

-COMPILATION ARTICLE-

E-LEADERSHIP AND INNOVATION PROCESS IN VIRTUAL TEAMS*

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Abstract

Rapid developments in the field of informatics have significantly changed the traditional management style of enterprises. Depending on the speed and level of technological development in the sectors, many services are supplied through interrelated virtual teams that increase the value of the services produced. The e-leader fulfils a number of functions such as coordinating and directing the work and employing innovative processes without direct, face-to-face interaction with the managers and employees in the sectors where the supply units are located. In addition to the technological and organisational challenges in these processes, the e-leader has to form virtual teams and involve the team employees in the innovation process, and coordinate the issues related to the external variables as well as the internal variables of the business. In this research, it is aimed to examine the roles and challenges faced by the e-leader in fulfilling the functions of an enterprise with virtual teams and accelerating the innovation process. Within the framework of this purpose, the way e-leaders fulfil their roles in the health sector, which uses virtual teams and supply chains until the health services reach the patient completely, has been selected as an example and analysed within the framework of literature data. In order to create the conceptual framework of the study, studies on the differences in the traditional management understanding of businesses and e-leadership understanding were utilised. The efforts of the e-leader in managing relations with stakeholders in the electronic environment and overcoming the internal and external problems of the enterprise are discussed thematically within the framework of the data obtained from written and printed documents. The main problems that the e-leader has to deal with in the innovation process are analysed in the way of implementing strategies such as coordinating, motivating and directing the work of employees to innovation without face-to-face interaction with the teams in the virtual supply chain. It was revealed that the acceleration of innovative practices in an enterprise is a process that depends on the successful implementation of the e-leader's roles. As a result, it is important for the e-leader to create virtual teams, to ensure harmony with other team members, to direct, motivate and inspire them to serve the purpose of the business, and to break the resistance to innovation. The idea of innovation is a process that starts in the minds of employees and emerges as design and implementation. The leader must manage this process effectively. When the process is managed well, it is predicted that team employees will accelerate their innovative thinking and orientation towards innovation. E-leader's utilisation of the psychological capital of the employees in the

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innovation process can facilitate their potential creativity. In this context, establishing sincere and natural communication with team employees, informing them, valuing their ideas and thoughts, supporting and rewarding innovations that are applicable and have corporate value, and including practices to increase tolerance and loyalty among team employees can increase the participation of teams in the innovation process towards corporate goals.

Keywords: *Virtual teams, e-leadership, innovation, supply chain, psychological capital.*

JEL Codes: *M15, M19, O32.*

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SANAL EKİPLERDE E-LİDERLİK VE İNOVASYON SÜRECİ²

Öz

Bilişim alanındaki hızlı gelişmeler, işletmelerin geleneksel yönetim tarzını önemli ölçüde değiştirmiştir. Sektörlerdeki teknolojik gelişimin hızına ve düzeyine bağlı olarak, üretilen hizmetlerin değerini artıran birbiriyle ilişkili sanal ekipler aracılığıyla pek çok hizmet tedarik edilmektedir. Tedarik birimlerinin yer aldığı sektörlerdeki yöneticiler, çalışanlarla doğrudan, yüz yüze etkileşime girmeden işi koordine etmek, yönlendirmek ve inovatif süreçleri işe koşturmak gibi bir dizi işlevi, e-lider yerine getirmektedir. E-lider, bu süreçlerde teknolojik ve örgütsel zorlukların yanında sanal ekipler oluşturmak ve ekip çalışanlarını inovasyon sürecine katmak, işletmenin iç değişkenlerinin yanı sıra dış değişkenleriyle ilgili konuları da eş güdümlü ele almak durumundadır. Bu çalışmada, sanal ekiplerle bir işletmenin işlevlerini yerine getirmede ve inovasyon sürecini hızlandırmada e-liderin yerine getirmesi gereken rollerin ve karşılaştığı güçlüklerin incelenmesi amaçlanmaktadır. Bu amaç çerçevesinde, sağlık hizmetlerinin hastaya eksiksiz ulaşmasında sanal ekipler ve tedarik zincirleri kullanan sağlık sektöründe, e-liderin rollerini gerçekleştirme biçimi örnek olarak seçilmiş, literatür veriler çerçevesinde ele alınıp incelenmiştir. Çalışmanın kavramsal çerçevesini oluşturmak için, işletmelerin geleneksel yöneticilik anlayışı ve e-liderlik anlayışındaki farklılıklara ilişkin yapılan çalışmalardan faydalanılmıştır. E-liderin elektronik ortamda paydaşlarla ilişkilerini yönetmede, işletmenin içsel ve dışsal sorunlarını aşmada gösterdiği çabalar, yazılı ve basılı dokümanlardan elde edilen veriler çerçevesinde tematik olarak ele alınmıştır. E-liderin inovasyon sürecinde baş etmesi gereken temel sorunların, sanal tedarik zincirindeki ekiplerle yüz yüze etkileşime girmeden, çalışanların çalışmalarını koordine etme, motive etme ve yeniliğe yönlendirme gibi stratejileri uygulama biçimi analiz edilmiştir. Bir işletmede yenilikçi uygulamaların hız kazanmasının, e-liderin rollerini başarıyla uygulamasına bağlı bir süreç olduğu ortaya konmuştur. Sonuç olarak e-liderin sanal ekipler oluşturması, diğer ekip çalışanları ile uyumunun sağlanması, işletmenin amacına hizmet edecek şekilde yönlendirmesi, motive etmesi ve onlara ilham kaynağı olması, yeniliğe karşı direncin kırılması açısından önem kazanmaktadır. İnovasyon fikri çalışanların zihninde başlayan, tasarım ve uygulama olarak ortaya çıkan bir süreçtir. E-liderin bu süreci etkin bir şekilde yönetmesi gerekir. Süreç iyi yönetildiğinde ekip çalışanlarının yenilikçi düşünmeye ve yeniliğe yönelmelerinin hız kazanacağı öngörülmektedir. E-liderin inovasyon sürecinde, çalışanların psikolojik sermayelerinden yararlanması, onların potansiyel yaratıcılıklarını ortaya çıkarması işini kolaylaştırabilir. Bu bağlamda ekip çalışanları ile samimi ve doğal iletişim kurma, bilgilendirme, onlardan gelen fikir ve düşüncelere değer verme, uygulanabilir ve kurumsal değeri olan yenilikleri destekleme ve ödüllendirme, ekip çalışanlarının kendileri arasında hoşgörünün ve bağlılığın artırılmasına yönelik uygulamalara yer vermesi, ekiplerin kurumsal hedeflere yönelik inovasyon sürecine katılımını artırabilir.

² An extended Turkish abstract is attached at the end of the article.

Anahtar Kelimeler: *Sanal ekipler, e-liderlik, inovasyon, tedarik zinciri, psikolojik sermaye.*

JEL Kodları: *M15, M19, O32.*

“Bu çalışma, Araştırma ve Yayın Etiğine uygun olarak hazırlanmıştır.”

