99	2.15	2.25	1.98
Panel C: Total and Net Spillovers					
	BRAZIL	**RUSSIA**	**INDIA**	**CHINA**	**S.AFRICA**
Net Spillover	-2.57	-1.73	-4.85	-2.23	-1.73

Note: * indicates that the relevant emerging market is presented in the column names.

Table 5: Full Sample Spillover Indexes For Volatilities

Panel A: Directional Spillovers for volatilities: FROM					
	BRAZIL	**RUSSIA**	**INDIA**	**CHINA**	**S.AFRICA**
EMERGIN					
G	6.31	1.00	5.67	1.78	7.60
US	7.93	7.67	7.70	7.64	7.98
CANADA	8.04	7.66	7.67	7.57	7.87
UK	8.63	8.57	8.59	8.54	8.94
FRANCE	9.11	9.02	9.09	9.06	9.21
ITALY	8.48	8.38	8.42	8.38	8.51
GERMANY	8.90	8.96	8.88	8.84	9.06
JAPAN	4.98	5.02	5.08	4.85	5.24
Panel B: Directional Spillovers for volatilities: TO					
	BRAZIL	**RUSSIA**	**INDIA**	**CHINA**	**S.AFRICA**
EMERGIN					
G	3.39	0.31	1.27	0.68	4.44
US	8.11	7.16	8.10	7.38	7.46
CANADA	9.32	7.98	9.29	7.90	8.64
UK	9.28	8.93	9.46	8.97	9.93
FRANCE	11.29	11.18	11.61	11.16	11.98
ITALY	9.65	9.40	9.75	9.28	9.88
GERMANY	10.18	10.05	10.37	10.10	10.80
JAPAN	1.15	1.21	1.26	1.19	1.17
Panel C: Total and Net Spillovers					
	BRAZIL	**RUSSIA**	**INDIA**	**CHINA**	**S.AFRICA**
Net Spillover	-2.92	-0.09	-5.55	-1.10	-1.73

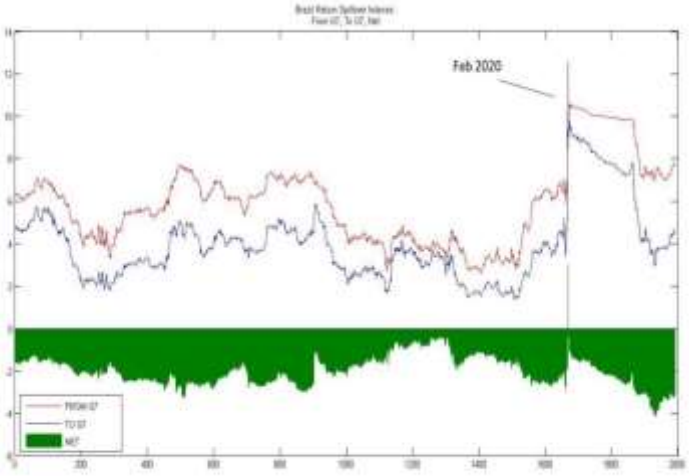
Note: * indicates that the relevant emerging market is presented in the column names.

Rolling Sample Analysis

Rolling-sample estimations provide insight into how the spillover patterns between emerging markets and developed markets change over time, whether emerging markets show similar patterns or not, whether there are any structural changes during turmoil periods and tranquil periods. The sample covers relatively recent period between Jan 2013 and June 2021 when it is compared to the literature. Any jump in spillover indexes shows contagion among markets, which is in conformity with the definition of contagion in the literature.

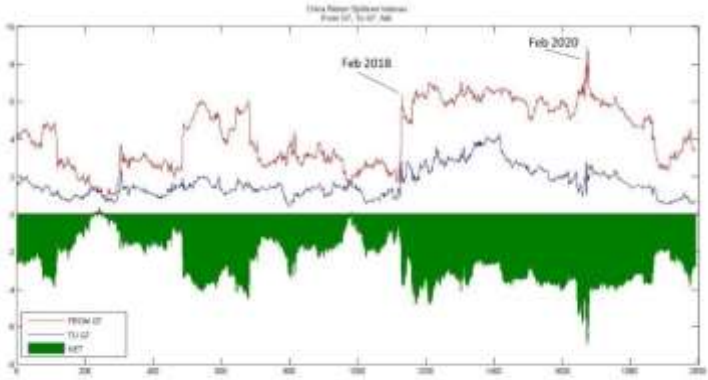
Rolling-sample estimations of directional spillovers and net spillovers indexes in the figures 1 and 2 provide insight into the spillover patterns between emerging markets and developed markets at the return and volatility level, respectively. As it is seen in the figures 1 and 2, the net spillover index of each emerging market dominantly takes negative values over the sample period. The most general conclusion drawn from the evaluation of directional and net spillover indexes of five emerging market-G7 pairs is that emerging markets are the net receivers of shocks both in return and volatility levels.

