

An Interdisciplinary Approach to the Management of Organizations' is a collection of research papers on a wide range of social issues by researchers from several different institutions. The book will appeal to managers, researchers, social science students and teachers of all subjects and of all levels, who wish to develop personally and professionally. It will also be useful to all those who interact, one way or another, with both students and teachers in a social context.

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An Interdisciplinary Approach to the Management of Organizations

Ali Akdemir, Hasan Arslan

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Ali AKDEMİR
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Foreword

The book *An Interdisciplinary Approach to the Management of Organizations* represents a common effort of researchers in the interdisciplinary social science field, comprising a diversity of papers, informed by various theoretical perspectives and employing a continuum of methodological approaches. Reflecting the variety of scientific preoccupations in the conference, the present book is representative of the current debates in management of organizations; therefore, it can be a valuable resource for researchers in this field. The book concludes thirteen chapters: Innovative Investments And Strategic Success Criteria in The Global Market: Hassan Textile Company Case Analysis in the Technical Textiles Sector, Adults Participation in Non-Formal Education: The Statistical Regression Model, A Survey on the Economics of Nonprofit Organizations and Concepts of Organizational Equilibrium, Organizational Cultures in Educational institutions, The Human Capital Approach versus the Production Function Approach to Entrepreneurship: Concepts and Constraints from Modern Macroeconomic Perspective, Organizations, Covid-19, and the war of drugs, A Research on Nomophobia Levels of Civil Aviation Employees, Deans in Higher Education, Issues of Progressive And Regressive Development of The Philosophy of Artificial Intelligence, The Changing Role of Education And Leadership in The Context Of 4.0, Formation of Non-Governmental Organizations' Institutional Identity Using Participatory Processes: The Case of ASKON Association, Fundamental Values for Public Organizations and Investigation of the Effects Of Organizations' Dynamic And Innovation Capabilities on Their Competitiveness And Product Performance.

The first chapter is dedicated to **Innovative Investments And Strategic Success Criteria in The Global Market**. Gülden Turhan & Ali Akdemir focus on companies aiming for export-based growth can provide an economic advantage with sustainable innovation while trying to succeed in competition in the global dimension. It may be possible to achieve success with more functional and affordable products that make a difference in a world market where global fashion sense and expectations become the same with the lifting of borders between countries. By exploring an innovation opportunity and implementing it before its competitors, entrepreneurs will gain competitiveness in the international market.

Jūratė Butvilė, Tomas Butvilas and Hasan Arslan discusses both theoretical and empirical data on adults' participation rates in non-formal education activities in Lithuania on the basis of public and private sectors in the second chapter. Firstly the chosen issue is discussed theoretically, presenting some relevant schools of thought, such as *Functionalism* and *Conflict theory* statements on the importance of participating in non-formal education processes through the life-span. On the other hand, authors of this article deal with some statistical and mathematical evidence about reasons that make the meaning for participation/non-participation within such kind of education.

The third chapter deals with **A Survey on the Economics of Nonprofit Organizations and Concepts of Organizational Equilibrium**. Volkan Hacıoğlu, Haydar Baki Doğan and Ali Akdemir focuses on understanding the nature of economic potential of nonprofit organizations is an important factor to assess the impact of globalization on the performance of business world. There are sufficient reasons in theory and evidence in practice to investigate areas where the dynamics of market mechanism fail to operate. These areas are important parts of the realms of economic cosmos in which daily instant data and information flow unabated. Economic environment is sensitive to data changes with new inventions and innovations.

The fourth chapter examines **Organizational Cultures in Educational institutions**. In this chapter, Carmen Sonia Duşe underlines the special organization, whose functioning is affected by a series of characteristics that differentiate and particularize it in the organizational landscape. It represents the basic unit of the education system, having as a priority function the full capitalization of the students' personality within a training process conceived as a teaching-learning-evaluation activity. The school is seen as an open system, which reflects and highlights a whole of relationships and correlations with external factors, in a complex managerial scheme, based on the continuous regulation and self-regulation of the relationships between input and output flow.

The fifth chapter draws attention on **The Human Capital Approach versus the Production Function Approach to Entrepreneurship: Concepts and Constraints from Modern Macroeconomic Perspective**. Volkan Hacıoğlu deals with the classical production function together with its modern reconstructions related to an innovation system of input-output analysis. Factors of production are inputs into the function. The process of production is to make goods and services or outputs from the inputs. In economics, the analysis of factors of production generally decomposed into four main categories. These are land, labor, capital and entrepreneur. Conceptual framework of production function is determined by these four factors of production. Each factor of production has its particular characteristic as an input data and plays an important role of function that turns into output data after specific process.

The sixth chapter is written by Mariateresa Gammone. The author focuses on **Organizations, Covid-19, and the war of drugs**. Globalization has joined, bridged and connected the remote corners and the local problems of the Earth. On Covid-19, national organizations have set their analysis, and addressed the assessed dangers accordingly with their own health danger standards, considering their national interest definitions. I present here the main thesis that derives from a different paradigm: global survival. The threats we face as a species and a civilization are overwhelming and all too real. Despite being the main actors of urgent change, national organizations are the main obstacle to full adoption of global compliance, as the organizational culture regarding their supervision is despairingly inserted in a rule accordance verification and not on the appraisal provided by international interests.

The next chapter examines **Nomophobia Levels of Civil Aviation Employees**. Sibel Bilkay investigate Nomophobia inclinations of civil aviation companies' employees. In the study, the effects of some demographic features on nomophobia will be examined and the concepts of aviation safety and security will be evaluated in this framework. The application part of this research was carried out in civil airline companies operating in Istanbul Airport, Istanbul Atatürk Airport and Sabiha Gokcen Airport. This study is envisaged to have many contributions in practice. It is the first and comprehensive study to measure aviation employees' nomophobia levels. For this purpose, a nomophobia scale was applied to 1073 aviation employees.

The eight chapter written by Nuray Tankılıç and Hasan Arslan. The authors discuss on **Deans in Higher Education**. Deans face many responsibilities that must be fulfilled when they start their duties. They have responsibilities in various fields such as faculty demands, student and staff demands, programs, financial resources, and support for scientific studies. In this study, deans in higher education were examined in the areas of leadership, academic competence, community service and research. The study was carried out by dealing with the deans at the University of Onsekiz Mart. The interviews were analyzed with descriptive analysis method

and codes were created under certain themes. The study shows that the deans, who had to devote more time to the administrative field, had limited time to conduct scientific research.

Khatira Guliyeva deals with the **Issues of progressive and regressive development of the philosophy of artificial intelligence** in the ninth chapter. The essence of the issues of progressive and regressive development and at the same time incomprehensible problems of the philosophy of artificial intelligence is also the main issue analyzed in this article, and special attention is paid to the importance of the progressive aspects of regression. The author tries to follow the dynamics of this topical event in the public consciousness, which unites the whole world, all mankind in the same thought and philosophy of life. The article also analyzes the situation and importance of the philosophy of artificial intelligence in young, independent and underdeveloped countries as leading world powers, citing the works of world-renowned scientists.

The tenth chapter examines **The Changing Role Of Education And Leadership in The Context Of 4.0**. Osman Ferda Beytekin and Figen Ata Çiğdem define The information society which brings learning and school to the forefront and causes individuals to turn to out-of-school learning environments. Requirements from education differ due to the various variables. School is a social open system and it is the necessity of the system to interact with its environment. In the transformation of schools to new generation schools, the knowledge and experience of the environment is one of the most important elements. Self-developing and managing individuals have an important role in the development of new generation schools. Nowadays we are talking about Industry 4.0, developments in artificial intelligence, machine learning, robotics, nanotechnology, 3D printers and genetics and biotechnology, technological developments that were once subject to science fiction movies such as smart homes, factories, farms, kitchens, cities is included our daily life. It is thought that the reflections of Industry 4.0 to education are realized as transformation phases.

Another chapter on **Formation of Non-Governmental Organizations' Institutional Identity Using Participatory Processes: The Case of ASKON Association** by Ali Akdemir, Sefer Şener, Özgür Topkaya, Serdar Kurt, Gonca Yilmaz, Derya Algur, Ahmet Tarik Karakaş and Orhan Aydın argues on integration of economic markets with each other locally, domestically and internationally changed the structure of business. Today many organizations whether they are small, medium or large, family owned or corporate, private business or non-governmental attempt to function in a very competitive business environment. Economic downturns, fluctuations and unstableness in the international markets make it even harder to survive. Everyday thousands of new entries into the economic markets are seen and other thousands diminish. Those businesses which survive and establish a sustainable market condition for themselves have several strategic assets. Indeed businesses need to build strategic assets to help them survive in the economy.

The twelfth chapter draws on **Fundamental values for public organizations**. Mădălina Tomescu describes public organizations which cannot exist outside a system, they are influenced by the components of the system they belong to and significantly influence each of its subsystems. The integrity of a system is strongly determined by a set of values and fundamental principles that specify, through their content, the basic coordinates between which the components of the whole work. The public sector is a component of the macrosystem with major implications for the functionality of the whole. This is obvious if the diversity of integrated sectors of activity in the public sector is taken into account.

The last chapter is written by Kudret Çeltekligil. The author underlines **the Effects of Organizations' Dynamic and Innovation Capabilities on their Competitiveness and Product Performance**. Organizations in a rapidly changing environment in terms of strategy and management, they have to continuously develop their basic competencies in order to maintain their competitive advantages in their sectors.. It is inevitable that organizations that do not develop their basic competencies fail in the competitive environment. For this reason, it can be emphasized that organizations have to have dynamic capabilities in order to increase their effectiveness and they should develop these dynamic capabilities continuously. Particularly, the development of new products, the implementation of new processes and systems of organizations in the production sector enables organizations to respond effectively to changing markets, technologies and competition as a result of the innovation mechanism

Editors

Prof. Dr. Ali AKDEMİR & Prof. Dr. Hasan ARSLAN

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Innovative Investments and Strategic Success Criteria in the Global Market: Hassan Textile Company Case Analysis in the Technical Textiles Sector

Gülden Turhan, Ali Akdemir

1. Introduction

Companies aiming for export-based growth can provide an economic advantage with sustainable innovation while trying to succeed in competition in the global dimension. It may be possible to achieve success with more functional and affordable products that make a difference in a world market where global fashion sense and expectations become the same with the lifting of borders between countries. By exploring an innovation opportunity and implementing it before its competitors, entrepreneurs will gain competitiveness in the international market. In this study, the factors that guide the success of enterprises that make innovative investments in the future and move their activities beyond national borders by going to innovation in their investments were evaluated.

The profitability of a company that cannot compete well in the market will decrease (Porter, 1998). In opening to foreign markets, enterprises should develop strategic tactics by analyzing the industrial structure and competitors in this market well. At this point, there are obstacles that must be overcome in the market will be primarily: 1 - capital strength, 2 - economy of scale, 3 - mastering distribution channels 4 - the cost of infrastructure change, 5 - idle capacity utilization, and 6 - differentiated product (Porter, 1998). Especially some sectors (such as heavy industry, diapers, chemical sector) require high capital strength and capacity. The scale in the economy should be high. Distribution channel dominance will provide important marketing advantages, especially in terms of cost and promotion. It may not be easy, but if you can easily convert the infrastructure you have set up in the industry into another infrastructure, that means you have overcome a major barrier to entry (Arslan. and Rata, 2015).

A company that does not manage idle capacity well, that is, does not manage its costs well, should not enter the sector with a new job. Products that meet unmet needs and expectations will make a difference, and the economic value of such innovations is quite high.

Because they have limited international experience, SMEs face greater risk on the way to becoming a global entrepreneur (Kiliç, 2011, p.77). Using cooperation and network connections to manage the environment of high uncertainty, especially in foreign market openings, will provide serious advantages. In this way, they will be able to detect dangers in advance and avoid costly missteps (Çavuşgil & Knight, 2015). Fairs can offer opportunities such as information acquisition, networking, and collaboration development (Meason, 2020). Network connections also help businesses overcome the barriers to entry they will face in exports (Üner etc., 2013).

The entrepreneur can choose to invest in innovation in many different areas such as product, production, technology, marketing, research and development (R&D), management understanding. Product development is a small change, while innovation is a more radical approach that provides a significant competitive advantage and is based on R&D work. Entrepreneurs who are a motivating force for innovation are not those who repeat or imitate existing jobs in the industry, but those who can commercialize and market new ideas or inventions. Entrepreneurial attitude, activity and desire should be accepted in the business as a

whole, from company managers to employees, rather than just a few people (i.e. entrepreneurial company). As Faiz and Uner (2015) put it, risk-taking, dynamic, determined and proactive/visionary managers can develop policies that support innovation initiatives. For example, allocating resources for new opportunities, providing training support to improve the capabilities of employees.

2. Literature Review

2.1. Globalization

The concept of globalization, which consists of its “global” origin dating back 400 years, is not really that old. Globalization, which first appeared in the 1960s and moved to the present day, refers to a process of transformation that affects the life of all humanity (Çeken, 2004, p.1). Globalization is the rapid and continuous spread of goods, technology, knowledge, and jobs, as well as social, political, and legal phenomena throughout the world. In this way, cross-border distance for all countries becomes less important in all specified issues (Bozkurt, 2000, p.28-29; Ceken, 2004, p.1). In a sense, globalization, according to Peter Dicken, is a phenomenon that enables increase in good flows across nation and to the functional interaction and integration of all nations by increasing the spread of economic activities (Dicken, 1992, p.1).

Because of globalization, trade liberalization technological developments, especially the internet and e-commerce, which have developed with advances in information technology, have pushed competition beyond borders (Karabiçak, 2002, p.122; Aydemir & Kaya, 2007, p.267; Faiz & Üner, 2015, in turn). Globalization has brought businesses into a process of rapid change and transformation. While moving entrepreneurial activities beyond borders, they have the opportunity to reach not only international but also global markets (Bilginer, 2016).

With the effects of globalization, firms have been reorganized as more dynamic, flexible and small structures (Durak, 2006, p.102). Along with the ability of entrepreneurs to adapt quickly to changes, SMEs that can use the advantage of high technology, especially thanks to flexible production structures, can easily overcome crises (Özdemir et al., 2007, p. 176-177). In Turkey, the export volumes of companies that carry their enterprises to international markets through the export of SMEs increased three-fold from 2006 to 2018 and reached \$ 150 billion (Bilginer, 2016).

2.2. Entrepreneurship and Innovation

The concept of entrepreneur introduced to the economic literature by the French economist Cantillon, is defined as “a person who, by combining all the factors of production, produces the needed goods and undertakes the risk for the profit to be obtained in return.” (Say, 1803; Çiftçi et al., 2014). The profit earned by the entrepreneur to the firm is different from that of the capital owner. French economist Baudeau describes the entrepreneur as an innovative person who aims to maximize profit by minimizing the cost by innovating (Çiftçi et al., 2014). According to Drucker (1985), **innovation is an entrepreneurial act of action**, entrepreneurs carry out their activities with the motive to innovate (Hitt et al., 2002, p.22; Çiftçi et al., 2014). Entrepreneurship means achieving different things by moving away from repeating the same things to achieve the better (Drucker, 1994).