1. INTRODUCTION

Due to the demands for rapid change, traditional leadership in organisations has had to be replaced by e-leadership. In the literature, an e-leader is a person who understands the latest information and technologies, takes advantage of the conveniences offered by these technologies, psychologically prepares employees and brings about a change in their productivity (Zheng and Chen, 2017). In this context, the function of e-leaders is to create environments that will reveal the creativity of employees by establishing constructive and sincere, inclusive working conditions. It is that when employees feel safe and experience a sense of belonging, they will become more creative. The establishment of virtual teams, comprising employees from diverse business lines or companies, is instrumental in facilitating the realization of work or organizational objectives. Furthermore, the provision of effective communication environments within virtual teams is paramount to ensure seamless collaboration (Ocker et al., 2011). Essentially, in the internet age, e-leadership, or electronic leadership, revolves around managing information. The primary responsibility of a leader is to integrate the organization's resources through the utilization of information technologies, to foster continuous employee motivation, and to ensure the economic achievement of organizational goals (Tang et al., 2017). It is an irrefutable fact that no leader can achieve anything alone. The creation of a sense of acceptance and trust among all members of an organization is imperative for the effective utilization of their talents and creativity. This dynamic interaction has implications for the e-leader's vision, leadership style and behaviour, as well as the working environment and the manner in which employees carry out their duties (Avolio et al., 2000). The prevailing paradigm of leadership, in which these processes are executed through face-to-face interactions, has undergone a transition to e-leadership, which is typically characterized by the absence of physical interaction with followers (Trivedi and Desai, 2012). A style of e-leadership has emerged, characterized by communication and information gathering through information technologies, as well as interaction with colleagues solely through these platforms (Avolio et al., 2014). The advent of digitalization and technological development in various sectors has precipitated the emergence of supply chains. The emerging supply system has given rise to a novel form of e-leadership management style, characterized by its unifying, communicative and expeditious nature. This e-leadership management style finds application in piecemeal teams or supply systems (Snellmann, 2013). According to Avolio, Sosik, Kahai, and Baker (2014), an e-leader is anticipated to "effect changes in individuals' attitudes, emotions, thoughts, behaviors, and performances, and to conduct an embedded social influence process in both nearby and distant contexts through information technologies" (s.107).

In this context, the function of the e-leader is to influence employee behaviour, to influence the psychology of employees and other variables, to direct them to make improvements in existing products, services, processes or business models, to develop new and different solutions and to inspire them. In this context, the leader has to create a corporate culture that is open to change, suitable for change, provide an environment for the formation of new ideas, support research and development activities, make in-

depth analyses and engrave the process of creating technological change in the minds of his employees. With the awareness that change is a time-consuming phenomenon, it has to focus on its goal patiently and persistently in order to become innovative. In the innovation process to be carried out in the corporate context, the situation can be accelerated by the interactions to be carried out at the level of organisational relations and at the level of individual employees. In the innovation process to be carried out in the corporate context, the situation can be accelerated by the interactions to be carried out at the level of organisational relations and at the level of individual employees. In the Internet age, e-leadership is to enable employees to create innovation based on the use of performance and creativity by using information technologies. Because innovation is the main tool for firms to gain competitive advantage in knowledge, business, product, process, organisation and marketing (Hou, 2018). In a comparative study conducted by Naktiyok (2006) on leadership characteristics, the leadership characteristics that virtual and traditional leaders attach importance to were compared. As a result of the research, it was concluded that traditional leaders are business-oriented while virtual leaders are people-oriented. It is observed that virtual leaders give more importance to leadership characteristics such as empathy, risk taking, self-confidence, creativity, knowledge sharing, flexibility, visioning and global thinking than traditional leaders.

The communication established in the virtual environment has been shown to facilitate the resolution of issues arising from the variables inherent to employees working within virtual teams or supply chains. Because as virtual teams spread over large areas, interactions between geographically dispersed teams are sometimes limited and continue to be a source of concern in organizations and companies. Team members need to be motivated to utilise available resources and complete activities. Self-confident individuals are more motivated to achieve their goals. According to Zhang and Yao (2021), 'the e-leader derives his/her power of influence from the trust-based relationship he/she builds with virtual teams. According to Malhotra, Majchrzak and Rosen (2007), who examine e-leadership, the leader's success depends on building trust by using information technologies, providing diversity in a clear and understandable way and making sure that it is appreciated, managing virtual work in the life cycle with an effective monitoring method, and progressing virtual teams within the framework of technology usage competence. Consequently, ensuring visibility among team members and within the team itself enhances the team members' substantial benefits from collective efforts. The leader can contribute positively to improving the quality of the service by "coordinating the teaching services to be provided to the teams, providing the necessary teaching tools and materials, and adjusting the teaching activities according to time and needs" (Beydoğan and Beydoğan, 2018: 2536). The ability to use the existing facilities in place and to achieve the desired results depends to a large extent on understanding the needs of the employees in the teams and mobilising them by reacting appropriately to their needs.

In an e-leader supported application, the e-leader is expected to act in a way that will mobilize the virtual teams and direct the behaviors of the team members. In this context, it is very important for the e-leader to motivate the virtual team members

sufficiently. As it is known, motivation is a broad concept that includes human-related wishes, desires, needs, impulses and interests. According to Maslow's hierarchy of needs, 'the secondary desire to achieve success motivates individuals, energises them and directs their behaviour towards certain goals (Argon and Eren, 2004). Hence, the perpetuation of employee motivation is directly linked to their level of satisfaction. In Herzberg's research, it's stated that "when a person enjoys their job, achieves success, takes on responsibility when recognized, progresses through promotions, and feels content with their situation, satisfaction ensues. In the opposite case, "although there is no dissatisfaction / dissatisfaction, the state of being satisfied disappears" (Aşan, 2001: 230). While this perspective faces criticism, satisfaction is attained through motivating factors. If a leader aims to motivate their employees, they should prioritize addressing these motivating factors.

The knowledge of a leader who wants to be successful is his/her own equity capital. It falls upon the e-leader to discern where and how to acquire knowledge and when and where to apply it. It is imperative for the e-leader to identify the necessary knowledge, seek it out, and make diligent efforts to obtain it. According to Drucker (2010), a manager or e-leader must focus on tasks at hand, trust subordinates, maintain a composed and risk-aware behavior, while simultaneously fostering encouragement, expertise in the field, receptivity to alternative ideas, simplification of complex issues, and acknowledgment that nothing is immutable or certain. Nevertheless, possessing these characteristics does not guarantee the success of an e-leader. E-leader's analysing the life values of his/her environment brings success (Gladwell, 2009). When leadership types are compared according to the theory of leader characteristics, it becomes important which one(s) of transformational leadership, shared leadership, transactional leadership characteristics the leader exhibits in the process. The idealisation-based influence, inspirational motivation, intellectual stimulation and individualised attention of leaders with transformational leadership characteristics deeply affect employees. In addition to the roles played by the transformational leader, the E leader's interaction with the team members, giving confidence to the members and showing commitment to the contracts he/she has made gives him/her a different power.