Figure 1: Directional and Net Return Spillover Indexes Over Time

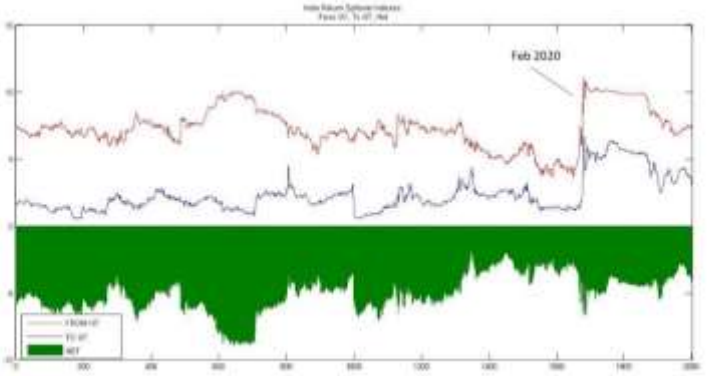


(a)

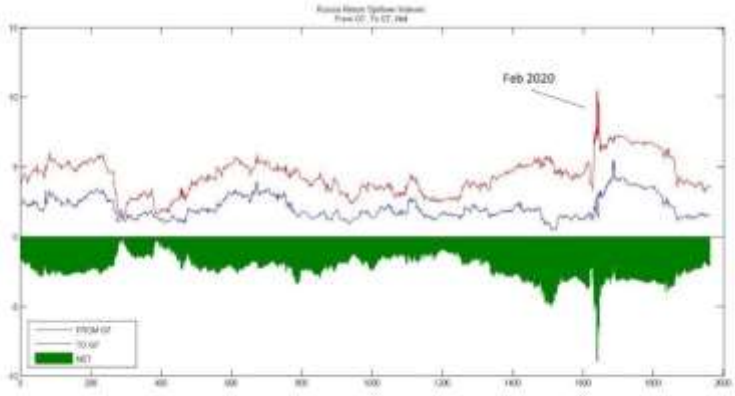
Brazil



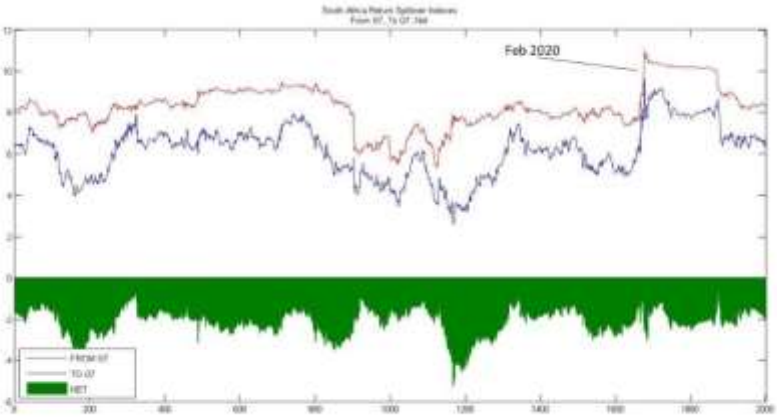
(b) China



(c) India



(d) Russia



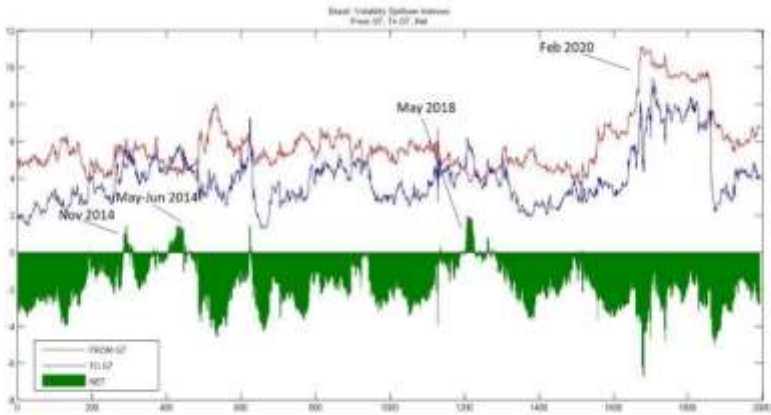
(e) South Africa

Brazil. The directional return spillover from developed markets to Brazil, which is depicted in the figure 1-(a), varies in the range of 5% and 7% over time and makes a sudden jump to 12% around the time when Covid-19 pandemic started and approximately one year later it falls to 7% and remains at around this level. The directional return spillover from Brazil to developed markets follows almost the similar pattern as that of directional return spillover from developed markets to Brazil with an approximately 2% spread. The net return spillover index consistently takes negative values, which varies in the range of 3% and 0% and supports the results of the full-sample analysis that Brazil is the net receiver at the return level. The directional volatility spillover from developed markets to Brazil, which is depicted in the figure 2-(a), varies in the range of 5% and 6% with a sudden jump to 11% level around the time when Covid-19 pandemic started, which is evidence of contagion of risk from developed markets to Brazil during Covid-19 pandemic. As for the net volatility spillover index, it takes positive values in a few times for a very short period of time, which indicates that there is a risk spillover from Brazil to developed markets in some periods even though they last very short period of time. These periods coincide with the time periods of Brazil's severe economic recession in 2014 and global economic downturn in 2018. Brazil became the net risk-transmitter to developed markets during turmoil periods.