Innovation is a tool that allows entrepreneurs to make changes to create a different business or service (Drucker, 1985, p.30). The similarity of alternative products creates confusion in people and they tend to buy the lowest priced one the easy way. In this case, when the prices

have to be lowered, the profits decrease and that is why a profitable growth can be achieved only by making a difference. Therefore, the way to achieve this is through innovation (Kirim, 2006). Innovation can be achieved not only in the product, but also in any process, management style, organizational structure or operation level (Çiftçi et al., 2014). For example, Ford is a company that was raised by management innovations in the assembly line and specialization based business division. It seems that the success of every major company has been realized by its innovations (Kirim, 2006).

As productivity development is achieved through technological advances (Taban & Kar, p.2014, p.105), **innovation in technology** is a sine qua non source of growth in developed economies (Gülmez & Akpolat, 2014, p.4; Gülmez & Yardimcioğlu, 2012, p.336). Technology innovation involves concentrating on product and process development, engineering, R&D, technical expertise and industry knowledge.

Imitating competitors who lead the market by pursuing a follower strategy and trying to achieve better is an innovation (Knight & Çavuşgil, 2004, p.120; Drucker, 2012, p.520-521). The other is innovation, which is realized by developing what is not available in the similar market and will lead to new markets. For this, R&D is required (Knight & Çavuşgil, 2004, p.120; Faiz & Üner, 2015). "Innovation activities carried out using **the accumulated knowledge** of the enterprise" (Knight & Çavuşgil 2004: 120), in other words, "the transformation process with **high added value** in which knowledge becomes concrete products " is defined as R&D activities (Yaylali et al., 2010, 13). The return on investment in R&D activities can be higher than other investments (Ağır & Utlu, 2011, p.269). Many researchers (i.e. Saraç, 2009; Yaylali et al., 2010; Ağır & Utlu, 2011; Gülmez & Yardimcioğlu, 2012, p.336; Göçer, 2013; Gülmez & Akpolat, 2014; Özcan & Ari, 2014) have revealed the positive contribution of R&D expenditures to economic growth.

Businesses can achieve sustainable success as long as they can integrate innovative and creative thinking with basic management capabilities and reflect it into their activities (Drucker, 2012, p.491-498). In order for companies to innovate, a management policy should be pursued that creates a desire to innovate throughout the organization (Drucker, 2012, p.497). The company must have an innovative structure that allows it to be entrepreneurial (Drucker, 2012, p.492-493). In addition, the entire organization should see change as an opportunity (Drucker, 2012, p.540-547). Enterprises in the structure that bear these characteristics are called entrepreneurial enterprises.

Throughout history, many global companies have been established with innovation and have grown with ongoing innovations. General Electric, Bosch, Siemens, Ford are just a few of the best-known names. Levi's was founded 150 years ago with the idea of durable jeans developed by Levi Strauss, who emigrated from Germany to America. In the 1980s, for Turkey, companies were able to achieve growth opportunities with both more profitable and differentiation, reducing costs with mass production without radical innovations, improving quality. However, in the early 1990s, when all countries were able to open up the world market, there was an abundance of goods on all sides. In order to differentiate in a world where products are identical, it was necessary to develop innovation skills. Innovation was now necessary for growth and profitability (Kirim, 2006).

2.3. Technical Textiles

In the textile sector, which was the locomotive sector in industrialization, which was previously labor intensive and has evolved/transformed into a capital intensive form of production in recent years, especially technical textiles meet us **with innovative products**

with high added value (Çütcü & Babalik, 2016). Technical textile refers to “textile materials and products produced primarily for their technical performance and functional properties, rather than their aesthetic and decorative properties.” (İTKİB, 2005, p.1). Technical textiles can be created as a material (such as upholstery surfaces) or a product suitable for end use (cleaning cloth, self-cleaning roller curtain), so that standard products are turned into products with additional features such as non-perspiration, stain retention. Technical textiles, as stated by Akalin and Mistik (2010: 6), are widely used in decoration, clothing, agriculture, transportation, industry, military, health, packaging, construction, sports, automotive and geological fields. Flexibility, conductivity, durability and efficiency, etc. overall performance characteristics aside, **the innovative aspect of technical textiles** emerges with distinctive and superior performance characteristics such as resistance to various chemicals, microorganisms, weather conditions, high strength and non-flammability (Çütcü & Babalik, 2016). In the technical textiles market, it is possible to acquire competitive power in the global market with high-value added products developed with innovative approaches by going outside the standard.

The textile sector in Turkey is a sector that **makes significant contributions to the country's economy** with its share of national income, employment and high export potential. Turkey's exports of technical textiles, which were worth 425.7 million dollars in 2000, reached 1.2 billion dollars in 2010 and 1.6 billion dollars in 2014. Between 2010 and 2014, exports of technical textiles declined by 4.8% in 2012 alone, and in other years they increased by 3.2% to 21.2%. (İTKİB, 2015, p.4). In recent years, the world's foreign trade in technical textiles also tends to increase significantly. World technical textile exports, which were worth about 68 billion dollars in 2009, increased to 96 billion dollars by the end of 2013. In the last five-year period from 2009-2013, World technical textile exports increased by an average of 9.5% annually (İTKİB, 2015, p.9; Çütcü & Babalik, 2016).

Due to insufficient and costly bank loans in labor-intensive sectors such as technical textiles, delays in returning VAT in foreign trade, **difficulties in finding financing** to support exports, many companies in our country cannot perform their activities on a global scale. Higher qualified labor costs for countries such as Turkey compared to other populated Asian countries, especially China, make competition in exports challenging. Fluctuations in raw material and energy prices are **an obstacle to global market openings** (Çütcü & Babalik, 2016).

From a structural point of view, due to the formation of small and medium-sized businesses rather than corporate ones, a perception of **insufficient equity capital** and **far from advanced technology** has been formed against firms in Turkey compared to their competitors in the world. Since most companies in our country are structured as family companies, a number of problems can also be raised, such as inability to provide **qualified labor**, **avoidance of R&D investment**, and **inability to support in-organization training** (Çütcü & Babalik, 2016). **Companies with high capital strength** can make innovative breakthroughs in the global market by investing in advanced technology, overcoming the difficulties experienced in credit supply, cash flow, skilled labor and raw material acquisition. The ability to turn the innovative process into a sectoral culture can be achieved by supporting the development of employees through internal training, **sharing information with open communication**.

3. Method

It was included as a case in our study to understand what factors led Hassan Textile Company to success in its innovative investments in the global market. On December 12, 2009, an

interview with the general manager of the company, Ahmet Şişman, lasted about 2 hours by the researcher. In this study, conducted in the form of a question and answer method by face-to-face interview, an audio recording was taken to be reported later with the consent of the interviewee.

3.1. Survey

Questions prepared by a professional researcher who has mastered the research topic and used in case analysis are as follows:

- Please provide information about the brief history of the business and its field of activity.
- Is there a business where the entrepreneur is dominant?
- What are the factors that drive your success in your business?
- Does your management culture have an understanding that motivates innovation and creativity?
- When it comes to innovation, what areas are you talking about innovation? (i.e. Product, production, technology, marketing management concept, ARGE)
- What are the basic managerial and organizational characteristics of an innovative business in your opinion. Are these in your organization?
- Your business's competitive innovation experience - the most important elements necessary for your success?

3.2. Hassan Textile Case Analysis in Technical Textiles Sector

Innovation has been inevitable in meeting changing customer needs to succeed in global competition and make it sustainable (Gülçubuk, 2014:22; Lazzarotti & Manzini 2009). Hassan Textile Company, which aspires to make meaningful contributions to the country's economy with its successful initiatives in the global market, is a case example analyzed in this research.

About Hassan Textile Company

Hassan Group, which started its first activity with quilting (carding), was founded in 1939. During the Second World War, Hasan Şişman, the first generation representative of this business, which exported wadding produced entirely by manual labor, took the first step on behalf of industrialization by buying the first carding machine in 1945. Hassan Group is a group of companies that can produce nonwoven surfaces used in many sectors with more than 80 years of experience and is a pioneer in the industrialization of the sector with its high production volume and investments. For example, in 1969, it produced the first domestic car pillow for the Tofaş brand in the automobile industry, and in 2007, it produced breathable diapers for the first time in the hygiene and medical sector.

Today, Hassan Group has closed production facilities exceeding 150,000 m², about 1200 employees, a production capacity of 160,000 tons/year (120,000 tons /year nonwoven and the rest is breathable film) and a total production area of 120,000 m². There are seven companies (Şiteks, Hassan, Telasis, Catsis, Teksis, Pelsan, Merkas) that are merged under the roof of the Hassan Group. One is a marketing company and six are manufacturing companies, and each has its own production, R&D and product development center, as well as its own quality, sales and purchasing units. There is no single centralized management, there is no organic link between companies, but there is strong cooperation. Since 2017, both the product development center and the R&D center operate independently of all other units. The group's products are exported to more than 60 countries around the world. Today, it is a leading company in Turkey in non-woven production with its third generation youth management and is among the leading companies in the world.

Hassan Textile Company, founded in 1987, focuses on the automotive sector and produces non-woven textiles in nine different locations. Others are the cleaning, floor protection, furniture and bedding, building and construction, filter, footwear and medical industries. Today, Hassan Textile, operated by the third generation young manager "Ahmet Şişman", has about 200 employees, 30,000 tons/year nonwoven roll production, 25,000 m² of indoor space and 40,000 m² of finishing capacity. The company's vision is to become one of the industry's global leaders in nonwoven fabrics and related fields, with a spirit of sustainable growth and innovation. Its mission is to benefit its stakeholders, other customers and society with value-added products that will solve new needs by pushing the boundaries of non-woven technology. By creating an infrastructure in accordance with ISO 9001: 2015 Quality Management System certificate, it aims to produce quality, reliable, economical products in accordance with the requests of its customers and to deliver them on time (www.hassan.com.tr).

Entrepreneur's dominance level in company

- An entrepreneur-dominated business
- Getting professional support

In family business, the entrepreneur is always dominant. An entrepreneur has the opportunity to grow faster than a normal company does because he can take advantage of the opportunity as soon as he sees it. When entrepreneurs themselves make all the decisions up to investment decisions, problems can arise in family companies about who will make what decision and who will run the business. However, even though it is a family business, Hassan Company has managed this part well with the knowledge and experience of being a third generation. In other words, each company makes its own decisions independently of each other, so there is a management insight in which **the entrepreneur is dominant**. Nevertheless, a relatively less dominant entrepreneurship can be mentioned, as they receive **support from a large number of professionals** compared to many boss companies.

Factors driving the success of the business

- Innovative products
- Technical knowledge
- Industry experience
- Unique product range
- Location suitable for logistics

Hassan Group has been operating in the technical textile sector for nearly 80 years as a group of companies. Now they have become a well-known company, recognized in the National, International and even world market. They find it more motivating to do **work that no one does or can do, or that very few firms can do** in Europe or around the world. They avoid the work that everyone does, and prefer to do what cannot be done. Because otherwise, profitability falls, maturities are extended and there are delays in the provision of receivables. A company that can survive for many years because they make their activities **sustainable** by developing **innovative products** (such as heated automotive carpets).

By improving imported products within the R&D center, they are turning to the export of new products they have obtained. Hassan Textile Company **makes a serious contribution to exports**, especially to European countries, as well as reducing our country's imports in the field of technical textiles with its own domestic products. At this point, the second element that leads the company to success in the international market is advantageous in terms of

distribution and logistics in the export leg, as it has a **location** in Turkey and therefore is **very close to Europe**.

In Europe and America, Hassan Textile's products are in great demand because it is a very old company, both with a lot of industry experience and product lines that are not available in many companies. As it is understood, third, the company's **diverse range of products** in the technical textile sector and **tacit knowledge** are of great importance in its success in the global market. In this sense, a company that can turn resources that are specific to the business, which cannot be imitated and are rare (such as knowledge, ability, experience) into opportunities in the foreign market.

Management culture that motivates innovation and creativity

- Innovative projects
- Higher export-based business volume compared to imports
- R&D units and R&D engineers
- Equity power
- Project financing support (such as government incentives.)

As Hassan group of companies, since the year it started operating, it has been constantly looking for innovation. During the periods when the first R&D was being talked about in Turkey, **R&D Engineer** Hüseyin Cevahiroğlu started working here in 1989 and during their 23-year association; they determined the R&D situation and the future business structure accordingly. About twenty years ago, while producing only in Turkey, they decided to open up to international markets when the expected demand for new products did not occur in the **technical textile sector** here. Since this sector is a **fast-changing sector** in the world, Hassan Textile Company, which used to be stationary, has taken on a **more dynamic structure** today as it keeps up with this change. **Those who work as a team** are also used to, adopted this process, and can more **easily adapt to doing something new**. When an existing team takes over the management of a new business that has been started, then it has turned into a trade, and in this case, it is necessary **to pursue other new investments** on the other side. At this stage, in addition to product development centers, **R&D centers operating completely independently** in three separate companies under the roof of the Hassan Group (One of which is Hassan Textile) have also been established. Now they immediately take an innovation into the procedure without questioning it. Let us look to an example. Hassan Textile currently has a **wide range of products** in the technical textile sector where they work. Incoming requests for this product range are received by employees of the sales and project Department at the product development center. They develop the products that they already offer to the market and provide a quick return to demand. However, if a problem is encountered during the product development phase, R&D centers come into play to produce **innovative solutions**. If it is projects that will be realized in a slightly shorter term with low technology, then they consider it an equity project in their centers. In addition, they can also do European Union projects or invited projects. They are trying to develop high-tech innovations that take place in the longer term in line with the needs of the calls filed by the state. For example, Türk Kızılay's tent project. Fireproof and compatible with all season air conditions, this tent is a product entered into the international level specification book. Moreover, this product is 100% recyclable in sustainability. Even the electrical installation previously required for tent cities has been made redundant, as the heating system can be powered by solar panels they have designed with the support of another project partner. Thus, each tent is able to generate its own energy for its needs such as lighting, heating and even phone charging. For another innovative project, an example is the carpet system that heats up

in cars. Hassan Textile, which is especially focused on the needs of electric vehicles, which are the cars of the future, has tried to turn the carpet placed on the base of the car into a system that can generate heat through the car battery system. In this way, a bottom-up heat distribution is provided and the car will be able to heat up very quickly with very low energy consumption.