Leaders with transformational leadership traits have a profound effect on employees through their idealization-based influence, inspirational motivation, intellectual stimulation and individualized attention. In e-leadership, the trust that the leader gives to the members in his/her interaction with the team members and his/her efforts to adhere to the contract he/she has made are important. Charismatic leadership embodies the exchange of ideas with team members, fostering trust and respect. It involves sharing risks comprehensively and modeling in-spirational, motivational leadership. This style exhibits a dedication to "goals", "effective communication", "willingness", "enthusiasm", "intellectual stimulation", "rationality" and "problem-solving". Additionally, it includes providing personal attention, mentoring, listening, and empowerment behaviors, reflecting a personalized approach. Studies indicate that shared leadership encompasses transformative," transactional"," directive", "individual empowering", "team empowering", and "deterrent aspects" (Fausing et

al., 2015; Ocker et al., 2011). The innovation process requires more than E leadership to possess and apply more of the existing leader characteristics.

2. METHODOLOGY FOLLOWED IN THE RESEARCH

The research is a review study aiming to synthesise the studies on the role and functions of e-leader in the innovation process through a theme. For this purpose, domestic and foreign literature has been reviewed, documents have been examined, and the managerial functions, roles and the difficulties faced by the e-leader in fulfilling his/her roles have been revealed depending on the changing management approach in enterprises. In the light of the literature, the strategies and roles played by e-leaders in involving their employees in the innovation process are described. In this context, the relations and interaction process of the e-leader with stakeholders in the electronic environment in enterprises are discussed. The characteristics obtained from written and printed documents, such as the continuity of the work, the distance of the line of work from the centre, the frequency of interaction between employees, the way of interaction, the sense of belonging to the workplace, were systematically analysed and synthesised.

3. VIRTUAL TEAM BUILDING AND E-LEADERSHIP

A virtual team is a group of people located geographically apart who collaborate, share information, coordinate, and use technological tools to communicate using various digital communication tools such as instant messaging and video conferencing. These employees may hail from the same organization or different ones, and they might be located nearby or in geographically distant regions. Team members might work in the same time zone or across different ones. In classic teams, there is a strong preference for frequent face-to-face meetings. The reliance solely on technology for team interactions is quite limited in this setup. Therefore, team members prefer to communicate using various modes, whether electronically or face-to-face. Managing such teams parallels managing any other team. In addition to effectively managing such teams and employing communication strategies and techniques, the leader must transform the team into a social structure, fostering team spirit, and cultivating a sense of belonging among team members.

The rapid evolution of technology and shifting needs have rendered e-leadership and the formation of virtual teams unavoidable. The formation of teams is closely linked to the level of virtuality, which can be gauged by factors such as team distribution, workplace flexibility, and the array of applications utilized (Chudoba et al., 2005). According to Bell and Kozlowski (2002), virtual teams may vary in terms of time distribution, geographical dispersion, life cycle, and roles. Hence, there exists considerable -flexibility in structuring virtual teams. E-leaders must not overlook these characteristics of virtual teams when devising their strategies. In a study on leadership conducted by Avolio et al. (2014), it is found that there is a positive relationship between the behaviors of the e-leader and the levels of trust building, mutual commitment and team performance. In some studies, on leadership have found

a negative relationship between virtuality and team communication, coordination, trust among team members, taking responsibility and team performance (Cramton and Webber, 1999; Gibson and Cohen, 2003; Peñarroja et al., 2013).

4. E-LEADER'S TECHNOLOGY REQUIREMENT IN VIRTUAL GROUPS AND SUPPLY CHAINS

In many sectors worldwide, including Turkey, virtual teams play crucial roles in various service areas. These teams' function as interconnected chains, adapting to the technological advancements within their respective industries. Advancements in informatics enable these supply chain teams to virtually collaborate and deliver services through specialized software. In Turkey, advancements in industrial and service sectors, such as health, defense, and aviation, have spurred the growth and development of virtual teams. The leader's interaction with virtual teams, distributing and coordinating tasks, providing continuous and regular feedbacks, appreciating and rewarding the employees in the virtual team in a way to motivate them, being tolerant in their behaviours due to cultural differences depend on the effective use of technology. Because the only way to communicate depends on the effective use of technology.

The integration of activities across enterprises operating at different points within the service domain, aimed at fulfilling customer needs in line with the overarching objective, is referred to as the "supply chain" (Scott and Westbrook, 1991). This situation imposes a number of new tasks on the E- leader in the innovation process. It requires the e-leader to use technology at the highest level in communication. Because the units in the supply chain provide continuous support especially with telecommunications, electronic systems, system software, manufacturing and parts production. Traditionally, sectors conducted their business by dispatching experts in the relevant field for the services they provided. However, today, these services are delivered in the form of virtual team-based operations. Companies structured in this manner possess the agility to serve and support their customers more swiftly and cater to a larger client base. Such systems are intricate, necessitating management through various techniques, supported by different levels of interactivity, potentially employing diverse methods and approaches. They entail interactions between experts and users facilitated by the establishment of multimedia communication links featuring audiovisual capabilities.

5.INDUSTRIES REQUIRING VIRTUAL GROUPS AND SUPPLY CHAINS

In many developed sectors, the supply chain method is used to coordinate the flow of services from the producer to the consumer, goods, services, information and financing in a timely and timely manner. This process covers the delivery of goods and services in the process from the receipt of the order from the consumer to feedback. Some of these services are carried out in co-operation with different sectors. For e- leader, the employees in these supply chains carry out activities as virtual

groups. Provision of health services is an organization that requires cooperation and establishment of supply chains with different sectors with different characteristics. In this study, the situation is explained based on the example of the health sector in Turkey. In the operation of a supply chain in this field, the tasks and roles of the e-leader are clearly seen. E-leader in the health sector has to procure from virtual teams in a wide range of areas from medical devices to pharmaceutical production and distribution, from maintenance services to technology software companies, from laboratory equipment to test units. As it is known, health services are complex in nature, based on specialization, involving experts from different sectors as well as professionals in the field of health, where there is interdependence and professionals from different fields of expertise need intensive cooperation with each other (Üşümüş, 2012). "The supply chain, as is known, includes the steps in the process until a product or service is delivered from the producer to the end user" (Turan, 2018:1027). E-leader is a systematic manager who makes strategic decisions to improve the long-term mission performance of all companies in the interconnected supply chain, including the functions, plans, and plans of the companies' businesses within the process" (CSCMP, <https://cscmp.org/sites/>: 06.06.2016.2016). The primary goal of every company within the supply chain is to ensure the provision "of the right amount", "at the right time", "in the right place", "in the right quantity", "at the right cost", and "under favorable conditions". In the healthcare sector, numerous suppliers across segments such as medical devices, pharmaceuticals, stocking, and distribution collaborate as teams to ensure the seamless execution of this process. Each sector manager must effectively fulfill their role as an e-leader. For instance, the e-leader in the pharmaceutical sector must oversee a chain of raw material producers, drug manufacturers, primary distributors, dealers, public and private pharmacies, and customers within the pharmaceutical supply system, maintaining effective communication with each of them. For instance, "the pharmaceutical supply system encompasses the efforts of pharmaceutical manufacturers and the pharmacy association, along with grocery stores and other outlets, to facilitate the flow of products between chain pharmacies, hospitals, and regional pharmacies" (Tengilimoğlu and Yiğit, 2013:34). For the manager, the process of 'procurement' of the tools and equipment used in health services means more than a traditional 'classical purchasing process'. Because "procurement is a process that requires to be handled within the scope of supply chain management" (Acar and Yurdakul, 2013:2). Furthermore, stocking, an integral component of the supply chain, demands vigilant monitoring and management by the stock tracking unit (Semerci, 2011). E-leaders may face technological and organizational problems in these processes.