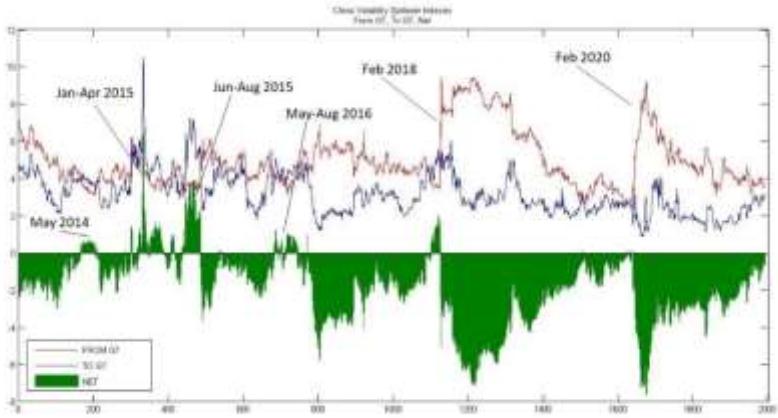
China. The directional return spillover form developed markets to China varies in the range of 1% and 6% until February 2018, afterwards it started to vary at a higher level in the range of 6% and 8%, which is shown in the figure 1-(b). This increased level of return spillover coincides with the

time periods when stock markets experiences significant losses due to global economic downturn starting towards the end of 2018. The net return spillover index of China is persistently negative indicating that China is net receiver of shocks from the developed markets at the return level and it shows a small and persistent increase in its level since early 2018. Until the February 2018, the net volatility spillovers are positive in some periods and negative in other periods, which implies that China was sometimes the net receiver of risk from developed markets and sometimes the net transmitter of risk to developed markets. The periods of being net risk transmitter coincide with the turmoil periods in China and in the world. China became the net risk transmitter to developed markets during 2015-2016 stock market turbulence in the national stock market and right before the global economic downturn in 2018. This indicates that China became a risk transmitter to developed markets during turmoil periods as Brazil in which the same pattern of spillover with developed markets is found. The net volatility spillover index and directional volatility spillover index from developed markets to emerging markets also provide evidence of contagion during Covid-19 pandemic with a sudden jump in the indexes as it is seen in the figure 2-(b).

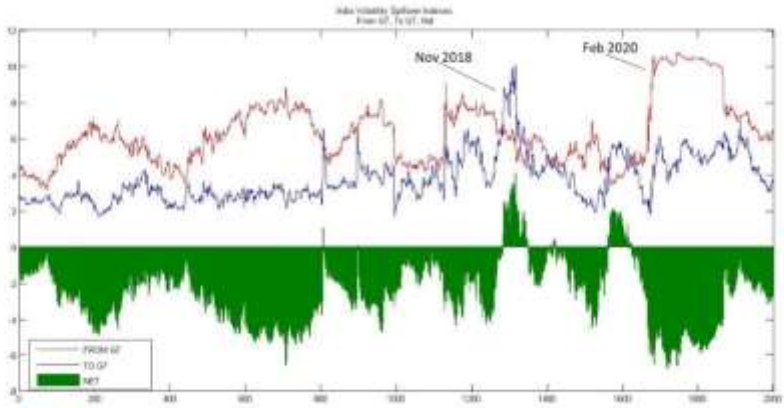
Figure 2: Directional and Net Volatility Spillover Indexes Over Time