Areas where innovation is applied

- Innovation in technology and R&D
- Innovation in the product
- Innovation in the production process
- Innovation in the software system

It is an innovative approach to offer customers different versions of products from the same product line by modifying or developing them. In this way, as product development units work to meet the demands of the current product range, Hassan Textile focuses more on **long-term R&D investments**, especially **with high return on investment**. They prefer innovative investments rather than innovation practices with existing machines and facilities, so the integrity of the existing infrastructure needs to change mostly in an innovative business. In the short term, they do not have expectations from R&D activities, and **R&D is more focused on the future**. For example, while there are more than one innovation being studied in this process, perhaps only one of them gives the expected result. With a higher return compared to the expenditure, creative and **completely innovative products** (Türk Kizilay tent that does not burn, suitable for seasonal conditions and recyclable; car carpet heated by electricity etc.) in order to reveal, they prefer **R&D and technology investments**. Innovation is being made not only in the product but also in the processes. It has been switched to the use of processes in which production is carried out by a non-traditional method, rather than by a method known to everyone. **At this time of digital transformation**, in this innovation they brought to the production line, they were able to increase their production capacity by using a digital demo installed on the lines that could simultaneously compare their own performance with other lines and show the difference in their performance. In the follow-up and reporting of investments, they also included an **innovation in the software system** with the transition to ERP (Enterprise Resource Planning) system.

Basic managerial and organizational characteristics of innovative business

- Focusing on customer expectations
- Working in accordance with the goals of the organization
- Collaboration in developing innovative ideas
- Continuous learning organizational structure
- Information sharing and open communication with employees

R&D activities in Hassan Textile are carried out **in line with customer expectations**. The products that are needed, which someone is likely to buy, are being studied. Although the R&D center is managed independently, it focuses on the direction the firm will go in the future, in other words, **the R&D activities are in line with the goals of the organization**. In previous years, the R&D center was working in a field of its own choice. Because this area of work was not included in the company's goals, it was eventually seen that innovation arose, but it was not found, although it was tried to find customers who would demand the product. Therefore, in order for such problems to occur, the R&D center was considered strategically appropriate to work only with the same industrial needs as the company.

Hassan Textile's R&D center uses three sources to create innovative project ideas. The entrepreneur does not miss his focus from the market, so the 1st is customers and fiber suppliers; the 2nd is R&D employees and even company employees, and finally; and the 3rd is the R&D strategy board formed by senior management, general manager, assistant managers, R&D management and academics. **Deciding new ideas in the direction of data obtained from different sources** helps to develop projects that are more accurate.

Hassan Textile regards its employees as a "value". It aims to guide people to the right job by measuring their performance and skills within the company. For each of them, the situation is evaluated, such as whether he is in the right job position or where he should be directed in the future. For this reason, employees are given **jobs that are compatible with their abilities and skills**.

They do not refrain from sharing their sectoral and technical knowledge gained over many years with their employees, but on the contrary, they maintain a strategy that supports and motivates the sharing of information within the company. In a sense, they are trying to make them realize that they are actually easing their workplace by teaching others how to do the work. Because there is no way to obtain their information and then dismiss them, there is no false perception of sharing information. In this way, employees are more open about teaching other employees what they know. While everyone is educating themselves or learning something from others, but now Hassan Textile is trying to turn into a **constantly learning structure** by giving planned and organized corporate trainings (orientation, etc.).

For employees who avoid sharing information, a strategic path is followed in the form of changing the workplace. There is a practice in the form of workplace change for employees who avoid sharing information. For control purposes, sometimes in the absence of a person given short-term leave, it is evaluated whether others can perform the work that needs to be done. Management does not choose to lay off its employees unless they show great resistance to information sharing. By enabling them to work in different job positions, both their **multifaceted development** is supported and the execution of a job is not left dependent on just one person. In this way, in order for the work to be done to continue without disruption, precautions are taken for problems caused by the lack of employees.

Priority requirements for competitive innovation

- Know-how
- Financial resource
- Different, creative or radical innovations

First, the firm must have **financial resources and know-how**. While Hassan Textile is working towards the future, innovative R&D investments can be financed with income from other existing products. Hassan Textile is constantly pursuing investments and trying to create projects that **they themselves find out how to do**, that is, **new, different or radical for the world**. For example, it does not currently produce all of the products that were made a decade ago, because it is no longer attractive as competition increases and many companies enter the field. Therefore, they are turning to long-term R&D and advanced technology investments with high return on investment. This requires considerable financial strength. Both with the income they receive from equity projects and invited projects, they can provide financing and constantly innovate. Hassan Textile has 14 different national or international patents, some of which are certified or some of which are in the process of approval. The aim is actually to get intellectual property rights at the end of the work they have already done.

4. Conclusion

For successful entrepreneurs, the entrepreneur must be both customer-oriented and highly proactive about financial decisions. In order to achieve a competitive advantage that envisages value creation, opportunities outside national markets need to be creatively identified and evaluated. Being proactive and managing risk well brings success while driving entrepreneurship at a global level. Enterprises opening to the global market can gain competitive strength through systematic innovation activities and investment in R&D and technology to produce new products in demand and achieve this quickly at a lower cost. A successful business should pursue a strategy aimed at increasing capital accumulation without having a shortage of cash, while wanting to maximize profit.

The company will show a better performance by sharing the value it has while it runs for surviving. Aside considering its own profitability, if a company serves on benefits for its employees, customers, stakeholders and society, thus it can achieve a sustainable success.

The relationship between organizational factors such as the importance given to innovation, risk taking, managerial support, reward and incentive system, resource availability and organizational structure was examined. As a result, there was a significant positive relationship between organizational factors and the innovation orientation of organizations (Naktiyok, 2007).

Business-specific, original, inimitable and rare sources (such as skilled employees, unique products, and tacit knowledge) are important factors that provide a competitive advantage for companies that want to find a place in the global market. Intellectual capital power aside (knowhow, competence), R&D and technology investments require a large amount of capital power to create this innovation in entering the global market by innovating.

Creative thoughts can be supported by various incentive systems. If ideas with a high value are met with a reward, the satisfaction of the person who reveals the idea increases, and his commitment to the organization develops. In this way, the employee can strive to perform better by having high motivation to do the goals related to the innovation development process.

Entrepreneurs can overcome some of the hurdles to be encounter in the direction of innovation with adequate support. Especially in family business structuring, it does not seem good to act with the support of families and acquaintances who are only informal resources. Apart from them, support provided for the entrepreneurial project may obtained from formal sources such as professional advisors as well (Delanoe, 2013).

The more develop task- related skills and knowledge of the employee through firm-specific training and education (Sung & Choi, 2016) the more they are not only motivated to launch an innovation and but also ensuring firm innovation performance (Sung & Choi, 2018). In organizations that are guided to continuous learning, a significant budget is allocated to training and development, the aim is to direct employees to the field where they are talented, so that they will be able to perform well in innovative initiatives. As the company funds training for the development of its employees, it also creates an environment to share what it has learned with others, thereby ensuring the distribution of information within the organization.

Companies in the position that increasing employment, high export potential, be representing their country with known brands, to produce innovations that facilitate people's lives, effectively scarce resource use and effective use of energy resources are really very

important for the development of the country in terms of socio-economic prosperity. Hassan group is one of the leading enterprises in the industry as a business with such advances, produce innovative technical textiles with a very widespread use, and have well-known brands in the world (such as the Koruser brand, which produces technical textiles for floor protection). They attach great importance to innovation and R&D studies. Hassan Textile Company, which is a part of this group, has made some important initiatives especially for the more efficient use of energy resources (heated carpets for electric cars, tent cities with heating systems with the support of solar energy panels). In addition, it produces products using recycled raw materials, or incorporates its own waste into the recycling process, so it has an approach that supports scarce resource use. In the process of pandemic nowadays, a company like Hassan Textile, which normally makes rough products in the automotive and construction sectors, has proved a high awareness of social responsibility through producing finer and more delicate apron and jumpsuit fabrics for health workers by revising current product lines in a very short period. Hassan Textile, which has proven successful in the global market, has been a case study in our research with the characteristics it carries. We have evaluated to be explained its success by what critical factors to depending on the successful initiatives of such a firm in the world in the result of case study and literature review. As a result, the critical success factors predicted for innovative investments are summarized as shown in Figure 1.

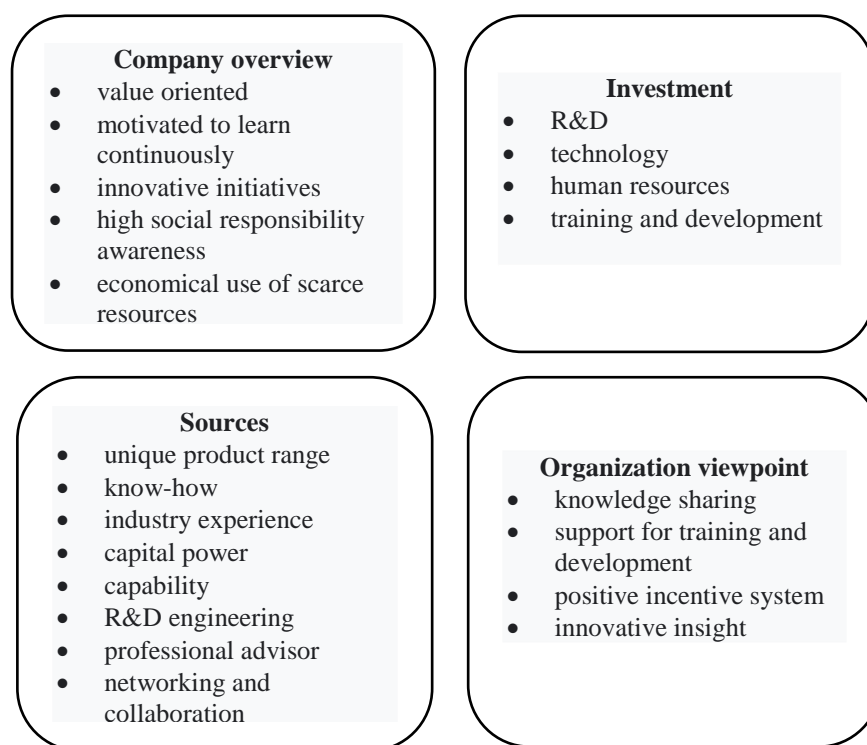


Figure 1. Strategic success criteria in the global market

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Adults Participation in Non-Formal Education: The Statistical Regression Model

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Introduction

Education, especially in the context of some particular social tendencies, plays almost essential role for developing society's economic, social and political growth (Barnes, 2011; Barros, 2012; Milana, 2012). It is impossible to put education aside from all what is happening within education processes and social contexts as well, i.e. demographic changes, progress of technologies, economic ups and downs, political changes and social transformations (Jarvis, 2012). Thus not the learning for a life, but lifelong learning paradigm becomes extremely important for a person, who wants to remain employed and competitive. Learning activities take in account all actions taken in no matter which life period with the goal to upgrade personal features, both civic, social and professional skills along with competences as well (Smith, 2017; Knowles, 1990). In this regard adult education is mainly identified as the tool for developing and sustain *human capital* (Hassan, 2009). This is exactly what is stated in the European strategic and growth scenario plan for the forthcoming decade – *Europe 2030* – which stresses the importance of education in the future society, fulfilled with intelligent and sustainable economy. Besides, in this strategy we may follow the strive of adults (aged 24-35) to learn and constantly upgrade their own skills while satisfying each self-realization needs and the demands of labour market. *Functionalists* (Durkheim, Parsons, and Giddens et al.) put the emphasis onto adults' successful integration into the labor market and discuss the education one of the functions – favorable socialization – through effective individual's input into economy growth of the society. They would examine education based on *consensus* perspective: analyse society in terms of how it is maintained for the common good. According to the functionalists' point of view, education helps maintain society by socialising young people into values of achievement, competition and equality of opportunity; skills provision is also important: education teaches the skills for the economy; besides, education allocates people to the most appropriate jobs for their talents, using examinations and qualifications.

Yet on the other hand, education could be a powerful tool to consolidate different social groups or arise even more tension among them. Especially *social conflict* (Smith, Vaux, 2003 et al.) theory deals with such rather paradoxical situation: globally, education is also regarded as an essential tool for human development and poverty eradication; however, efforts to widen access to education need to focus more on how education can affect conflict (Smith, Vaux, 2003; Beytekin, O. F. & Kadi, A., 2014). As social conflict theorists would argue, that there is an urgent need to develop methods to track whether *progress in education* may also create tensions that could spark or exacerbate conflict; it must be understood as well that education can be part of the problem same as part of the solution.

According to the European statistics and indicators (OECD, 2019), investing in education and training after leaving initial education is essential for upgrading the skills of the labour force. Globalisation and the development of new technologies have broadened the international marketplace for goods and services. As a result, competition for skills is fierce, particularly in high-growth, high-technology markets. An ever-larger segment of the population must be able to adapt to changing technologies, and to learn and apply a new set of skills tailored to meet the needs of the growing services industries, in order to function effectively (OECD, 2019). Adult learning, as part of lifelong learning, is considered crucial for coping with the challenges of economic competitiveness and demographic change, and for combating unemployment, poverty and social exclusion, which marginalise a significant

number of individuals in all countries. Therefore rapid changes in almost every human life's sphere demand adequate individual's educational transformations; thus the whole education system along with its institutions seek for a new quality in order to prepare people to live and work effectively in a changing society (*Mapping major changes to education and training in 2025*, 2010). Having this aspect in mind, we may witness even higher education institutions' quite obvious orientation towards the needs of labour market rather than unleashing human's self-realization and creativity. All this is caused mainly by economic and some ideological reasons. Therefore both formal and non-formal adult education in most cases are interpreted through *sociocultural* and/or *constructivistic* points of view, when *sociocultural* deals with the role of more specific contexts within learning processes (e.g. emotional, organizational, physic, cultural etc.), while on the other hand *constructivistic* – reveals a learner's active participation and the reconstruction of knowledge.

As it is stated in UNESCO (2006) document on non-formal adult education, for adolescents in particular, non-formal educational activities may greatly expand their opportunities for learning. In situations of conflict, many adolescents will have missed years of formal schooling and may not want or have the time to attend primary classes with younger children (UNESCO, 2006). Consequently, they may drop out of the educational system completely if other options do not exist. Some may want to enter the formal school system but may be prevented from joining because of space constraints or due to legal age restrictions. Adolescents who do not have readily available and accessible educational options are much more vulnerable to dangerous situations, such as recruitment to armed militias, engagement in illegal activities and involvement in unsafe income-generating activities. Non-formal education therefore serves as a positive alternative and can often be a vital protection strategy. In this way non-formal adult education in Europe is well known and clearly identified sociocultural phenomenon both sociologically and educationally. Such an education is dedicated for several purposes: a) give an impulse for personality's growth, its active citizenship and solve issues of people's employability rates within modern labour market; b) guarantee individual's socialization favorability (Knowles, 1990; Barros, 2012; Colletta, 1996). Besides Lithuanian experience and government movements show the acceptance of European standards for adult non-formal education – to form a person, through upbringing the competences, who is able to become an active role player in the society and also a person who is willing to satisfy the needs of knowledge, education, and self-realization.