6. E -TECHNOLOGICAL CHALLENGES OF THE LEADER

In team work, the leader often experiences problems in technology-supported communication. Problems are reflected and described in their physical dimension, while the human and emotional aspect of the work is insufficient. In this sector, values are created through chained teams. When one team's view of the problem differs from the other team's view of the problem and the meaning, they attribute to it, the value perception of the sector is affected. It is a very difficult process for each virtual team

in the sector to create online trust and overcome certain difficulties. Because virtual team employees lack face-to-face communication. Only online communication limits the naturalness and participation among team members. The task of creating virtual teams and ensuring trust between teams falls to the e-leader. The foundations of the first impression of trust between the e-leader and the teams are laid in the first online communication. The impressions that emerge here form the direction and source of the intensity of the discussion. According to Sivunen and Valo (2006), trust has both a direct and mediating effect on the productivity of the team members. In this case, the e-leader's use of a warm virtual working mode in his/her work and the adoption of an online communication based on close, close relationships with team members can facilitate interaction (Sivunen and Valo, 2006). In warm virtual work environments, the e-leader's inclination towards synchronous, fluid, and actively participatory communication methods can bolster team members' efforts towards a shared objective. While team members appreciate the use of technology for regular communication, face-to-face meetings are favored when sensitive decisions need to be made. Some of the problems faced by the e-leader can be improved by improving or updating the technology. Ensuring coordination between independent teams, building trust among them, creating common mental models and managing potential conflicts require more effort for the e-leader than in a traditional team environment (Liao, 2017). The e-leader has to find new ways of organizing virtual teams in a human scale.

7. E - LEADER'S ORGANIZATION PROBLEMS

It is not possible to prepare for an innovative transformation into effective teamwork without effective communication in the organization, which means combining independent parts into a functioning mechanism. The e-leader is based on solving this problem using technological tools. In this process, the e-leader needs some information about the people who will take part in the organization. They shape the organization based on how employees work and are managed. The e-leader's understanding of the identity of team members is pivotal for communication. They decide whom to communicate with and how to establish a shared understanding with each team member they engage with. One challenge faced by leaders in building virtual teams is the lack of sufficient knowledge about the identity and status of team members. This presents a time constraint for the leader. Time-sensitive interactions with team members can help mitigate trust issues within the team. However, a strong sense of collective identity within the team may hinder effective communication among team members. The identities of team members can contribute to the establishment of shared meaning and a sense of unity among team members. In the absence of shared meaning and a collective sense of belonging, sharing information and creating common understanding, even on seemingly straightforward matters, may prove challenging. Team identity and competencies can indeed be established through shared interests, knowledge, and terms with common meaning. Team identity is thereby regarded as a competency rather than a commitment. Teams typically prioritize task accomplishment over fostering a sense of identity. However, team members can cultivate a collaborative environment where they share current

information about their colleagues and developments in their respective areas of expertise. E-leadership embodies traits such as open communication, expertise, fairness, and goodwill (Hakkinen, 2012). E-leaders cooperate with his/her stakeholders to clarify his/her goals, it establishes effective communication, receives instant feedback establishes norms, and creates trust based on mutual respect (Jawadi et al., 2013). Because the leader's trust-based sharing with his stakeholders in virtual environments affects the interaction positively (Tsai et al., 2014).

E-leaders can organize and evaluate the activities of employees within the organization in evaluation:

The purpose of the team: Who will be assigned to the team, sustainability of the task, level of realization of the work.

Functioning of the team: The effectiveness of the team can be evaluated based on several factors, including the distribution of team members according to their skills and expertise, identification of training needs, selection and assignment of tasks among team members, the level of engagement and commitment of members to their roles and responsibilities, their interest in the work area, and the availability of expertise within the team.

The desire of the team to succeed: Assigning tasks based on seniority and access to critical points can contribute to the team's efficiency in reaching its goals.

It is very important for the e-leader to understand and manage the emotional process that the team members are in and to effectively use and activate the psychological capital that constitutes the most fundamental power of human capital within the organization. It requires the e-leader to produce solutions that are appropriate for the working conditions and working environment of the group in which he is a member of, for the problems of each employee in independent supply groups. Virtual teams are a group of people who need to be together, built on working together. Unfortunately, technology alone is insufficient to solve organization problems.

8. E-LEADER'S USE OF PSYCHOLOGICAL CAPITAL AND INNOVATION PROCESS

In virtual groups, e-leadership begins with the leader explaining his/her own vision. He/she uses technology as a tool to explain his/her thoughts and achieve his/her goals. He/she demonstrates the competence to direct human resources effectively and efficiently. If the process is working well, if a new product emerges and is marketed, if there is harmony among team members, if the feedback from stakeholders is positive, if the problems that arise are solved in place and on time, if innovation and creativity are reflected in the R&D process, the e-leader plays his role in the innovation process effectively. Based on the fact that innovation is a process, he/she uses e-leadership in a way that will improve the process. He/she believes that every innovation that takes place will reach the desired level within the integrity of the

organization. He/she directs team members to work in a collaboration based on persuasion rather than coercion, to create decision-making mechanisms that will create mutual positive dependency in teams. He/she believes that employees will reach their peak of creativity when the appropriate environment is provided, and he/she does it. Ultimately, the transfer of ideas to the employees in the team by my leader further triggers the creativity of the employees and encourages their innovative efforts (Afsar et al., 2014).

It should not be forgotten that innovation is a product of imagination; it is a process of taking risks, deviating from the status quo and thinking differently, linking reflexes and skills, and a process in which new ideas emerge and turn into implementation skills. Therefore, the individual's mental creativity is an important factor in this process. Having a creative mental state is influenced by the individual's environment, freedom to work and higher-level needs. E- leadership is to transform the innovative tendency of employees into a potential innovation by creating a creative environment that encourages innovative behaviour. According to the principle of reciprocity in social exchange theory, when the organisation supports employees at work, employees are more likely to work more and return to the organisation. In order for an employee to achieve the pursuit of self-worth, it is beneficial to develop positive roles and behaviours in which basic needs are met and role behaviours such as the innovation process are encouraged.

A conscious e-leader can effectively communicate digitally with his team members. Employees' psychological capital can increase their emotional attachment to leaders. Innovation business and operational behaviours are observed at each stage of the innovation development process (Messman and Mulder, 2012). It can inspire them to engage in innovative behaviors' e-leaders 'appropriate and effective use of employees' psychological capital increases the success of the e-leader and the organization. In order to achieve success, e-leaders should increase interaction with employees, share common goals, make actions understandable, and gain understanding and support from them. When the employees form emotional attachment to the leader, this situation facilitates the functioning of the organization significantly when the employees in the organization have the desire to work together.