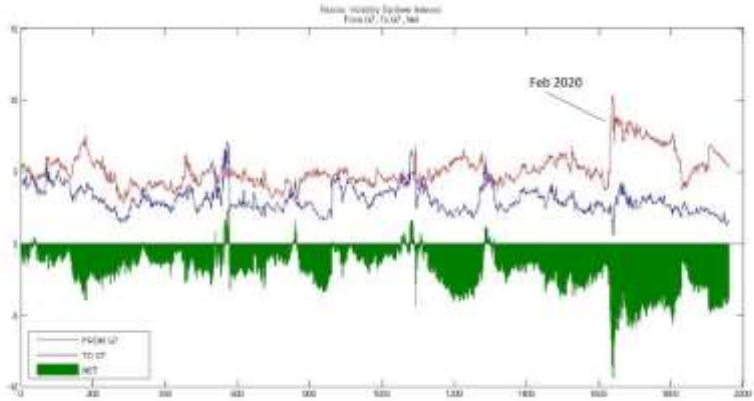
(a) Brazil



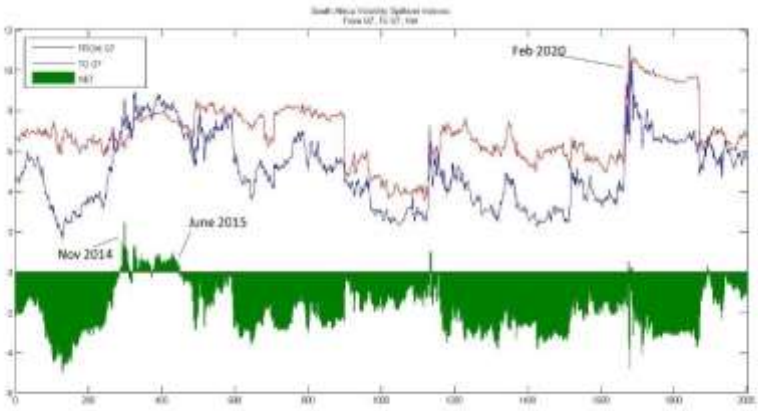
(b) China



(c) India



(d) Russia



(e) South Africa

India. The directional return spillover index from developed markets to India varies in the range of 5% and 10% until the outbreak of Covid-19 pandemic and makes a sudden jump to 12% level from 5% level as it is seen in the figure 1-(c), which is another evidence of contagion during Covid-19 pandemic. India is the net receiver of shocks from the developed markets like other emerging markets and maintains a persistent level of net return spillover. As for the net volatility spillover index, India shows almost an opposite pattern than that of China in the terms of its behavior until November 2018 and after November 2018, which can be seen in the figure 2-(b) and (c). Until November 2018, India was the net risk receiver from the developed markets with persistently positive net spillover values, and afterwards, India became a risk transmitter to developed markets for a few short periods of times. On the other hand, China was sometimes net risk receiver, sometimes net risk transmitter until 2018 and afterwards China has become persistently the net risk receiver form the developed markets, which is an opposite pattern than that of India. The net volatility spillover index also provides evidence of contagion from developed markets to India during Covid-19 pandemic. There is also contagion from developed markets to India depicted in the figure 2-(c) with a sudden jump to 10% level from 2% level during 2018 global economic downturn.

Russia. The return spillover from developed countries to Russia is quite persistent around 5% except that it makes a jump at the outbreak of Covid-19 pandemic as it is seen in the spillover patterns of other emerging countries. However, it lasts very short period of time for Russia while the high

spillover level last almost a year for other emerging markets. That is, the effect of contagion did not last as long as it did in other emerging markets. Russia is also the net receiver of shocks like other emerging markets at the return level with persistent negative values as shown in the figure 1-(d). As for the net volatility spillover index of Russia, it can be seen in the figure 2-(d) that there is contagion from developed markets to emerging markets at the outbreak of Covid-19 pandemic. In the period after the outbreak of pandemic, the net volatility spillover increases approximately by 2% on average, which indicates that there is an increase in the level of risk transmitted to Russia by the developed markets.