However, there's not much place or even attention paid for adults' non-formal education in Lithuania these days, especially in regards with education as to a separate field, which doesn't have a long term legal regulations/traditions neither to prepare pedagogues nor manage adults' educational processes.

Consequently, this paper **object** is the main factors influencing adults' participation in non-formal education comparing public and private sectors.

The goal – to analyze and describe most important factors/regresses for either participation or non-participation of adults in non-formal education activities in Lithuania.

Materials and methods

Within this research among Lithuanian adults from public and private sectors, the main task was to identify main factors that could be a cause for adults' participation in non-formal education activities; also their attitudes towards lifelong learning, course content, experienced obstacles etc. The most important feature of this survey – the scientific attention to participants' expectations, reasons for learning and the ways that adults learn in today's society.

The *reliability* analysis confirmed that the questionnaire both internally and externally is constructed appropriately, i.e. valid and homogenous (Cronbach $\alpha=0.58$ (ANOVA F test¹=131.81, $p<0.000$)). *Factor analysis*, using the method of Principal Components and the rotation of Varimax along with KMO (Kaiser-Meyer-Olkin) normalization (0.65) and Bartlett's test ($\chi^2=1125.062$ $p<0.000$), has revealed that most of identified components are quite important in this research.

The questionnaire was sent to adult learners throughout Lithuania who were targeted on purpose. Statistic data was analyzed by using MS SPSS 23.0 version with its descriptive methods, Chi test, Student's T-test, Factor analysis and disperse ANOVA analysis, Spearman Rho correlation and multiple linear regression analysis, when adult participants were treated as separate cases who make much influence to a non-formal adult education processes (Cohen, Cohen, 2010; Seber, Lee, 2003).

The *sample* of the research was based on *non-probable and convenient sampling principle*, when picking those who keep learning through their life-span (in sum $n=613$). According to some sociologists (Salganik, Heckathorn, 2004), in such kind of researches matters not only the amount of participants but their active participation ratio. Thus in this study we paid much attention on contextualization of problematic field and correlation between empirical indicators and it was more qualitative approach rather than quantitative (Denzin & Lincoln, 2016; Yin, 2015; Stake, 2010; Flyvberg, 2006 et al.).

Research ethics

The research was conducted following/matching all necessary ethic requirements, when main principles were taken into account: a) research participants' free will to be a part of the survey; b) all data presented is strictly used for only scientific purposes and confidentiality is guaranteed; c) the same level of communication with the respect of human rights based on humanistic values and the equal partnership between researcher and participant was established; d) research participants are updated with the data that was obtained after making both quantitative and qualitative approaches within analysis of chosen problematic field.

Results

Using of multiple linear regression

In mathematical statistics the *multiple linear regression* in most cases is defined as the regression that attempts to model the relationship between two or more explanatory variables and a response variable by fitting a linear equation to observed data. Every value of the independent variable x is associated with a value of the dependent variable y^2 . According to M. Friendly (2006), using of multiple linear regression within social sciences let the researchers to prevent/avoid of some systematic flaws³. Putting into other words, such kind of analysis, when we have too many variables, helps to understand the structure of correlations among those variables, i.e. the importance and meaning of participants' choices for dependent variable – towards constant (Friendly, 2006; Cohen, Cohen, 2010 et al.).

Therefore, after making the Spearman Rho correlational analysis, the existence of correlation between some variables was set; thus it has become highly important to assess the consistency of those correlations. The multiple linear regression model was used, especially in the context of *public* (Y_v) and *private* (Y_p) sectors as in this research several independent variables were of much importance⁴.

¹ In this case ANOVA p mean shows those regresses that are closely related with dependant variable: if p is less than 0.05 then the regression model is considered to be sufficient enough for that kind of statistics.

² *Multiple Linear Regression*. URL: <http://www.stat.yale.edu/Courses/1997-98/101/linmult.htm>

³ For instance, the evaluation of all tests' answers/items, especially in cases of ANOVA, MANOVA, ANCOVA or MANCOVA tests (for more detailed info – please see in: Friendly, 2006; Seber & Lee, 2003).

⁴ Only significant meanings are presented in this paper.

Results are expressed with the following equation of multiple linear regression:

$$y = \beta + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \dots + \beta_k x_k$$

Therefore symbols, presented in this equation, have the following explanation:

Y (constant) – *teaching sector;*

X_{13} – *projects management courses;*

X_{14} – *accountancy and finance courses;*

X_1 – *gender;*

X_{15} – *learning for better professional performance;*

X_2 – *education obtained;*

X_{16} – *learning for knowledge;*

X_3 – *living/working place;*

X_{17} – *learning because of duties/responsibilities;*

X_4 – *respondent's age;*

X_{18} – *learning for the certificate;*

X_5 – *duration of participation in non-formal education;*

X_{19} – *learning for not losing a job;*

X_6 – *learning areas;*

X_{20} – *learning because of meeting with others;*

X_7 – *learning languages;*

X_{21} – *organizers of non-formal education;*

X_8 – *IT literacy and skills upgrading;*

X_{22} – *willingness to participate in non-formal education;*

X_9 – *knowledge deepening in entrepreneurship;*

X_{23} – *obstacles;*

X_{10} – *art/craft courses;*

X_{24} – *relation between personal intentions and chosen courses.*

X_{11} – *health courses;*

X_{12} – *psychology courses;*

After getting the regression's numbers the equation of multiple linear regression was set for *public sector* (when model's $R=0.54$, ANOVA $F=9.029$, $p<0.000$), including only statistically significant and influential variables:

$$Y_v = 0,013 (B) + 0,206 X_8 + 0,117 X_{12} + 0,143 X_{13} - 0,250 X_{14} + 0,120 X_{24}$$

Therefore, we may observe that much of influence in public sector is made by learning areas, especially choosing such courses as IT literacy, Psychology, Projects' management, and accountancy. Also, one of the regresses was the relation between intentions that learners would have and what courses they choose. All of this is much clearly demonstrated in a figure bellow where normal probability plot is presented (see figure 1).

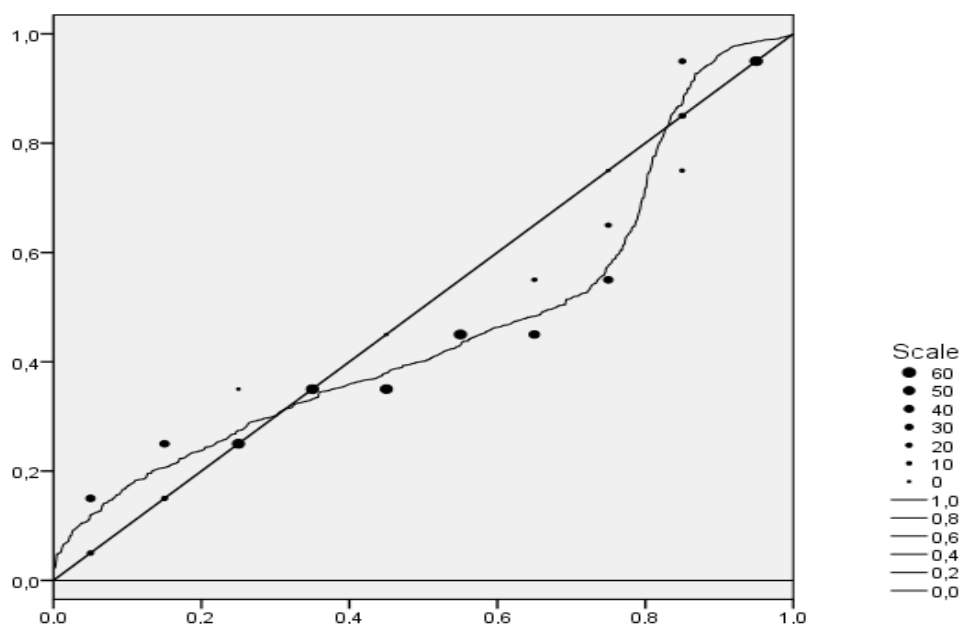


Figure 1. Normal probability plot for adults' participation in non-formal education (*case of public sector*)

Again, it is obvious that variables, mentioned above, crossing the line, are significantly influential for adults' participation within non-formal education, while other variables have scattered quite away and are not considered as significantly important ones.

Respectively regression equation was set for *private sector* as well (when model's $R=0.54$, ANOVA $F=9.029$, $p<0.000$):

$$Y_p = 1,974 (B) - 0,206 X_8 - 0,117 X_{12} - 0,143 X_{13} + 0,250 X_{14} - 0,109 X_{19} - 0,120 X_{24}$$

Also presenting the normal probability plot for the private sector, we may see quite similar distribution of variables, except one that differs from the public sector case, i.e. the reasons of participation in non-formal education (see figure 2).

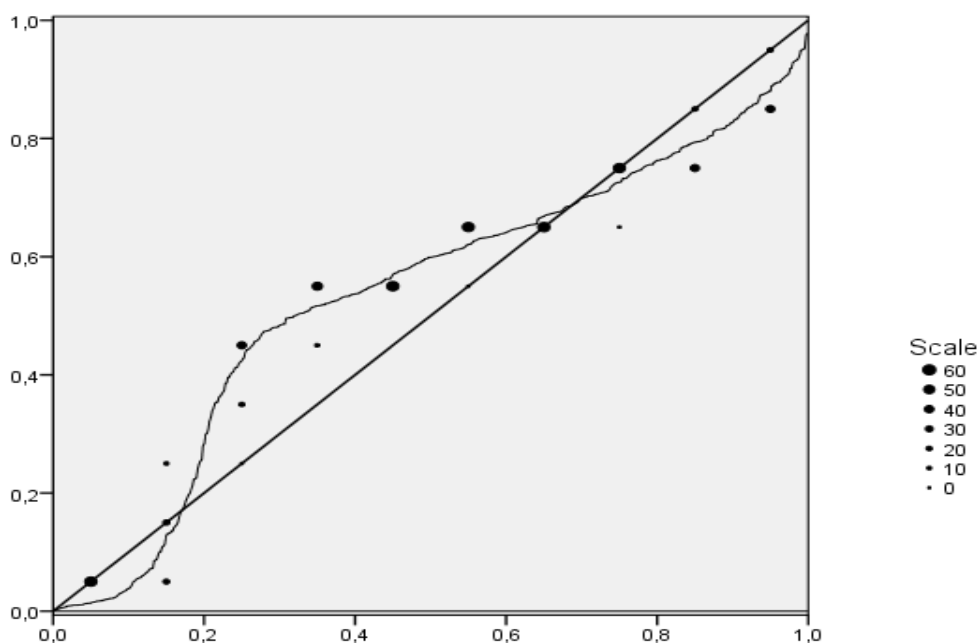


Figure 2. Normal probability plot for adults' participation in non-formal education (*case of private sector*)

Thus, after having these equations, it becomes much easier to analyze some of variables' direct influence in regard of teaching sectors. The regression analysis has shown existing differences between those two sectors, especially having in mind learners – adults' – decisions whether to choose or not non-formal education activities/courses. Even though there were only few significant differences within public and private sectors, however, in both cases much influence to the organization/management of adults' non-formal education is made by:

- *learning areas* that adults would choose (i.e. IT literacy and skills upgrading $p<0.000$, psychology $p<0.005$, projects' management $p<0.000$ and accountancy – $p<0.000$);
- *relation between personal intentions and chosen courses* ($p<0.002$).

Also, it was found that in *private sector*, as the significant regress, is one of the reasons that force adults to choose non-formal education courses – *learning for not losing a job* ($p<0.05$). Thus, it is one of the major influential variables within private sector that separate both sectors and reveals some further tendencies of *human vs. social capital* expression.

Conclusions

1. Non-formal adult education is defined as the main socio-cultural instrument to form a person, through upbringing his/her competences, who is able to become an active role player in the society and also a person who is willing to satisfy the needs of knowledge, education, and self-realization.
2. Multiple linear regression analysis has revealed some significant differences between public and private teaching sectors and that the most important reason for adults to become a lifelong learning participants is rather highly *expressed fear* not to lose a job and this fact is mainly predominant within private sector.
3. Public sector differs from a private in few aspects as well: people become learners because of *more qualitative work, meeting new friends and socialization* ($N=57$, $t=4.10$, $p<0.000$), *duties at work* ($N=35$, ANOVA $F=21.66$, $t=55.76$, $p<0.000$).

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A Survey on the Economics of Nonprofit Organizations and Concepts of Organizational Equilibrium

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1. Introduction

Understanding the nature of economic potential of nonprofit organizations is an important factor to assess the impact of globalization on the performance of business world. There are sufficient reasons in theory and evidence in practice to investigate areas where the dynamics of market mechanism fail to operate. These areas are important parts of the realms of economic cosmos in which daily instant data and information flow unabated. Economic environment is sensitive to data changes with new inventions and innovations. The definition, content and meaning of data itself also differs and transforms from the view point of time and period.

Structured and unstructured data with sufficient quality and quantity assure price system get in line with real variables through which equilibrium condition of the economy is established. In an era of data-driven society, big data outweigh static models such as simple input-output analysis. Public and private funds are channeled by institutional and organizational networks which are quite complex social structures of the circular flow of modern economic life. However, characteristic conditions of the market economy comprise full of uncertainties. The forecast and hindcast methods to predict future and past periods of events provide little proof of robustness under the remote tests for trends. Periodical parameters alter rapidly by swift influx of state-of-the-art information and thereby mitigating the effectiveness and efficiency of estimation results. This aspect also causes problems for policy considerations posed upon empirical investigations.

The measurement of success and performance of market economy relies heavily on theoretical predictions of the actions of human and natural agents. When demand and supply prices do not coincide and the value system of the economy is disturbed, what ought to occur is nothing but a market failure. Market failure is an economic phenomenon that is not infrequently encountered in practical operation of business world. The traditional market failure theories focus on the existence and function of nonprofit organizations in the adaptation process of equilibrium system of price totals. Another explanation for the existence of nonprofit organizations in the economic structure comes from the supply side theory. The explanation of the traditional supply side theory centers on social and ideological entrepreneurship in an altruistic conception as opposed to capitalistic profit orientation. In this approach, price system of free market economies as a value phenomenon is simply replaced by social values.