Emotional commitment is a commitment to organizational principles, a commitment that will lead the employee to evaluate what the loss and cost to the organization will be if the employee leaves the organization. Effective communication strengthens the relationship between the leader and the organization and develops a sense of duty and responsibility among team members. The management style of the e-leader influences and changes the personal beliefs and perspectives of both the employees and the leader. To the extent that the relationship with the leader within the organization is understood by the employees, it positively affects their relationship with the leader (Kang et al., 2019).

The e-leader's trust in the employees of the organisation encourages the development of employees (Jia et al., 2022). In this context, the e-leader can appoint managers with

high performance, create effective communication channels for the organisation and create a comfortable and friendly organisational climate.

When a leader fulfils the needs of his/her employees, he/she can ensure that the employees feel excellent interest and trust towards the leader. This process can increase employee recognition and emotional commitment within the organization and increase the values of the organization. It can facilitate employees to direct their attention and interest to their work, and it can positively affect employees' perceptions of organizational support. In a study conducted by Abdullatif et al. (2016), external motivation plays an important role in the emergence of behaviours towards the realisation of innovation. Because affective commitment influences the intrinsic values on the behaviors of employees and leads to psychological cognition knowledge related to affective commitment. Emotional commitment in employees with high levels of performance can translate into positive actions towards innovative processes and less feeling of work and life pressures.

9.DISCUSSION

In order for the e-leader to initiate the innovation process in the enterprise, he/she must first establish the organizational structure on an innovative understanding. It is decisive that the e-leader is interested in innovation, encourages creativity and innovation, and uses his/her power and authority in this sense. The e-leader's setting out his/her goals in a dynamic, assertive, open to change and innovative proactive manner can contribute to the innovation process. When an e-leader does not clearly determine a goal in the business process and is not sensitive to emotions and sensitivities, he/she may experience serious problems in creating corporate values. When an e-leader does not create a vision for global innovations and does not share the information required by the vision, his/her ability to influence the team weakens. Encouraging employees to communicate their ideas and contribute to communication is very important. When a leader provides a suitable environment, employees have the opportunity to express their ideas freely and use their creativity. Natural, sincere inclusive behavior, open and positive communication increase employees' willingness to express and share their ideas. An environment with such practices can strengthen the beneficial effects on innovative thinking and innovative behavior of employees in the workplace. Wolor et al. (2020:1106), who conducted a study on motorbike employees, concluded that "e-learning has a positive effect on virtual leadership and work-life balance, focus on work". It can be said that the e-leader's focus on virtual training of employees and observing the work-life balance of employees can positively affect their performance. The problems and solutions that the e-leader will face are more complex and multifaceted than the classical leadership. The success of the e-leader in overcoming these problems, using the psychological capital of the employees, establishing human-oriented strategies and making some positive decisions in favour of the employees will contribute to both the successful implementation of the strategies and the achievement of organizational goals.

10. CONCLUSION

In this study, the relationship between e-leadership, which requires going beyond the competencies observed in all other types of leadership, virtual groups and supply chain applications that have emerged in sectors with today's information technology, and the concept of innovation, which is a result of human curiosity and the effort to search for the better, has been revealed. Innovation is a process, but it is a human activity that develops in suitable environments and conditions. It is not a direct result of creative thinking (Levitt, 2002). However, creative thinking turns into design, knowledge and application as long as it is provided with the appropriate environment and encouragement. In this process, the e-leader has important responsibilities to reveal the potential power of the employees.

Those directly related to innovation can be expressed as the e-leader creating an environment to support innovative ideas and initiatives, recording the ideas that emerge, ensuring that ideas are discussed in detail, providing incentives and support for the realization of design and thought to the extent of available opportunities, and making efforts to turn them into a product. In this context, it is clear that there is a relationship between the behaviors of the E- leader and the behaviors of the employees to exhibit innovative behaviors and to tend towards innovative innovations. The free environment provided by the E- leader can increase the free thinking and creative thinking outputs of the employees. E- leader's increasing mutual commitment among employees positively affects self-confidence, organizational belonging and creative thinking. Reducing the power distance between the leader and the employee may increase the tendency of the employees to feel self-confidence, to take responsibility and risk, and to use the ability to take risks. When employees exhibit a high level of affective commitment, they feel less work and life pressure, maintain a positive outlook on the environment and workplace, and exhibit a more remarkable ability to influence their work environment (Zhang and Liu, 2022).

Presently, communication technologies streamline information exchange and knowledge management, providing avenues to oversee the activities of all team members. Virtual teams and e-leadership are prevalent in sectors reliant on knowledge rather than labor, especially in contexts necessitating global work networks. Time zones, geographical dispersion, cultural diversity, organizational life cycles, and varied roles constitute key components of e-leadership in global settings.

It's evident that traditional management, reliant on face-to-face communication for influencing employees and fostering trust, faces limitations when transitioning to technology-supported communication. Consequently, managing virtual teams demands greater effort and necessitates the adoption of distinct techniques and approaches compared to managing face-to-face teams. At the same time, employees working in virtual teams are groups that prioritize conducting their interactions in this context because they have the same culture, expectations and psychological needs as traditional teams.

E-leaders encounter various challenges when interacting with virtual teams, spanning from financial constraints and recruitment hurdles to managing working hours, stakeholder expectations, employee training, and overcoming reluctance to engage in problem-solving activities. The initial interaction between the e-leader and team members, particularly in terms of establishing trust, can significantly impact the ease or difficulty of the e-leader's role. It's imperative to provide training for team members in virtual participation, offering opportunities for them to ask questions, while also prioritizing efforts to foster trust and commitment among teams and team members towards management. The moral dilemmas inherent to virtual groups, influenced by cultural factors, warrant separate evaluation, with due regard for privacy boundaries. Risks must be carefully assessed, prioritized, and promptly addressed. To gain comprehensive insight into their employees' characteristics, leaders should actively seek avenues for effective communication. Establishing an atmosphere of mutual trust within communication platforms is crucial, fostering a positive emotional connection between employees and the e-leader and encouraging the utilization of their cognitive capital.

An e-leader must craft a vision and strategy that harnesses two pivotal dynamics: leveraging information technology and tapping into employees' psychological capital. While technology serves as a tool for effective communication, the efficacy of influence hinges on the employed tactics. Consistency in demonstrating care, not only during the initial presentation but also throughout subsequent interactions, is paramount. Addressing employees' inquiries to a certain extent, responding to their other needs within reasonable time frames, and keeping them informed about the organization's vision and goals are essential. Additionally, providing explanations about potential risks and precautionary measures, valuing employees' ideas and input, and supporting or rewarding those aligned with corporate values are crucial for fostering tolerance, loyalty among team members, and achieving corporate objectives. The e-leader's adept coordination among virtual team members, coupled with the establishment of trust and emotional commitment to e-leadership, plays a pivotal role in fostering a shared mental model and mitigating conflicts. The cohesion and integration of virtual team members not only bolster social bonds but also foster the exchange and cultivation of fresh ideas and perspectives through interaction. Implementing initiatives aimed at striking a balance between the work and personal lives of virtual employees positively impacts their motivation and fosters team spirit.