South Africa. The directional return spillover from developed markets to South Africa varies around 8% until the outbreak of Covid-19 pandemic and makes a relatively small jump compared to other emerging markets as it is seen in the figure 1-(e). Additionally, when the net return spillover index is examined in the figure 1-(e), there is no evidence of contagion at the return level unlike the other emerging markets during the pandemic. In terms of volatility spillover between South Africa and developed stock markets, South Africa is the net receiver of risk from developed markets except the time period between November 2014 and June 2015 in which it became the net risk transmitter to developed markets. This period coincides with the time period when re-branding of Johannesburg Stock Exchange was made with the purpose of positioning the exchange as the leading stock exchange and the provider of modern and accessible investment platform in Africa, which facilitated the greater integration with the world. During this one-and half year, South-Africa became the net transmitter of risk to developed markets, however, it shows a persistent and consistent pattern of negative net volatility spillovers for the rest of the sample with the exception of a few very short periods of positive net volatility spillovers. Over all the results support the general finding that South Africa is also the net receiver of risk from developed markets like other emerging markets.

CONCLUSION

The international transmission of shocks among financial markets has been one of the most important issues in finance due to its important implications on financial, investment and policy decisions. For instance, changes in the degree of spillovers between emerging and developed markets may adversely affect the expected benefits of international portfolio diversification. Therefore, it is important to gain insight into the degree of

interdependence among financial markets and understand how it changes over time. This paper examines the return and volatility spillover between emerging and developed markets with the directional and net spillover indexes proposed by Diebold and Yılmaz (2012). Even though there is a substantial literature on contagion and spillover among the international markets, majority of those studies focuses on the contagious effects of 1994 Mexican crisis, 1997 Asian crisis and the global crisis in 2008. In this study, the spillovers among selected markets are examined with a recent data set in order to gain insight into the current patterns and changes in the spillovers among the markets. Most prominent and general result is that the emerging markets are the net receivers of shocks rather than the net transmitter of shocks both at the return and volatility level. However, emerging markets, namely, Brazil, China and India are becoming the net transmitter of risk to developed markets during turmoil periods. Other significant finding is that directional and net spillover indexes provide evidence of contagion during Covid-19 global pandemic between emerging and developed markets.

Overall, the findings are in accordance with the finance literature providing strong evidence that there are certain transmission channels among countries which is more active during turmoil periods and limit the effectiveness of portfolio diversification during turmoil periods. Additionally, the study provides evidence of change in the direction of spillovers between emerging and developed markets during turmoil periods. Possible extensions of the study may involve the analysis of spillover patterns among G7 countries and countries in specific regions such as Latin America, Asia, Europe etc. in order to see whether the patterns reported in this study are common among emerging markets or not. These future studies may also contribute to the finance literature by answering to the question of if there is any similarity in spillover patterns between emerging and developed markets which is specific to the analyzed region.

REFERENCES

Akhtaruzzaman, M., Abdel-Qader, W., Hammami, H. & Shams, S. (2021). Is China a source of financial contagion? *Finance Research Letters*, 38, 1–13.

Baur, D. G. (2012). Financial contagion and the real economy. *Journal of Banking and Finance*, 36, 2680–2692.

Beirne, J., Caporale, G. M., Schulze-Ghattas, M. & Spagnolo, N. (2013). Volatility spillovers and contagion from mature to emerging stock markets. *Review of International Economics*, 21, 1060–1075.

Bekaert, G., Harvey, C. R. & Ng, A. (2005). Market integration and contagion. *The Journal of Business*, 78, 39–69.

Chancharoenchai, K. & Dibooglu, S. (2006). Volatility spillovers and contagion during the Asian crisis evidence from six southeast Asian stock markets. *Emerging Markets Finance and Trade*, 42, 4–17.

Collins, D. & Gavron, S. (2004). Channels of financial market contagion. *Applied Economics*, 36, 2461–2469.

Corsetti, G., Pericoli, M. & Sbracia, M. (2001). Correlation Analysis of Financial Contagion: What One Should Know Before Running A Test. Report 882. Yale University.

Devereux, M. B. & Yu., C. (2020). International financial integration and crisis contagion. *Review of Economic Studies*, 87, 1174–1212.

Diebold, F. X. & Yılmaz, K. (2012). Better to give than to receive: Predictive directional measurement of volatility spillovers. *International Journal of Forecasting*, 28, 57–66.

Dungey, M., Fry, R., Gonzalez-Hermosillo, B. & Martin, V. (2004). Empirical Modeling of Contagion: A Review of Methodologies. IMF Working Paper 04/78. Washington: International Monetary Fund.