Hence conducting a survey on nonprofit organizations is not only necessary for understanding of modern macroeconomic consensus but also necessary step towards the comprehensive theoretical and practical conclusions. Accordingly, plan of the chapter is as follows. In the second part, we discuss economics of nonprofit organizations from the perspective of different approaches and review the literature in search for an integrative theory of the economics of nonprofit organizations. In the first subsection of second part, the nature and dynamics of long-run disequilibrium and market failure theories are diagnosed. Institutions, markets and organizations are examined in a paradigmatic analysis the second subsection of part two together with the contextual matrix of (dis)equilibrium concepts and characteristics. Part three is appropriated to the organizational theories and concepts of organizational equilibrium. Part four concludes the argument with relevant insights for the nature of economic potential and performance of nonprofit organizations.

2. Economics of Nonprofit Organizations: A Literature Review in Search of an Integrative Theory

The existence and economic potential of nonprofit organizations started to attract attention of researchers from different backgrounds and departments of knowledge especially in the last a few decades. The nature of nonprofit organizations as opposed to for-profit firms has important features that motivate social action and accelerate economic development. Economics of nonprofit organizations extends beyond systematic mechanism of perfectly competitive markets. In neoclassical conception of equilibrium condition, marginal rates of profits tend to become zero as increasing number of firms enter into the free market framework.

Under normal conditions and the strong assumption of *ceteris paribus*, the conceptual function of profit is constricted as the excess of revenue over cost. Cost considerations of producers and entrepreneurs span over the wide range of economic categories such as cost of production that is related to supply side economics, opportunity cost which reckons the element of time, cost of capital and investment in relation to rate of interest, and other factors of production particularly those of land and labor with their relevant remunerations as wages and rent. Each category of cost can also be classified as particular expenditure pattern.

The balance between the receipts and the expenses creates natural profit according to the equilibrium of demand and supply. However, equilibrium state of the economy is not a general condition but rather an exceptional situation subject to shift from a disequilibrium condition to another point in time and thereby creates cyclical movement of trends (Schumpeter, 1982; Keynes 1936). Competitive price system of free market is built upon the concept of effective demand which becomes deficient under disequilibrium (Hockley, 1970).

2.1. The Diagnosis of Long Run Disequilibrium and Market Failure Theories

Diagnosis of long-run disequilibrium within an economy is important for the management of organizations and entrepreneurial activities because the economic theory of nonprofit organizations stems from two sources of disequilibrium. These are market failure and supply side theories. When individual welfare exceeds social welfare, free markets are said to fail to distribute income equally. At this point, Pareto optimality is violated and inefficiencies arise. Income inequality created by market failure is the most important economic problem of contemporary societies. The role of government for the income redistribution is somewhat limited because of inefficiencies in public finance. If free markets fail to allocate resources of the society, nonmarket institutions and organizations emerge as an alternative to reallocate social resources (Stiglitz, 1989).

Valentinov (2008) searches for an integrative economic theory of nonprofit organizations by eliminating the disconnection between market failure and supply-side theories. The limitations of market structure beyond networks of information in relation to the limits of organization (Arrow, 1974; Klein, 1996) to operate as an exchange mechanism enables self-sufficiency of nonprofit organizations. The heterogeneous nature of the nonprofit sector also analyzed by Ott (2001). The market failure theories can be analyzed under two headings. First one is related to the nature of the goods such as non-excludible public goods (Buchanan, 1968) and externalities (Heller & Starrett, 1976). Information and network externalities are also considered as a new source of market failure (Liebowitz & Margolis, 1995).

Public goods theory of nonprofit organizations merges governmental failure to the market failure (Weisbrod, 1988). If a government fails to provide a particular public good to any fraction of the population, this kind of failure reflects itself also to the market. The

function of nonprofit organizations is to remedy the market failure in providing public goods for those sections of the society. The organizational response to market failure creates the institutional identity of nonprofit organizations. The ambiguities in definitions of the concepts of “markets,” “institutions,” and “organizations” are examined by Ménard (1995). Markets in the form of institutions are discussed as opposed to organizations in the form of markets under dynamic macroeconomic model.

2.2. Institutions, Markets and Organizations: A Paradigmatic Analysis in Dynamic Macroeconomic Model

Characteristic properties of markets, institutions and organizations under dynamic macroeconomic model differ according to their foundations, structures and functions. Foundations demarcate establishments where consistent states of principles operate within structure. Structures indicate specifications and juxtapositions of foundations whether they are formal or informal, local or universal, etc. Functions showcase and delineate how foundations and structures are formed to perform under specific circumstances of environments (Ménard, 1995).

Table 1.—The Contextual Matrix of Concepts and Characteristics

ENTITIES	FOUNDATIONS	STRUCTURES	FUNCTIONS
INSTITUTIONS	Permanent, general, objective set of rules.	Culture, history, manners and laws.	Practical application of the “rules of thumb,” often by enforcement for <i>modus operandi</i> .
MARKETS	Competitive setting, substitutability and complementarity.	Price system, commodities, factors of production.	Exchange of goods and services, utility production and consumption.
ORGANIZATIONS	Cooperative setting, framework and formalization.	Levels of centralization and hierarchy.	Decision making, strategic planning and redistribution of resources.
(DIS)EQUILIBRIUM	Static vs dynamic, stationary state, <i>status quo</i> .	Demand and supply, price mechanism.	Pareto optimality, (in)efficiency, creative destruction.

Source: Ménard (1995)

Table 1 depicts the matrix of concepts and characteristics which contains different definitions of institutions, markets and organizations with their respective foundations, structures and functions. This is a modified and reconstructed the model of Ménard’s (1995) table for comparative characteristics. We treat equilibrium and disequilibrium states of the economy as separate entities in this system. There are also various definitions of equilibrium under

considerations. Besides market equilibrium, institutional and organizational equilibrium concepts enter into the analysis.

Markets are defined as specific institutional and organizational arrangements through which space of exchange expand. Walras' (1896) general equilibrium analysis of markets reflected by the Arrow-Debreu model depends upon convex preferences in a perfectly competitive economy (Arrow & Debreu, 1954). Systematical investigations of optimal organization framed to maximize an objective function (Arrow, 1964). On the other hand, non-convexity in institutional and organizational economies violates assumptions of Arrow-Debreu model and brings market failure theories into prominence (Dasgupta & Mäler, 2004).

Especially from the beginning of 2000s digital technologies together with information systems innovations, a new paradigm appeared in a global sphere. For example, new economic concepts such as contextualization, value-in-context, value-in-use and value networks attempt to redefine utility and show how context frames exchange (Chandler & Vargo, 2011).

On the other hand, traditional boundaries of markets broadened and transformed into complex networks of information with the invention of digital currencies (Sarasvathy & Dew, 2005). Flow of information through institutions and organizations also transformed structures and functions of those entities. Level of analysis and economic approaches to organizations shifted from the local understanding to the global contemplation. Organizational culture, ecology and climate articulated within the formal framework of behavioral theory and evolutionary approaches to organizations (Douma & Schreuder, 2008).

Examination of networks beyond markets is also crucial for a thorough comprehension of technology and economic infrastructure (Lioukas & Voudouris, 2020). Network externalities, if they exist within structuring environments of institutions and organizations, can cause a new source of market failure. Besides broadening boundaries of informational networks beyond markets, the conceptual distinction between *institutional environment* and *institutional arrangements* are also important to understand organizational structure (Davis & North, 1971).

3. Organization Theories and Concepts of Organizational Equilibrium

Classical economic dynamics of general equilibrium corresponds to marginal utility and depends upon market price system of demand and supply mechanism. Market equilibrium is also a strategic point for profit maximization. Relatively recently, evolutionary agent-based Walrasian economy takes learning process into considerations and differentiates between public and private prices (Gintis, 2007). Besides profit maximization definition of market equilibrium, various nonprofit organization theories adopt different types of equilibrium models. Gazendam and Simons (1998) analyze the concept of equilibrium according to four main organization theories in the relevant literature.

The first study is classic organization theory of Fayol (1916) which describes organizational equilibrium in relation to the balance between vested interests. Secondly, Mintzberg's (1979) modern organization theory sets equilibrium in the framework of a stable configuration. Third type relates to Morgan's (1986) postmodern theory of organization that views equilibrium concept from the perspective of variety of images of organization. Fourth and final work is Volberda's (1992) hybrid theory of organization which synthesizes different approaches in a contingency framework based on flexibility of organizations.

3.1. Organizational Equilibrium Concepts of Fayol's Balance Between Interests

Fayol's (1916) work is considered among the classics of organization theory. This classic organization theory sets systematic relationship between managerial functions and the general structure of the organization which is defined as the body corporate. There are various

numbers of equilibrium points oscillating between opposing forces of public and private interest. The equilibrating process of organizations operates under dynamic macroeconomic structure.

Gazendam (1993) identifies four types of equilibria in relation to the static managerial tasks. We redefined those equilibrium concepts in relation to dynamic entrepreneurial, technological and innovative functions of organizations under the relevant titles of (i.) The Entrepreneurial Equilibrium; (ii.) The Welfare Equilibrium; (iii.) The Environmental Equilibrium; (iv.) The Time Equilibrium.

1. *The Entrepreneurial Equilibrium.* The equilibrium between employers such as managers, and employees such as workers. This *entrepreneurial equilibrium* is established by an entrepreneur who has abilities in coordination of organizational performance and maintained by payoffs formed according to the quality and quantity of strategic organizational achievements and failures. The strategic interaction of economic agents within and outside of organizations creates equilibrium or disequilibrium conditions in the short-run as well as in the long-run.
2. *The Welfare Equilibrium.* It defines the equilibrium between private and public interests. The welfare of organization depends not only upon private interests of individuals as in the free market system under perfect competition but also upon social welfare which takes public interest into consideration as well. Public goods theory of nonprofit organizations provides sufficient reason for the existence of this *welfare equilibrium*. Positive externalities are important elements in establishing and maintaining welfare equilibrium of organizations whilst negative externalities are source of disturbance and thereby disequilibrium.
3. *The Environmental Equilibrium.* It is the equilibrium between organizational staff and the management of human resources. This concept of equilibrium is also related to the organizational culture and climate under which appropriate innovation ecosystems flourish. The establishment and the maintenance of this *environmental equilibrium* can be attained by qualified personnel endowed with lifelong learning abilities.
4. *The Time Equilibrium.* This abstract and theoretical *time equilibrium* concept corresponds to time preference of personnel effort spent between learning and productive periods. However, learning by doing (Arrow, 1971) in strategic environments where economic agents endowed with heterogeneous learning habits and expectation formation abilities turns the direction of utility function in time preference from substitutability to complementarity.

These four types of equilibrium concepts are necessary for the wealth of the organizations. There are also some performance criteria in attaining foregoing equilibria distinguished by Fayol (1916). According to Fayol's classical organization theory, equilibrium state of organizations is attained and maintained only by managerial functions which consist of rather static scrutiny tasks. We introduce dynamic entrepreneurial functions and redesign the performance criteria as efficiency and equality, stability and continuity of staff, innovative and initiative spirit of entrepreneurial activities, inclusive philosophy and unity of organizational community.

3.2. Organizational Equilibrium Concept of Mintzberg's Stable Configuration

Mintzberg's (1979) organization theory focuses on the equilibrium concept of stable configuration from the perspective of transdisciplinary approach that makes use of different theoretical analyses such as systems theory, decision-making theory and contingency theory. Stable configuration attains and maintains equilibrium through structuring of organizations. The essence of structure of organizations consists of five coordinating principles.

- (i.) Mutual adjustment which coordinates work by the process of information transmission and communication;
- (ii.) Direct supervision by entrepreneurs;
- (iii.) Standardization of work processes;
- (iv.) Standardization of work outputs;
- (v.) Standardization of worker skills.

After coordinating principles, stable configuration requires five basic parts of organizations that are operating core, strategic apex, middle line, technostructure and support staff. In coordinating equilibrium concept of stable configuration, three variables define a specific state for organizations. These are contingency (independent) variables, intermediate variables that are related to work process and structural (dependent) variables. The contingency factors are important for effective structuring and configuration of organizations.

3.3. Organizational Equilibrium Concept of Morgan's Variety of Images

Morgan (1986) develops a postmodern version of organization theory by using Ashby's (1991) Law of Requisite Variety. According to this approach, the equilibrium state of organization depends upon the variety of images of organizations. Every image of organization reflects on a metaphor as working of a machine, living of an organism, functioning of a brain, growing as a culture, governing like a political system, as an instrument of domination, etc.

Conditions for the equilibrium state of organization obey the Law of Requisite Variety. When the requisite variety of images of organization exists at a particular period of time and place, the organization is said to be in an equilibrium state. Organizational equilibrium concept of variety of images employs mental maps of economic agents which consist of metaphors or images of organization in peoples' minds. This equilibrium framework is set into a mu-space model because the state space model of organization has not sufficient information to support the Law of Requisite Variety (Gazendam, 1998).

3.4. Organizational Equilibrium Concept of Volberda's Flexibility Framework

Volberda's theory is an analysis of equilibrium between the flexibility of an organization and erratic nature of industrial ecosystems and turbulence of environmental factors. Flexibility of organization is a crucial variable to adapt in an ever changing situations of business life especially in an era of uncertainty. The change of organizational characteristics is also relevant with the Law of Requisite Variety.

There are three categories each of which relates to a particular attribute of characteristics of organization. These are characteristic structure of organization, characteristic technology of organization, and characteristic culture of organization. Sources of disturbance to equilibrium are defined exogenous shocks and can be listed such as shortness of raw materials, insufficient supply chains, shifting demand functions for differentiated products, ever changing customer needs and expectations, trends of consumer preferences, alternative risk attitudes of market participants, state-of-the-art technology infrastructure renovations and innovations.

The equilibrium is attained at the point where intrinsic flexibility of organization matches and absorbs exogenous disturbance factors. In this approach, ability of adaptation to changes is formulated as a managerial function. However, the introduction of dynamic entrepreneurial functions to the system flexibility framework is also important. The dynamic functions of entrepreneurial abilities to deal with disequilibria determine the flexibility of an organization to change and adapt for new requirements.

There are also some characteristics for the disturbance terms. These are complexity of conditions, dynamics of ecosystem and unpredictability of future course of economic shocks. The adaptation of organization to a new equilibrium level of production is based on reorganization. Voldebra's theory defines the function of organization in terms of two interactive variables: ecosystem variable and flexibility variable.

4. Conclusion

The concept of equilibrium in economics has a central function for the full performance of market system. Coordination of markets requires optimum allocation of resources and factor of production. The circular system of traditional economies considers goods and services and constructs a theory where competition is assumed to be perfect. However, in case of misinformation and negative externalities, markets fail to produce best outcome. The market failure theories of nonprofit organizations explain the existence and functions of organizations from the perspective of modern macroeconomic theory.