All these processes require e-leadership to put in much more effort than traditional leadership. The e-leader's success with virtual team employees depends on continuing the practices that support the innovation process, using communication technologies effectively, establishing trust among employees, using the psychological capital of employees, and focusing on people-oriented activities.

SANAL EKİPLERDE E LİDERLİK VE İNOVASYON SÜRECİ

1. GİRİŞ

Hızla değişen teknolojik gelişmeler pek çok alanda olduğu gibi, işletmelerin yapısında işleyişinde, yönetim süreçlerinde ve işlevlerinde değişimi kaçınılmaz hale getirmiştir. Geleneksel olarak, klasik ekiplerle çalışan, istikrarlı veya geleneksel çalışma ortamlarında faaliyet gösteren işletmeler, artık aynı veya farklı kurumlardan, farklı coğrafi bölgelerden farklı zaman diliminde çalışan ekiplerden oluşturulabilmektedir. İşletmeler işlevlerini, birden fazla işletmeyle ya da tamamlayıcı tedarik zincirleri oluşturarak veya işletmeler arası iş birliği yaparak yerine getirmektedir. Doğal olarak bu durum, klasik işletmelerde yürütülen yönetici iş gören ilişkilerinde iletişim biçiminden, iş organizasyonlarına ve üretilen ürünlere kadar pek çok noktada değişikliğe yol açmıştır.

Bu çalışmada e-liderin sanal ekiplerle yürüttüğü faaliyetlerde ve inovasyon sürecini hızlandırmaya ve geliştirmeye yönelik faaliyetlerde oynaması gereken roller ve bu süreçlerde karşılaştığı güçlüklerin incelenmesi amaçlanmaktadır. Bu amaç çerçevesinde, mevcut durumu somutlaştırmak için sanal ekipler ve tedarik zincirleri kullanan sağlık sektörü örneğinden hareketle e-liderin rollerini gerçekleştirme biçimi, literatür veriler çerçevesinde ele alınıp incelenmiştir. E- liderin oluşturduğu sanal ekiplerde yeni fikirlerin uyanması, fikirlerin farklı açılardan değerlendirilmesi, tasarlanıp uygulanması sonucu ürün ve hizmetlerde iyileşmesinde etkili olan faktörler üzerinde durulmaktadır.

2. YÖNTEM

Bu araştırmada, literatür verilerine dayalı kavramsal analiz yöntemi kullanılmıştır. E-liderlik, sanal ekipler ve tedarik zinciri ve yenilik ve inovasyon sürecini içeren yerli ve yabancı literatür taranarak ilgili kavramları içeren kaynaklar belirlenmiştir. Tarama sonucu ulaşılan kaynaklar bilgisayara kaydedilerek içerikleri incelenmiştir. İncelemede, işletmelerde amaç, süreç ve ürüne kattığı değer açısından bu kavramların işletmelerin işlevlerindeki değişim, işletmelerde yöneticilerin pozisyonu, bilişim teknolojisindeki gelişmeye bağlı sanal ekipler ve tedarik zinciri oluşumu, yenilikçi yaklaşımları içeren yerli ve yabancı literatür taranmış, dokümanlar incelenmiştir. Çalışma işletmelerde e-liderin, inovasyon sürecine klasik yönetici anlayışından farklı olan işlevlerine odaklanan bir derleme çalışmadır. Çalışmada e-liderin elektronik ortamda paydaşları ile ilişkilerini ve yönetme biçimini ele alan, yazılı ve basılı dokümanlardaki verilerin sistematik bir incelenmesini içermekte, e -liderin karşılaştığı sorunlar ve çözüm önerilerinin yer aldığı bir analiz çalışmasıdır.

3. BULGULAR

Sektörlerin teknolojik gelişme sürecine bağlı olarak örgütün yapısında dış tedarikçilerin nicel olarak artması ve çeşitlenmesi, daha fazla iş birliği yapmayı zorunlu kılmaktadır. Artan ve çeşitlenen tedarikçilerle hızlı ve sürekli etkileşimin teknoloji destekli yapılmasının sonucu sektör yöneticilerini e-lider konumuna itmiştir. E-liderlerin teknolojik gelişme hızına göre tedarik zincirleri oluşturmak, birbiriyle ilişkili tedarik zincirleri arasındaki uyumu ve koordinasyonu sağlamak, e-liderin vizyonunu ve yenilikler konusunda görüş ve düşüncelerini paylaşması önem kazanmıştır. Bu sürecin etkin kullanıldığı durumlarda, sektörün sunduğu hizmetin değerinin arttığı gözlenmektedir. E-liderin görevi, ürün değerinin artırılması, inovatif ürünlere yönelimin sağlanması noktasında sanal tedarik zincirindeki ekiplerle yüz yüze etkileşim ihtiyacı duyması, işi koordine etmesi, tedarik zincirlerinde çalışanları motive etmesi ve yönlendirmesi önem kazanmıştır. Ancak bu noktada e-lider, örgütsel güçlüklerin yanında,

oluşturulan sanal ekipleri-örgütle uyumlu hale getirmek, sorunlarını çözmek gibi bir dizi sorumluluk üstlenmek durumundadır. Sektörde tüm ekiplerin birbiriyle uyumlu bir çalışma sergilemesi beklenmektedir. E-liderin aynı zamanda sanal ve sanal olmayan ekiplerde çalışanları sektörün ortak amacına hizmet edecek şekilde inovasyon sürecine dahil etmek için harekete geçirecek uygulamalara yer vermesi gerekmektedir. E-lider yönlendirmeler yaparken sektörün iç değişkenlerinden çok dış değişkenlerine bağlı sorunları ele almak ve çözmek durumundadır.