Edwards, S. & Susmel., R. (2001). Volatility dependence and contagion in emerging equity markets. *Journal of Development Economics*, 66, 505–532.

Frankel, J. A. & Schmukler., S. L. (1997). Crisis, Contagion, and Country Funds: Effects on East Asia and Latin America. Working Paper PB96-04. Pacific Basin Working Paper Series

Forbes, K. J. & Rigobon, R. (2002). No contagion, only interdependence: Measuring stock market comovements. *The Journal of Finance*, 57, 2223–2261.

Gebka, B. & Serwa D. (2006). Are financial spillovers stable across regimes? Evidence from the 1997 Asian crisis. *Int. Fin. Markets, Inst. and Money*, 16, 301–317.

Goldfajn, I. & Baig, T. (2000). The Russian Default and the Contagion to Brazil. Working Paper https://ssrn.com/abstract=224269. SSRN. 35

Han, K. C., Lee, S. H. & Suk., D. Y. (2003). Mexican peso crisis and its spillover effects to emerging market debt. *Emerging Markets Review*, 4, 310–326.

Horta, P., Lagoa, S. & Martins, L. (2016). Unveiling investor-induced channels of financial contagion in the 2008 financial crisis using copulas. *Quantitative Finance*, 16, 625–637.

Imbs, J. (2004). Trade, finance, specialization, and synchronization. *The Review of Economics and Statistics*, 86, 723–734.

Jung, R. C. & Maderitsch, R. (2014). Structural breaks in volatility spillovers between international financial markets: Contagion or mere interdependence? *Journal of Banking and Finance*, 47, 331–342.

Kaminsky, G. L. & Reinhart., C. M. (1999). The twin crises: The causes of banking and balance-of-payments problems. *The American Economic Review*, 89, 473–500.

Kim, B.-H., Kim, H. & Lee, B.-S. (2015). Spillover effects of the U.S. financial crisis on financial markets in emerging Asian countries. *International Review of Economics and Finance*, 39, 92–210.

Kenourgios, D., Asteriou,D. & Samitas, A. (2013). Testing for asymmetric financial contagion: new evidence from the Asian crisis. *The Journal of Economic Asymmetries*, 10, 129–137.

Koop, G., Pesaran, M. H. & Potter, S. M. (1996). Impulse response analysis in nonlinear multivariate models. *Journal of Econometrics*, 74, 119–147.

Leung, H., Schiereck, D. & Schroeder, F. (2017). Volatility spillovers and determinants of contagion: Exchange rate and equity markets during crises. *Economic Modelling*, 61, 169–180.

Mathur, I., Gleason, K. C., Dibooglu, S. & Singh, M. (2002). Contagion effects from the 1994 Mexica peso crisis: Evidence from Chilean stocks. *The Financial Review*, 37, 17–34.

Morales, L. & Andreosso-O'Callaghan, B. (2012). The current global financial crisis: Do Asian stock markets show contagion or interdependence effects? *Journal of Asian Economics*, 23, 616–626.

Pesaran, H. H. & Shin, Y. (1998). Generalized impulse response analysis in linear multivariate models. *Economic Letters*, 58, 17–29.

Rigobon, R. (2019). Contagion, spillover, and interdependence. *Economia*, 19, 69–100.

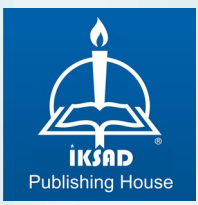
So, M. K. P., Lam, K. & Li, W.K., (1999). Forecasting exchange rate volatility using autoregressive random variance model. *Applied Financial Economics*, 9, 583–591.

Suliman, O. (2011). The large country effect, contagion and spillover effects in the GCC. *Applied Economics Letters*, 18, 285–294.

Syllignakis, M. N. & Kouretas, G. P. (2011). Dynamic correlation analysis of financial contagion: Evidence from the central and eastern European markets. *International Review of Economics and Finance*, 20, 717–732.

Wang,G.-J., Xie, C., Jiang, Z.-Q. & Stanley, H. E. (2016). Extreme risk spillover effects in world gold markets and the global financial crisis. *Journal of International Money and Finance*, 46, 55–77.

Xiao, L. & Dhesi, G. (2010). Volatility spillover and time-varying conditional correlation between the European and us stock markets. *Global Economy and Finance Journal*, 3, 148–164.


İKSAD
Publishing House