In order to understand the true nature of economic potential of nonprofit organizations, it is important to search for alternative concepts of equilibrium analysis in organization theory. For this reason, we surveyed four theories of organization with their relevant implications to equilibrium concepts and redefined some of their assumptions not in static managerial tasks but with dynamic entrepreneurial functions. Institutions, markets and organizations are important components parts of contemporary economic life. Improvements in technology together with production techniques and consumption preferences render some concepts obsolete and require new ways to do business.

The demarcation lines between institutions, markets and organizations are getting much less determinate. The contextual matrix of concepts and characteristics of these economic entities show the mutual relationship between different modern economic phenomena. Foundations, structures and functions of entities take place in the horizontal vector of the matrix. Equilibrium and disequilibrium conditions depend upon the mutual relations of demand and supply dynamics as well as operation of networks and flow of information throughout institutions, organizations and markets.

The complex structure of economic system necessitates various forms of equilibrium concepts and conditions other than general equilibrium attained at the intersection between demand and supply. In this manner, we redefined chief forms of equilibria already defined in the existent literature in terms of managerial functions so as to make clear the functions of dynamic entrepreneurial activities: (i.) The Entrepreneurial Equilibrium; (ii.) The Welfare Equilibrium; (iii.) The Environmental Equilibrium; (iv.) The Time Equilibrium. After all, organizational equilibrium is a general type of market equilibrium in broad sense and the way from disequilibrium to equilibrium is paved by the 'invisible hand' of innovative entrepreneur.

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Organizational Cultures in Educational Institutions

Carmen Sonia Duse

1. Introduction

The school is a special organization, whose functioning is affected by a series of characteristics that differentiate and particularize it in the organizational landscape.

It represents the basic unit of the education system, having as a priority function the full capitalization of the students' personality within a training process conceived as a teaching-learning-evaluation activity.

The school is seen as an open system, which reflects and highlights a whole of relationships and correlations with external factors, in a complex managerial scheme, based on the continuous regulation and self-regulation of the relationships between input and output flow.

The school itself represents not only the main factor of education of the young generation, but also an educational environment that sends didactic, psychological, artistic influences, etc.

As such, school management involves meeting several requirements:

- adapting the organization to the social environment by planning the activity at the level of the educational unit;
- adapting the organization to the requirements of the social system through the methodological orientation of the teaching-learning-evaluation activity;
- ensuring an organizational continuity, by stimulating the specific cultural model.

The culture, professional ethos and the informal activities are factors which differentiate schools, giving each of them their own identity. The culture of the school is permanently enriched by the culture of the students, in an continuing changing, which ensures a continuous "breath". The school analysis allows the observation of organizational culture, because its specificity as a social organization can only be understood by knowing some of the most significant functional variables, such as atmosphere, ethos and management.

2. Organizational cultures

The conceptual framework of organizational culture has its roots in social situations, anthropology, sociology, social psychology and organizational behavior. Specialists in these fields spoke of culture as a basic component of a society. Some experts (Sorokin, P., 1951) view culture as one of the critical aspects of organizing the organization and describe it as a system that transmits patterns of behavior to connect human communities to the surrounding ecological environment.

The term "culture" is coming from anthropology. It was used to represent in a very broad sense, the physical and spiritual elements which a certain human community has transmitted from one generation to another. Edward Sapir (1934) considers three meanings of the concept of culture:

- the technical meaning, which aims at the unification of all human elements (culture coextensive with man, a term identical to that of civilization);
- culture as an ideal of personality, in terms of instruction and education;
- culture in the sense of spirit or genius of a people.

According to the American Heritage Dictionary, culture is about "the arts, beliefs, customs, institutions, and other products of human work and thought considered as a unit, especially with regard to a particular time or social group", or "the summum of beliefs, values, behaviors and other outcomes of human thought and work that are socially transmitted within a community" and "the set of predominating attitudes and behavior that characterize a group or organization"

Webster's New Collegiate Dictionary formulates the meaning of organizational culture as "a model for integrating human behavior which includes ways of thinking, language, action and artifacts, a model that depends on the human capacity responsible for the processes of learning and transmitting knowledge to future generations " or " the integrated pattern of human knowledge, belief, and behavior that depends upon the capacity for learning and transmitting knowledge to succeeding generations".

Ouchi (1985) speaks of organizational culture as "a set of symbols, ceremonies, and myths that communicate the beliefs and core values of the organization to its members." Peters and Waterman (1982) consider organizational culture as "a coherent and dominant set of shared values, transmitted through symbolic means such as stories, myths, legends, slogans, anecdotes, short stories."

Considering all these definitions, we can understand the organizational culture as summum of values, symbols, rituals, ceremonies, myths, attitudes and behaviors of the majority in an organization and which are then transmitted to succeeding generations. It can be understood as a normal way of thinking, feeling and acting of the members of the organization having a major influence on the results and evolution of the organization.

Or, in other words, organizational culture is determined by a series of endogenous and exogenous factors of the organization, which influence the characteristics of the organization. These factors will be analysed in the next paragraphs.

2.1. The leader's influence

It is possible for a culture to emerge over time without the intervention of a key individual, or a major actor. But extremely many cultures, especially the strong ones, reflect the value of one of the organization's beginning leaders or a leader who dominates organizational life at some point. This can best be seen in the person of a principal who, through the depth and devotion shown to the institution he leads, becomes and represents the personalization of that institution, so that, even years later, the name of the leader and the school are almost confused.

This leader is not only the one who performs the management processes, but also the one who transmits a certain attitude towards work, an attitude that reflects his image, his own faith about what must happen in the organization, in order for it to achieve its objectives and to be an organizational continuity. The leader of the organization attracts people who think similarly, and who share his vision. Looking of the evolution of the organization over time, the group matures and consolidates, thus appearing an organizational learning process, so at the same time, the leader is conditioned by the characteristics of the culture of the organization he lead it.

2.2. Social connections

They are the ones who ensure the connection and interaction between individuals, who can thus appropriate their beliefs, values and visible elements of the respective culture. In weak and fragmented cultures there is often a random selection of staff and an indifferent succession of social ascents. In strong cultures, the staff is integrated through a staged socialization process, carried out in several steps, a process whose course is represented in the figure 1.

Step 1: Selection

Those individuals who are able to adapt to the existing culture are selected, through initial presentations as truthful as possible, in order to eliminate the unwanted ones.

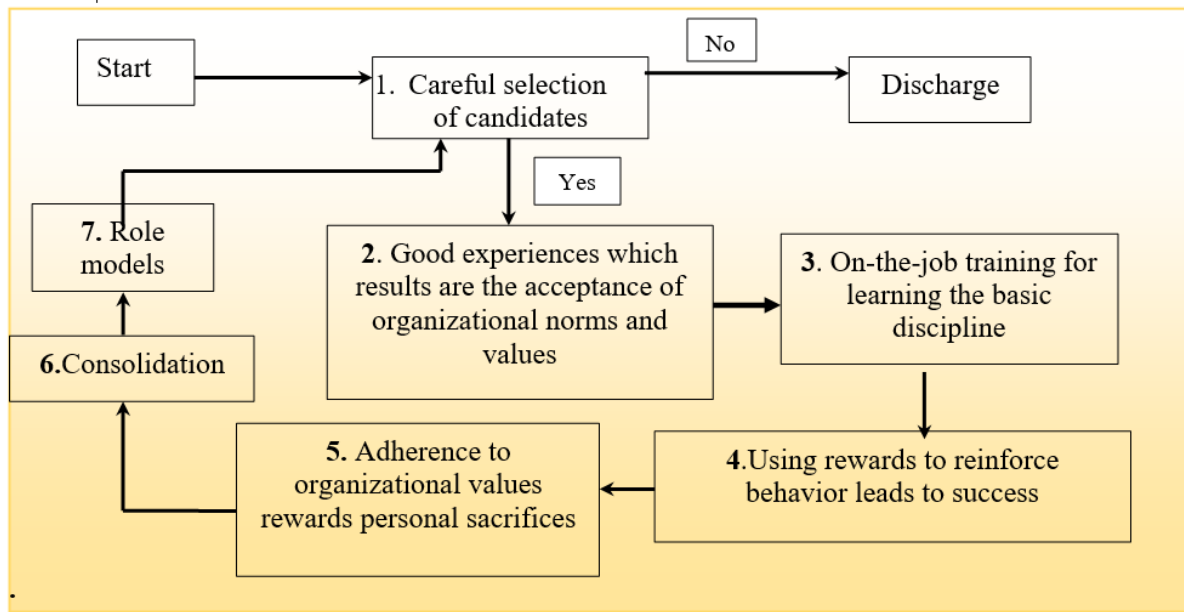


Figure 1. Socialization Stages specific to strong cultures

Step 2: Challenge experiences

Such experiences are chosen that produce the humiliation of new employees, so that they accept and then adhere to the organizational rules.

Step 3: Training at different jobs

Even the best educated newcomers are allowed to start working at the bottom of the professional ladder to understand how the organization as a whole works.

Step 4: Reward and promote

This system must be carefully managed so as to stimulate those who support the achievement of the organization's goals.

Step 5: Adherence to organizational culture

The members of the organization get in touch with the beliefs, values and assumptions necessary to adopt a certain behavior. In this way, everyone realizes that the sacrifices made because of socialization are rewarded.

Step 6: Consolidation

At this stage, contact is made with the stories, myths, legends that consolidate the culture.

These models are living examples and the newcomers can imitate in building a fast-paced career in line with organizational culture.

Step 7: Behavioral role models

Of course, in educational organizations, a series of stages can disappear or several stages can be merged into one.

2.3.The ethos of the organization

The ethos of the school is difficult to define and almost impossible to measure, but each of us knows when it is weak or strong. It integrates the spirit of culture and its value system.

The ethos of the school is the result of thousands of actions, interactions, decisions and determination. It accumulates the whole school past and can only be changed gradually.

Sometimes the "school ethos" actually wants to define the climate. Although it includes many of the meanings of the climate, the ethos has other connotations, because it expresses the attachment of educational actors to the educational institution to which they belong, an attachment that is based on the values promoted by the school.

By concentrating efforts to promote positive values and standards, the ethos can be strengthened and that has the effect of investing in the health of the school organization for the future.

Ethos can be interpreted as defining the objectives, principles and expectations that a school has, being explicitly stated and implicitly, likely to support the learning process in a safe environment. It reflects the beliefs of the team and includes a set of values that it aims to promote both in the curriculum and in the educational climate, but also in the external image of the school.

The ethos of the school is visible in the way students interact with each other, as well as with the teaching staff, as well as in the school's relationship with the community.

School practice highlights that the ethos is developed by consensus, it is promoted by the principal and his management team and it is the quintessence of consensus reached by the school with teachers, parents, students and often with other external factors, or from the local community. It conveys information to the outside world about how the school acts as a learning organization, promoting a sense of identity and belonging.

A positive school ethos will promote an open environment and reflect how the school respects its rights and responsibilities, equal opportunities, special educational needs and the recognition of diversity and differences.

A positive ethos has been identified in several studies to improve school activity, as fundamental for increasing accumulations, for behavioral change, for reducing school violence.

In a school community, everyone contributes to shaping the ethos. The ethos of school collectives of classes is influenced by the ethos of the school. No doubt it is the task of teachers to understand and promote the ethos of the school, helping students to share it.

Promoting a positive ethos requires praise and encouragement, high expectations and standards, good relationships between individuals and between the categories involved, a positive and stimulating work environment. To this end, the consistency of teachers is very important. They have the task of encouraging self-control and responsibility in students. A positive ethos is likely to increase the results obtained by the school in the training of students.

2.4. Staff expectations

These have a strong influence on the way staff behave. From the first days, the newcomers get in touch with the requirements of the organization. The requirements appear even more pronounced during the integration period, but also as the teacher begins to discover and correctly interpret a series of processes, phenomena in the school.

Organizational culture is, in this context, a landmark that prefigures what is accepted or not, in the organization.

2.5. Employee characteristics

This aspect refers to the differentiation of the labor force according to age, education, gender, intellectual and physical abilities, etc.

In many educational groups there are certain dissensions between teachers of technical culture and those of general culture. There are also some discussions between teachers with seniority in the school and newcomers. All these problems must be known and mastered to prevent a climate of hostility and the formation of "little churches", with undesirable effects on the evolution of the organization.

The formation of a strong organizational culture involves the preservation of individual cultural elements, which are in line with the basic values of the organization, as defined by the

vision and mission of the organization. This implies an interweaving of values, beliefs, individual symbols, with those specific to the organization.

2.6. Evaluation and motivation system

Organizations evaluate what is important for the activity, what is considered to bring and create value for the organization. In this way, a permanent feedback appears, the members of the organization being able to self-evaluate and knowing what is happening to them. The way in which the evaluation is performed (type of evaluation, frequency, etc.) as well as the way in which it is reflected in the motivation of employees causes a specific behavior. Thus, the staff will focus on those elements that will be evaluated and have the best score, thus ensuring a positive image through evaluation.

2.7. Information technology

It directly affects the organizational culture. The development of information technology offers great possibilities to its users.

The information system is designed in an anticipatory vision, which would give the teacher the opportunity to access a database, where he can find the necessary information.

Currently, the teacher has the opportunity to get a greater involvement and participation of students in the learning process, precisely because of the possibility to use the assisted instruction in a current way.

Thus, it is possible to stimulate the responsibility of teachers at all levels of the organization, giving them the opportunity to organize their own activity, to a greater extent.

In this pandemic period, this factor is all the more important, as schools have been challenged to teach online, and many of them, at least in Romania, have not coped. Those schools they did not make investments in digital infrastructure now had to "improvise education". The effect will be seen in time, in the way current students will be able to recover the losses from the current period.

2.8. Organizational resources

The existence of resources for an organization plays an important role in creating a specific type of organizational climate.

If resources are limited, there is competition within the organization, with each participant at the organization level trying to show that its performance is superior in order to obtain more resources. There may be disagreements between certain departments / units regarding the distribution of resources, the analysis starting from the importance that each of these organizational structures gives to the training of pupils and students among the members of the organization, students. Thus, the situation can degenerate, appearing harsh reactions between members of the organization, reactions translated into destructive conflicts for the organizational culture.

2.9. Legislation

Legislative provisions have a direct or indirect action on its organization and management.

In the context of the educational system, the legislation has undergone and is undergoing a series of changes that visibly affect the evolution of the organizational culture.

Frequent fluctuations are not likely to produce a coherent education system, nor to build clear visions of what society expects in the future from that organization.

Moreover, legislative fluctuations cause confusion and disorientation for both students and teachers, all of which are negatively reflected in the morale and motivation of all actors involved in the educational process. The effects are seen in the lack of motivation for the teaching career of graduates, reflected in the aging age of active teachers.

2.10. Customers

The clients of education are constituted by the central governmental institutions or of the local administration, companies and organizations of companies, institutions specialized in the management of the labor force, etc.