4. TARTIŞMA

E-liderin sektörün geleceğine yönelik kararlar alması, kararları ekip çalışanlarıyla paylaşması, vizyonunu çalışanların ufuklarını açacak şekilde aktarmasını içeren, bir vizyona sahip olması gerekir. E-liderin aldığı kararların hayata geçirmesi, tüm ekip çalışanlarının birlikte hareket etmesiyle gerçekleştirilebileceği bir durumdur. Alacağı her yeni karar ve inovasyon, ekip çalışanların inanması, benimsemesi ile uygulanabilir. E-liderin çalışanların inovatif düşünme, tasarlama ve ürüne dönüştürme sürecine katılımları, ancak çalışanların kendilerini özgürce ifade ettikleri, düşüncelerinin kabul gördüğü, değer verildiği ve teşvik edildiği ortamlarda ortaya çıkmaktadır. E- lider çalışanlar için güvenilen, değer verilen ve önemsenen bir ilham kaynağı olduğu ölçüde ekip çalışanlarının inovasyona yönelik sınırlılıklarını ortadan kaldırabilir. E-lider bu farkındalık içinde kararlar almak ve uygulamak durumundadır. Bu da e-lideri sürece yönelik düşünmeye ve kararlar almaya yönlendirir. Çalışanların enerjisini, motivasyonunu, yaratıcılığını ortaya koyması kendi problemlerine daha az odaklandığı zaman ortaya çıkar. E-liderin ekipte çalışanların ekip içi ve ekip dışı sorunlarına odaklanmak ve çözümler üretmek temel görevleri arasındadır. Bütün bu süreçlerde E-liderin sanal ekipler oluştururken ekip üyelerinin kimlikleri, statüleri hakkında yeteri kadar bilgisinin ve onları tanıyacak kadar zamanının olmaması bir kısıt olarak ortaya çıkmaktadır. E-liderin, sektörün farklı birimlerinde çalışanlarla yüz yüze gelme, onlarla yüz yüze etkileşime girme şansı yok ya da çok nadirdir. E-liderler, ekiplerle iş birliğinde, teknolojik zorluklarla karşılaşabilmektedir. Sanal ekip üyeleri arasında yüz yüze iletişimin olmaması, yalnızca çevrimiçi iletişime başvurulması, ekip üyeleri arasında olumlu etkileşimi engelleyebilmektedir. Bu nedenle e-liderin, iş yükü, çalışma şekli, kullanacağı yöntemler, stratejiler ve araçlar değişmiştir. E-liderin yeni yöntemler, yeni stratejiler ve iş akış şemaları oluşturmak, çalışanların fizyolojik gereksinimleri kadar, psikolojik gereksinimlerini doyurmak, çalıştıkları bölgenin kültürel biçimine uygun çözümler üretme yoluna gitmelidir. E- liderin teknolojiyi etkin kullanarak ekiplerle bilgiyi paylaşma, iletişim kurma ve yönlendirme, çalışanlarında inovatif yeni düşünceler uyandırma, tasarlama ve uygulamalara yönelmesi sonucu yeni ürün ve hizmetlerin ortaya çıkması mümkündür.

SONUÇ

E-liderlik, diğer liderlik türlerine göre daha kompleks ve karmaşık, bütüncül olduğu kadar analitik düşünmeyi de gerektirmektedir. E-lider insan odaklıdır, sürece dönük düşünmek ve karar vermek durumundadır. Bütün güçlüklerine rağmen, sanal ekipler arasında yenilikçi fikirleri ve girişimleri desteklemek, fikirler üzerinde ayrıntılı tartışmayı sağlamak, mevcut imkânlar ölçüsünde yeni tasarım ve düşüncenin yaşama geçirilmesini teşvik etmek gibi bir sorumluluk üstlenmektedir. Bu bağlamda düşüncenin bir ürüne dönüşmesi için teknolojiyi etkin kullanma, problemleri yerinde ve zamanında çözme çabası içindedir. Alanda üretilen ürünlerin değerini artırmak için çalışanların psikolojik sermayelerini kullanmak, onlarda aidiyeti ve duygusal bağlılığı geliştirecek iletişim, yöntem ve teknikleri işe koşar. Yeni fikirlerin ortaya çıkması, tasarım ve modellerin oluşturulması, uygulanması ve ürün ve hizmetlere dönüşmesi

için çaba harcar. E-liderin çalışanların inovatif iş davranışlarını ortaya çıkarmak için onların içsel motivasyonlarını harekete geçirecek şekilde fikirlerine değer verir ve kurumsal değerlerle uyumlu olanları destekler veya ödüllendirir, ekip üyeleri arasında hoşgörü ve sadakatı teşvik etme yoluna gider. Alan bazlı gelişmelerin sürdürülebilirliği, Ar-Ge çalışmalarının ürün ve patentlere dönüşmesi, yeni hizmet ve uygulamaların tüketicilerin hizmetine sunulup pazarlanması e-liderin, çalışanların inovasyon sürecine katılımını sağlaması, onların yaratacaklarından faydalanması ile mümkün olduğunun farkındadır.

REFERENCES

- Abdullatif, T. N., bt Johari, H. and bt Adnan, Z. (2016). The Influence of Extrinsic Motivation on Innovative Work Behaviour with Moderating Role of Quality Culture. *Journal of Business and Social Review in Emerging Economies*, 2(1), 79-86.
- Acar, A. Z. and Yurdakul, H. (2013). Tedarik Lojistiğinde Sistem Satın Alma ve Entegre Ürün Timi. Sağlık Sektörü İçin Öneriler. *Akademik Bakış Dergisi*, 34, 1-15.
- Afsar, B., Badir, Y.F. and Saeed, B.B. (2014). Transformational Leadership and Innovative Work Behavior. *Industrial management & Data Systems*, 114(8), 1270-1300.
- Argon, T. and Eren, A. (2004). *İnsan Kaynakları Yönetimi*, Ankara: Nobel Yayıncılık.
- Aşan, Ö. (2001). *Motivasyon Yönetim ve Organizasyon*, Güney, Salih (ed.), (230) Nobel Yayın Dağıtım.
- Avolio, B. J., Kahai, S. and Dodge, G. (2000). E-leadership: Implications for Theory, Research, and Practice. *The Leadership Quarterly*, 11, 615-667.
- Avolio, B. J., Sosik, J. J., Kahai, S. S., and Baker, B. (2014). E-Leadership: Re-Examining Transformations in Leadership Source and Transmission. *The Leadership Quarterly*, 25, 105-131.
- Bell, B. S. and Kozlowski, S. W. J. (2002). A Typology of Virtual Teams: Implications for Effective Leadership. *Group & Organization Management*, 27(1), 14-49.
- Beydoğan, G. Ş. and Beydoğan, H. Ö. (2018). Öğrencilerin Memnuniyet Düzeyleri Açısından Eğitim Fakültelerinde Verilen Öğretim Hizmet Kalitesinin Karşılaştırılması. *Ahi Evran Üniversitesi Kırşehir Eğitim Fakültesi Dergisi*, 19(3), 2521-2540. <https://doi.org/10.29299/kefad.2018.19.03.020>
- Chudoba, K. M., Wynn, E., Lu, M. and Watson-Manheim, M. B. (2005). How Virtual Are We? Measuring Virtuality and Understanding Its Impact in a Global Organization. *Information Systems Journal*, 15(4), 279-306. <https://doi.org/10.1111/j.1365-2575.2005.00200.x>
- Cramton, C. C. and Webber, S. S. (1999). *Modeling the impact of geographic dispersion on work teams*. Unpublished working paper.
- CSCMP, https://cscmp.org/CSCMP/CSCMP/Store/Layouts/Item_Detail.aspx?iProductCode=PROCTOR-FEE25 (accessed on: 7.7.2024)
- Drucker, P. (2010). *Büyük Değişimler Çağında Yönetim*, Çev. Zülfü Dicleli, İstanbul: Optimist Yayınları.

- Fausang, M. S., Joensson, T. S., Lewandowski, J. and Bligh, M. (2015). Antecedents of Shared Leadership: Empowering Leadership and Interdependence. *Leadership & Organization Development Journal*, 36(3), 271-291.
- Gibson, C. and Cohen, S. (2003). *Virtual Teams That Work* (Vol. 33). San Francisco, CA, USA: Jossey Bass.
- Gladwell, M. (2009). *Outliers (Çizginin Dışındakiler): Bazı İnsanlar Neden Daha Başarılı Olur?*, İstanbul: MediaCat Kitapları.
- Hakkinen, S. (2012). *Towards A Trust-Based Model of Leadership whithin the Leader-Member Exchange Theory. Dissertations in Social Sciences and Business Studies*, 45. UEF, Joensuu, Finland: Publ. of the University of Eastern Finland.
- Hou, X. H. (2018). Review and Prospect of Employee Innovation Behavior Research. *Heilongjiang Science*, 9(21), 23–25.
- Jawadi, N., Daassi, M., Favier, M. and Kalika, M. (2013). Relationship Building in Virtual Teams: A Leadership Behavioral Complexity Perspective. *Human Systems Management*, 32, 199-211.
- Jia, L. D., Yang, S. Y. and Liu, D. P. (2022). Perceived Deep-Level Dissimilarity and Individual Creativity: A Study Based on Conservation of Resources Theory. *Wuhan University Journal (Philosophy & Social Science)*, 75(3), 104–114.
- Kang, W. Z., Guo, L. Y. and Zhang, J. C. (2019). The Influence of Authoritarian Leadership on Employee Helping Behavior: The Chain Mediating Effect of Perceived Insider Status and Affective Commitment. *Journal of Technology Economics*, 38(11), 57–63+82.
- Levitt, T. (2002). *Creativity Is Not Enough*. Harvard Business Review, 80, 137-145.
- Liao, C. (2017). Leadership in Virtual Teams: A Multilevel Perspective. *Human Resource Management Review*, 27 (4), 648-659.
- Malhotra, A., Majchrzak, A. and Rosen, B. (2007). Leading Virtual Teams. *Academy of Management Perspective. February*, 60-70.
- Messmann, G. and Mulder, R. H. (2012). Development of a measurement instrument for innovative work behaviour as a dynamic and context-bound construct. *Human Resource Development International*, 15(1), 43–59.
- Naktiyok, A. (2006). E-Liderlik: E-Liderlik Özelliklerinin İncelenmesine Yönelik Bir Araştırma. *Dokuz Eylül Üniversitesi İşletme Fakültesi Dergisi*, 7 (1),19-40.
- Ocker, R.J., Huang, H., Benbunan-Fich, R. and Hiltz, S.R. (2011). Leadership Dynamics in Partially Distributed Teams: an Exploratory Study of the Effects of Configuration and Distance, *Group Decision and Negotiation*, 20(3), 273-292.
- Peñarroja, V., Orenco, V., Zornoza, A. and Hernández, A. (2013). The Effects of Virtuality Level on Task Related Collaborative Behaviors: The Mediating Role of Team Trust. *Computers in Human Behavior*, 29, 967–974.
- Snellman, C. L. (2013). Virtual Teams: Opportunities and Challenges For E-Leadersprocedia. *Social and Behavioral Sciences*, 110 (2014), 1251 – 1261.
- Scott, C. and Westbrook, R. (1991). New Strategic Tools for Supply Chain Management. *International Journal of Physical Distribution Logistics Management*, 21(1), 23-33.

- Semerci T. (2011). Kamu Hastanelerinde Tedarik Zinciri. Süleyman Demirel Üniversitesi, SBE yayınlanmamış yüksek lisans tezi, Isparta.
- Sivunen, A. and Valo, M. (2006). Team Leaders' Technology Choice in Virtual Team. *IEEE Transactions on Professional Communication*, 49 (1),57-68.
- Tang, W. N., Yan, S. D. and Liu, Z. (2017). Research on The Influence Mechanism of E-Leadership, Perceived Organizational Support and Employees' Job Satisfaction. *Leadership Science*, 33(17), 43–45.
- Trivedi, A. and Desai, J. (2012). A Review of Literature on E-Leadership. Shri Chimanbhai Patel Institutes, Ahmedabad. Working Paper No. CPI/MBA/2012/0004.
- Tengilimoğlu, D. and Yiğit V. (2013). *Sağlık İşletmelerinde Tedarik Zinciri ve Malzeme Yönetimi*, İstanbul: Nobel Akademik Yayıncılık
- Tsai, Y.-H., Ma, H.-C., Lin, C.-P., Chiu, C.-K. and Chen, S.-C. (2014). Group Social Capital in Virtual Teaming Contexts: A Moderating Role of Positive Affective Tone in Knowledge Sharing. *Technological Forecasting & Social Change* ,86, 13-20.
- Turan, H. (2018). Küresel Rekabet Ortamında Bilişim Teknolojisinin Tedarik Zinciri Yönetimi Üzerine Etkileri (Otomotiv Sektörü Uygulaması). *Uluslararası Sosyal Araştırmalar Dergisi*, 11(61), 1025-1030.
- Üşümuş, E. D. (2012). Sağlık sektöründe liderlik ve örgütsel sessizlik. (Yayınlanmamış YL Tezi), Beykent Üniversitesi, Sosyal Bilimler Enstitüsü, İstanbul.
- Wolor, W., Kurnianti, D., Zahra, S. F. and Martono, S. (2020). The Importance of Work-Life Balance on Employee Performance Millennial Generation in Indonesia. *Journal of Critical Reviews*, 7(9), 1103-1108.
- Zhang, X. J. and Liu, X. (2022). The Dual Pathway Model of Informational Faultlines and Team Creativity: The Moderating Role of Different Emotional Regulation Strategies. *Science & Technology Progress and Policy*, 39(12), 140–149.
- Zhang, Y. and Yao, Y. H. (2021). Psychological Capital and Transformational Leadership and Employee Innovation Behavior: The Moderating Effect of Work Values. *Research on Financial and Economic Issues*, 43(7), 138–145.
- Zheng, X. J. and Chen, J. (2017). Empirical Analysis on Relationship Between “Internet + Enterprise Leadership” and Employee Performance. *Science & Technology and Economy*, 30(1), 61–65.

KATKI ORANI / CONTRIBUTION RATE	AÇIKLAMA / EXPLANATION	KATKIDA BULUNANLAR / CONTRIBUTORS
Fikir veya Kavram / <i>Idea or Notion</i>	Araştırma hipotezini veya fikirini oluşturmak / <i>Form the research hypothesis or idea</i>	Gizem Ş. BEYDOĞAN
Tasarım / <i>Design</i>	Yöntemi, ölçeği ve deseni tasarlamak / <i>Designing method, scale and pattern</i>	Gizem Ş. BEYDOĞAN
Veri Toplama ve İşleme / <i>Data Collecting and Processing</i>	Verileri toplamak, düzenlenmek ve raporlamak / <i>Collecting, organizing and reporting data</i>	Gizem Ş. BEYDOĞAN
Tartışma ve Yorum / <i>Discussion and Interpretation</i>	Bulguların değerlendirilmesinde ve sonuçlandırılmasında sorumluluk almak / <i>Taking responsibility in evaluating and finalizing the findings</i>	Gizem Ş. BEYDOĞAN
Literatür Taraması / <i>Literature Review</i>	Çalışma için gerekli literatürü taramak / <i>Review the literature required for the study</i>	Gizem Ş. BEYDOĞAN