Students are constituted in a category of clients, both internal (as participants) and external (as beneficiaries) and have their own expectations related to the school. Teachers and school staff come into direct contact with students, in this way the interaction takes place. It practically intersects two systems of values, attitudes and behaviors, with a visible mutual impact.

Last but not least, the management and staff of the school are also internal clients, each of these categories having its own requirements and expectations.

A dissatisfied client will create a negative mood for the teacher, on which he will pass on to the organization. If these situations are frequent or growing, then the entire organizational climate will be affected.

Students come from different backgrounds, with different cultures, with their own traditions and values. It is clear, therefore, that managers need to consider these issues, take into account the cultural background of students, and establish appropriate ways to respond through the services provided, their needs and requirements (Arslan, 2018).

2.11. Globalization

There is currently a tendency to oppose the phenomenon of globalization, which causes many groups to assert as much as possible their cultural identity, different from others. Belonging to a nation gives individuals a sense of solidarity, gives them the opportunity to present both their own history and traditions, as well as the remarkable achievements that nation members are proud of.

However, globalization is an increasingly present phenomenon and it forces organizations to consider a larger complex of factors, in an international vision.

Organizational culture is strongly influenced by these interactions that take place between countries, organizations and people with different cultural traits. At present, there are more and more interpenetrations of the universal cultural elements, with the particular ones, which belong to the specifics of a certain geographical area or of a certain group.

The factors that favor this process are:

- development of telecommunications and information technologies;
- increasing the level of education of the population, with positive effects on the workforce able to use these technologies;
- emphasizing the interdependencies of cultural, social and economic policies.

3. The components of organizational culture

There are multiple channels and forms through which organizational culture can be observed.

We can talk about cognitive, affective and normative elements existing in culture. In Edgar Schein opinion there are several categories of components of culture, such as:

- behavioral regularities in people's interactions: the language used, customs, traditions, rituals applied in relationships and in different specific situations;
- group norms, as standards and values (such as "so much work, so much pay");
- the values highlighted, as principles and values explicitly formulated for the participants in the organization (for example, "in the foreground, quality");
- formal philosophy, ie ideological and political principles that guide the actions of the participants in the organization in relation to customers;
- the institutional, formal and informal rules, which define the affiliation to an organization, as well as the ways of managing and regulating the relations;

- socio-moral climate and architecture of the organizational space: moods, emotions, furniture, order, spatial organization;
- personal skills, respectively those specific competencies that are to be applied by the members of the organization in fulfilling the work tasks and in the relations with those outside the organization;
- ways of thinking, mental models, linguistic paradigms, ie those cognitive frameworks that guide perceptions, thoughts, approaches and communications;
- activated meanings, ways of understanding daily events or fulfilling work tasks;
- metaphors and symbols, transposed into ideas, feelings, feelings or images about themselves and about phenomena in the organization and which are manifested in everyday life.

3.1. Symbols and slogans

Organizational culture can be expressed through a series of symbols, some deep and some superficial. Depth symbols provide an indication of how the organization works. Surface symbols are those tools designed specifically to create a certain image of the organization.

Symbols represent objects, events, or ways in which different ideas can be conveyed. They reflect the philosophy, values, beliefs, expectations of the organization's staff, and through them different concepts are expressed and certain behaviors are promoted within the organization.

They may also differ in their complexity and degree of coverage. For example, the slogan of the organization or the positioning at the board table, the parking space for the director, all these talk about how things happen in that organization. The meetings, the teaching councils, in addition to their role of information exchange and decision-making, highlight the relationships that exist between management and staff of the organization, values and priorities within the organization.

The mission of the organization, expressed according to the level of the school, can also be seen as a symbol with strong effects on its members.

Each school has its own symbols that managers use to express different values, organizational culture or their vision of the future.

The symbols of culture visible in the physical and social environment are called artifacts. They are the most important and accessible aspects of an organization.

The artifacts therefore include the buildings, but also the logo of the organization, the characteristics of the office, the furniture, etc. The artifacts talk about what managers consider important, and how the school differs from others, similar.

3.2. The values of the organization

Values represent the second and deepest level of culture. They reflect the fundamental beliefs of the staff about what is or should be. The values are consciously present both in the discussions between the members of the organization and in the claim of the school mission or in the presented reports (Arslan & Rata, 2013) .

Values make the difference between good and evil, between good and bad, between normal and abnormal, desirable and undesirable.

Organizational culture contains beliefs, values, and behavioral norms that represent the basic level of participants' perceptions of what is happening in the organization, what is desired and accepted, and what constitutes a threat.

It is often considered that values and beliefs are found in the philosophy and ideology of the organization. Ideology expresses certain beliefs about pre-how society and how it acts and evolves. Ideology fulfills the role of motivator of consciousness, because it connects social elements with ethical principles. A strong ideology is defining for the relations between the members of the group as well as for their relations with those outside.

Norms and values in organizations require a consensus on what is important, positive, and desirable in the organization. In this way it is possible to foreshadow what ideas and behaviors the participants in the organization should manifest.

It should be specified there is a difference between the decreed values (ie what the members of the organization want to be values) and the existing values (as they result from the behavior of the participants in the organization). Values can be reflected in the behavior of individuals in the organization, but also in its artifacts.

Joseph Quigley defines values as "rules or guidelines by which an organization determines its members to manifest themselves in accordance with its order, safety, and growth."

In order to determine what beliefs are and how they influence the organization's future strategy, Thomas Peters and Robert Waterman made 7 statements involved in achieving success:

1. The belief that you are the best.
2. To believe in the importance of details - the secret of a job well done.
3. Belief in the importance of treating people as individuals.
4. Belief in the superior quality of your services.
5. The belief that most members of the organization can be innovative, but also the opposite, that the organization can't cope if not.
6. The belief that an informal atmosphere enhances communication.
7. Belief in the importance of growth and success.

In order for these values to be known, respected and appropriated by the employees of an organization, it is necessary at certain moments to be a presentation, an explanation of the major values on which the implementation of decisions and actions of the organization's staff, as well as from the external level of the organization.

Each participant at the level of an organization must know their own values and how they integrate into common values. In this sense, Christopher Aschua proposes a questionnaire consisting of 16 items that assess personal values in 8 areas: professional, financial, family, social, community, spirituality, physical and intellectual

Also, the Dutch researcher Geert Hofstede presents on his personal page, a model for evaluating the values on which the culture of the analyzed organization is based.

In a research undertaken in the Romanian schools regarding the existing organizational cultures, the following values were found, expressed in the order of their preferences: order, learning, people, survival, network, power, personal success.

3.3. Norms of conduct

They are even required by the idea of organizing and functioning of social groups and communities. The norms are those who describe recognized and accepted behaviors by all members of the group, highlighting the expected behaviors from participants group, both inside and outside the organization.

Also, in organizations we meet customs, ie a kind of conventions on which most of us talk about formal rules of conduct, established by official regulations by the management of the organization and informal, established unofficially by members. They are not imposed but, as a rule, are the result of passive acceptances. The norms are also supported by explicit values.

According to Michael Armstrong (2003), the rules refer to aspects of behavior, such as:

- the treatment applied by the managers to the team members (managerial style), as well as the way in which the latter relate to their managers;
- the prevailing work ethic, such as: "we work seriously, we have serious fun", "you come early, you leave late", "if you can't finish your work by the end of the program, it's clear, you're inefficient" you always look busy", "try to look relaxed all the time";

- personal status - how much importance is assigned to it; the presence or absence of obvious symbols of personal status;
- ambition;
- performance - the demanding performance standards are general, the greatest praise someone in the organization can get is to refer to him as a very good professional;
- power - recognized as a way of life, exercised through political paths, dependent on expert competence and ability, rather than the position held; peak concentration;
- politics - present everywhere in the organization and treated as a normal form of behavior; not accepted in the form of obvious political behavior;
- loyalty - expected, represents a “cradle to grave” approach to the career;
- affordability - managers are expected to be approachable and visible; or, on the contrary, everything takes place behind closed doors;
- formalism - the norm is a cold, formal approach; small names are / are not used at all levels; there are unwritten rules, but clearly understood by everyone, in relation to the appearance of clothing.

Each organization has its own language, specific, as a reflection both of the characteristics of its members, and in terms of activities and objectives. The language gives new meanings, specific connotations of words selected by the participants in the organization .

A particular form of language is jargon, which is used to make group members communicate more easily and clearly. If a member of the organization does not know and therefore cannot use the jargon, this is a clear sign that he does not belong to the group.

3.4. Rituals and ceremonies

They are collective models of behavior, visible in formal situations, relatively stable over time and with a rich symbolic content. Rituals and ceremonies are some of the most visible forms of the manifestation of symbolic behavior in an organization. Due to this collective mode of action, the beliefs and values are considered decisive for the survival and development of the organization and stand out and are strengthened.

Rites are elaborated sets by collective activities adopted in different occasions, at the beginning or end of a certain stage, or of a certain organizational process. Rites can be classified as follows:

- of passage, which shows the changes in the status of the individual. For example the retirement meeting;
- growth, which shows the strengthen of the achievements of the individual. For example awarding certificates for the best...;
- renewal that emphasizes change in the organization and commitment to the organization that learns and grows. One such example is the opening of a new training center for employees of the organization.
- of integration through which different teams or individuals are brought together, in order to form or develop group cohesion. Some schools have even named the event held at the beginning of the school year, which aims to integrate newcomers into the educational team;
- to reduce conflicts that aim to approach in a constructive way the strategies of conflicts or disagreements that occur naturally in an organization. An example of this is hearing complaints or negotiating union contracts;
- degradation are encountered in some organizations to make visible the penalties applied to people who have violated values or rules of conduct. For example, in some organizations, leaders are dismissed in a negative public manner, being accused of unethical behavior or failure to achieve the organization's goals.

Rituals are planned actions, often with emotional content, that highlight the ways of expressing the organizational culture, in this way they reproduce or confirm certain social models. In practice we encounter rituals:

- personal, of the individual and in connection with his role in the organization;
- related to tasks or objectives, related to the activity carried out by one or more persons;
- social belonging to informal groups;
- organizational, in which all members of the organization are involved.

An example in this sense is the common lunches, the festive meals occasioned by different events, the development of the evaluation and motivation process, the meetings, etc.

Such rituals reveal organizational values and revitalize relationships between members of the organization. On the other hand, they help to strengthen the organizational culture, reduce stress, as well as send symbolic messages to the outside.

Rituals have different forms for different organizational cultures and are often perceived as unwritten rules of the organization.

Through them, the identity of the individual is strengthened, but also of the group, as well as the feeling of pride for belonging to the respective community.

The ceremony is a collective event, formal and solemn, which highlights the tradition and past of the organization, acting directly on the motivation of the individual, by creating a sense of belonging to an organization with historical roots.

The ceremonies include jubilees, anniversaries, the inauguration of a new school, the establishment of a new specialization, or the celebration of several years of existence of the school institution.

Through such ceremonies, a greater unity is created between the members of the organization, feelings of pride are transmitted, new members are initiated, relationships are developed, hope is created.

Worship is another form of manifestation of the unity of the group, which transforms it into a social entity closed to outsiders. It requires members of the organization to show devotion to the beliefs and values promoted, sometimes demanding this through radical actions, by completely giving up other values and rules, even if they are decisive in a particular system. subcultures with cult aspects appear, this fact can have a negative impact on the organization, because, sooner or later, the cult provokes the authority of the organization's leaders, with effects on the organization's performance.

3.5. Stories and myths

Specialists in organizational behavior emphasize the idea that one of the most effective ways to strengthen the organizational culture is the stories about the organization and its heroes. Stories, give meaning and sense to the identity of the organization and are especially useful for guiding new employees. The strength of organizational stories lies in the fact the listener is led to draw their own conclusions, which is a powerful tool of communication.

The stories present to the new member of the organization what the life of the organization means, facilitating the sense it has to give on the different events.

Thus, the stories start from the real facts, but also include elements of imaginary, fiction, because they are transmitted orally, bearing the imprint of oral creation. They talk about how obstacles are overcome within the organization, what security the organization offers, what is the value of equality in the organization, etc.

In this way, the stories talk about the morals and values of the organization, in an easily accessible and meaningful way, through a simple and clear message.

Most of the organization's stories are based on a few common themes, such as:

- stories about the leader, about how human he is. Such stories accentuate the human face of the leader, or the way he reacts to mistakes;

- stories which shows if employees positioned on lower levels can reach top positions, in other words if anyone can reach a management position;
- stories about how employees are fired, which shows if the organization can easily get rid of them;
- stories about how the organization reacts in crisis situations, how it overcomes obstacles.

Stories can also be found in the form of legends, scenarios, myths, etc.

Legends are a story which presents the uniqueness of a group or leader in a simple form, who speaks in a symbolic way about the history of the organization.

Scenarios are stories about the future of the organization, as predicted by speakers, in their attempt to anticipate their role and position in future events.

For playing an effective role in the organizational culture, the stories must be known by the majority of the participants in the organization, to be easy to decode, with a clear message, to be able to elements of originality, allow "flourishing" by additions brought by the narrator, etc.

A strong culture is distinguished by a wealth of stories and myths, which highlight the heroes of the organization, heroes who carry the full load of organizational rules and values. These stories are repeated and enriched over time, talking about the success of some members of the organization, thus strengthening the culture and implicitly the organizational activity.

The term "myth" comes from the Latin language (*mutus*) - with the meaning of dumb, silent, ie things that can only be expressed symbolically.

The myth appears in the processing of a true situation, which then is enriched, processed and transmitted in the organization in the form of a metaphor, suggesting, through symbolic language, a story who synthesizes the basic beliefs and values of the organization. It is similar with a story or a legend, only it is used when values and beliefs cannot be supported by concrete facts. And then what is transmitted becomes the realm of the unreal, the fantastic, so the collective perception finds that "anyway, it cannot be achieved, because it is just a myth!".

For the organization, the myths are unique, they integrate "historical" people and memorable past events, which have withstood the memory of time and do not need evidence to be credible. They often act in the sense of forming group cohesion, facilitate the understanding of the moment, provoke interest in new opportunities, situations, legitimize certain attitudes, and bring to light certain expectations.

To the same extent, however, myths can they can oppose change, preventing the organization from changing its vision and strategy. In any case, myths speak of the continuity of the organization, connecting the present with the past and the future.

People want their myths, they believe in them, even if sometimes reality contradicts this.

Heroes also appear in the organization, ie those characters who personify the values of the organization, thus emphasizing their mobilizing force. As heroes, we can talk about the organization's founders, leaders, or even ordinary people. Through their behavior, heroes create patterns of behavior, certify and highlight organizational values.

4. The need of analyzing organizational culture

In Romania, the study of the organization's culture is in a deep dynamic. In 1997 was the first study conducted and consisted of a research at the level of institutions in our country. The results are characteristic of the state of transition, which has left its mark on the mentalities, values and attitudes of staff.

The concept of organizational culture is very complex, in some respects it is difficult to see and therefore sometimes difficult to define. Within the organizational culture, the managerial culture has a primordial role, directing the promotion of certain values, behaviors, which serve the objectives of the institution, and this is achieved through the tools of human resources management.

Intervention on culture must begin with a diagnosis of it, a diagnosis that helps us understand how the institution we analyze works. Most of the time, trying to detect the state of things in organizations through questions to participants, such as "Why are you doing this?" Most of the time they will answer "Because that's how we do it".

Using the concept of organizational culture can become a powerful managerial tool, which demonstrates that it goes beyond the theoretical concept and can become operational, practical.

It should be noted that the history of educational institutions in Romania is not particularly related to its founder or leaders as is the case in major international companies; the history is not correlated with the company's management, but rather with its results (what clients it attracted, what graduates it has, what high schools they attend, what endowment the school has, etc.). However, the idea must be kept in mind is the staff and especially the management ensure the personalization of each institution.

Studying the culture of an organization will become more and more necessary in the future, because we cannot lead an organization without knowing its values, internal norms, the organization being a micronation with its own beliefs and values. Only by knowing the culture of an organization can we act in accordance with it, and only by considering it can we change it, when necessary.

Strong cultures often have a degree of rigidity and inflexibility and are often threatened by loss of sensitivity to internal or external changes, which is a danger to the "healthy living" of the organization. For example, those homogeneous teaching groups in terms of value and even age are often refractory to any change, because "if things go well as they are, what's the point of change?" Because the changes caused by the external environment are rapid, we cannot say that there are ideal cultures, but we must admit that for the future the ideal cultures are the flexible ones (Rata, Runcan and Arslan, 2013).

However, in order to transform a bureaucratic Romanian institution, protected and isolated by its clients into a flexible, available and open institution, we must be aware that we need time, trust and perseverance. No program of change will solve anything if it is not accompanied by structural changes. In vain one tries an orientation towards people if too many hierarchical levels are kept.

There must also be budgetary autonomy and more. It often takes a lot of courage to impose drastic organizational measures to bring about change. Sometimes it is beneficial to manage close to the human resources of the organization, to create cultural cells at lower hierarchical levels, all of which can stimulate the desired change.

5. Between culture and organizational climate

Studies about these two terms are differentiated. Some authors will talk about the difference between the two concepts, while others subsume the climate, to the school culture.

If so far we have shown what are the defining elements of culture, about the school climate we can say that it is represented by the collective perceptions of employees and school members, which arise from the routine of practices in that school and influence the behavior and attitudes of those who make up the organization. It is the one who influences the performance of the school members (Arslan, Icbay, and Duse, 2017).

According to Emil Păun (1999), a series of factors act on the school climate, some of which are easily and quickly observable, while others has a less visible action. This is how we talk about:

- structural factors, referring to the structure of the organization, ie to the distribution of the statuses and roles that individuals play in organizations. Among them, the most important are:

the size of the educational unit, the human resource by age and sex, the degree of homogeneity of the professional training, etc. ;

- instrumental factors which consider the conditions and measures by which the organizational objectives are achieved. Included here are the physical environment, the subject matter, the relationships within the school staff, the leadership style of the principal and the team, etc. ;

- socio-affective factors with a direct role on the motivation of the participants at the level of the school organization. This category includes those factors that promote acceptance / rejection, affection / indifference, the person's relationship with the principal and his team, satisfaction / dissatisfaction with school activity, promotion opportunities, motivation techniques, etc.

In the literature, several types of educational climates are described:

a. Open climate: is characterized by cooperation and participation between team members who give each other respect and support. The participants prove their professionalism, being fully engaged in achieving the objectives. The principal gives all the support of the staff and staff, it is a personal example and respects those he works with. Between these patterns, they benefit from autonomy, which makes them not feel bound by rules, regulations and bureaucratic control.

b. The closed climate implies a total lack of interest on the part of the teachers, who carry out their activity in the absence of motivation, through routine, non-involvement and non-employment. In the same time, the principal practices an authoritarian but inefficient management, using excessive control, proposing rigid and unattractive tasks, showing inflexibility and lack of tolerance.

c. The employed climate is represented by a rigid, autocratic manager, who tries to control, by any means, everything that happens in the school. Despite such a situation, teachers, characterized by high professionalism, dedication and motivation, ignore the behavior of the director and lead themselves. Collegiality, team spirit and the pleasure of working for the benefit of the school reign among the teachers.

d. The unemployed climate is specific to the school where only the manager shows professionalism. He is strongly motivated and involved, showing an open and supportive behavior. Instead, teachers are disinterested, uninvolved and even sabotage the principal's efforts to achieve the proposed goals. Thus, the principal, oriented towards teachers, tries to stimulate them permanently, respects them, offers them ways to succeed professionally, while the teachers do not reconcile either with each other or with the principal.

Obviously, between these four dimensions, the variant of a school with an open climate is preferred, in which the participants feels like in a huge family, without unnecessary pressures or rules, without behaviors that limit and slow down. As a result, job satisfaction is visible, members of the school organization are highly motivated, and performance is commensurate.

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The Human Capital Approach versus the Production Function Approach to Entrepreneurship: Concepts and Constraints from Modern Macroeconomic Perspective

Volkan Hacıoğlu

1. Introduction

The classical production function together with its modern reconstructions relates to an innovation system of input-output analysis. Factors of production are inputs into the function. The process of production is to make goods and services or outputs from the inputs. In economics, the analysis of factors of production generally decomposed into four main categories. These are land, labor, capital and entrepreneur. Conceptual framework of production function is determined by these four factors of production. Each factor of production has its particular characteristic as an input data and plays an important role of function that turns into output data after specific process.

Land is a fixed factor of production in *quantity* albeit it alters in natural *quality* and it includes all natural resources available at a particular place and time. Labor is a variable factor of production that alters both in *quantity* as well as *quality* and it includes all kinds of mental and physical human resources. Labor can also be transformed in quality with the aspect of learning by doing which in essence is a cognitive procedure (Arrow, 1971; Thompson, 2010). Entrepreneurship as a special type of labor corresponds to human capital approach to production function. Capital is also a variable factor of production which comprises material, tangible and intangible resources of society (Eisfeldt & Papanikolaou, 2014). Entrepreneur organizes those three factors of production and makes the best use of them with the optimum level of effort in production process. Remunerations of factors of production are rent for land, wage for labor, rate of interest for capital and profit for entrepreneur.

The neoclassical production function formulated in its original version resembles a black box of systems theory. It transfers characteristics of input data through multilateral process into output data. For this reason, whole dynamic process of production can be depicted within the framework of dataflow diagram. In this system, production process is divided into different states of input and output. In economics, the classical formal production function as an abstract of black box approach first formulated by Wicksteed (1894) in an attempt to delineate the coordination of laws of economic distribution. Leontief (1951) brought abstract black box approach under concrete scrutiny of modern economic analysis by the employment of empirical application through the span of two turbulent decades in between the years 1919-1939 which also comprises of the Great Depression period. Mustafin and Kantarbayeva (2018) attempt to open the Leontief's black box and thereby understand its working mechanism inside.

The formal construction of black box approach to production function with abstract theoretical and concrete empirical tools have hitherto been used and taken for granted by dynamic stochastic general equilibrium models (DSGE) of macroeconomics (Christiano *et al.*, 2018). Albeit certain sort of macroeconomic consensus is achieved until relatively recently, under contemporary considerations some critical aspects appeared in relevant literature (Arestis, 2019). Modern disequilibrium analysis stems from different sources of economic scarcity scenarios that depend upon unemployment of particular factors of production.

Keynes (1936) described unemployment of labor in the general theory of disequilibrium as opposed to *status quo* of classical static equilibrium conception. Influenced by Wicksteed (1910), Schumpeter (1934) considered entrepreneur as an agent of change who disturbs *status*

quo of static equilibrium point on which reality of socioeconomic structure pivots to channel economic resources into innovative modes of production that are otherwise rendered obsolete. In Schumpeterian terminology, actions of entrepreneur viewed as creative destruction. Schumpeter asserts unemployment of entrepreneur as a factor of production is a crucial cause for deficiency to attain full employment.

From that historical background and theoretical perspective, this chapter with six parts inquires human capital approach as opposed to production function approach in an attempt to reconcile Keynesian and Schumpeterian unemployment analysis from modern macroeconomic perspective. Following the introduction, second part pertains to literature review from classical to modern thoughts on the nature, importance and relevance of entrepreneurship. After literature survey, in part three a search for production function approach—in other words black box approach to entrepreneurship is conducted through technical conversation. Part four corresponds to the entrepreneurship as a human agent of change with its static and dynamic functions described in detail within structural and contextual analysis. Human capital approach is discussed in the fifth part. Part six concludes with some conjectures reflected over the agenda of future research projects.

2. Literature Review

The entrepreneur is a reflective factor of production. Productive efforts of entrepreneurs are reflected on the other factors of production. The importance of entrepreneurship is central for economic growth and development. Although it is mentioned as a factor of production in production function, the neoclassical economics neglected the role and function of entrepreneur in growth theories. For this reason, the production function approach is also called black-box approach in which the real mechanism of productive entrepreneurial activity disguised under the general term of technology. Separate attempts made to catch a clear-cut sketch of entrepreneur in modern economy by different classical and neoclassical writers.

Classical economists were well aware of the importance of entrepreneur. Cantillon (1931 [1775]) attributed a special economic function to the entrepreneur. Say (1855 [1803]) described the entrepreneur as the agent of change. In the beginning of neoclassical utilitarian theory, Walras (1957 [1877]) conceptualized the entrepreneur as a coordinator and arbitrageur. Knight (1921) depicted the function of entrepreneur in firm organization. The profit of the entrepreneur is compensated by the elements of risk and uncertainty. The entrepreneur bears uncertainty which is an incalculable element by taking risk that is a calculable element. For Schumpeter (1934 [1911]), the entrepreneur was the propulsive power of economic development. Hayek (1945) envisaged the marketplace as an environment in which learning process occurs. According to Mises (1951) market was an entrepreneurial *process*. Kirzner (1973) concentrated on market dynamics and a concept of entrepreneur that is alert to profit opportunities.

Disappearance of entrepreneur from the scene of economics coincides with the separation of macroeconomics and microeconomics by Hicks (1939). The domination of neoclassical microeconomic theory and equilibrium analysis led the macroeconomic entrepreneurial spirit to dwindle away. According to Kirchhoff (1991) the strict assumptions of equilibrium models that are dominated the microeconomic field and firm theory led to the death of the macroeconomic entrepreneur. The entrepreneur was a central figure in the history of economic theory before neoclassical equilibrium analysis dominated the economics (Ripsas, 1998). There has been a resurgence and revival of entrepreneur for about two to three decades back from the onset of the twenty first century.

3. The Production Function Approach to Entrepreneurship: Concepts, Constraints and Configuration

The concept of production function in which capital and labor are treated into quantity units is a makeshift solution. There is an implicit assumption of homogeneity for the nature of factors of production. In this sense, the production function is an ‘implicit’ function. Besides being a mere mathematical formulation, the production function is also a metaphor. The neoclassical production function theory is a highly deterministic model and it is a form of firm theory.

Under the assumption of general equilibrium steady state position of the economy, the theory of firm corresponds to the theory of production function. This is a neoclassical conception of production function. In this model, firms are identical. There is no difference between the performances of firms in their economic activities. They use similar resources with the same quality. The only difference is the quantity of inputs and outputs. According to their production possibility frontier—a curve concave to the origin—firms make an optimal choice for the most efficient use of available inputs to produce maximum output.

These assumptions of the neoclassical theory of production function are strict and in many ways unrealistic in comparison to the complex economic life. The assumptions of a theory are most of the time constraints of the model. When we move from the steady state equilibrium analysis to the disequilibrium analysis of comparative dynamics, it is necessary to relax the strict assumptions of neoclassical production function.

The configuration of black box approach to production function comprises chief forms of formulations. These are Cobb-Douglas production function, the Leontief production function, Constant Elasticity of Substitution (CES) production function and the Ricardian production function. We can depict a dataflow diagram to configure the interactive black box by static system of production functions as follows within an environment of innovation ecosystem. In this innovation system approach, production functions are viewed as tools of transformation mechanism (Vasconcelos *et al.*, 2018).

Table 1.—Innovation Ecosystem with Black Box Conception

INPUT DATA	<i>Configuration of Interactive Black Box by Static System of Production Functions</i>	OUTPUT DATA
<u><i>Factors of Production</i></u>	<u><i>Chief Forms of Production Functions as Tools of Transformation Mechanism</i></u>	<u><i>Goods & Services</i></u>
<ul style="list-style-type: none"> • Capital (<i>K</i>) • Labor (<i>L</i>) • Land (<i>N</i>) 	<ul style="list-style-type: none"> • The Cobb-Douglas Production Function • The Leontief Production Function • The CES Production Function • The Ricardian Production Function 	<ul style="list-style-type: none"> • Networks • Markets • Information
<u><i>Exogenous Factors</i></u>	<u><i>Infrastructure Investments</i></u>	<u><i>New Products & Services</i></u>
<ul style="list-style-type: none"> • Technology (<i>A</i>) • Entrepreneur (<i>E</i>) 	<ul style="list-style-type: none"> • R&D Activities • Inventions & Innovations • High Value-Added Activities 	<ul style="list-style-type: none"> • Improved Production Possibilities

According to the Ricardian production function which originally captures the nature and essence of resources, partial second derivatives of factors of production denote diminishing marginal productivity (MP) of relevant resources (Humphrey, 1997). The continuous change in the level of technology denoted by (A) enters into the formulation differentiated with respect to time $\{t\}$.

$$f(K, L, N) = \left\{ \begin{array}{l} f : K \rightarrow \frac{\partial^2 f}{\partial K^2} = f \left(\frac{dA}{dt} \right) < 0. \\ f : L \rightarrow \frac{\partial^2 f}{\partial L^2} = f \left(\frac{dA}{dt} \right) < 0. \\ f : N \rightarrow \frac{\partial^2 f}{\partial N^2} = f \left(\frac{dA}{dt} \right) < 0. \end{array} \right. \quad (3.1)$$

In classical models, static system of production functions excludes entrepreneurship from the formulation. Hence, chief forms of production functions fall into the category of black box approach. The element of time is attributed to the level of technology in a manner that is exogenous to the model. Dynamic analysis enables us to examine strategic environment of competitive markets in which economic agents interact. The Models of New Growth economics broadens the configuration of black box to a great extent in order to understand the real world economy. The function of entrepreneur among the factors of production emerges since it has an important effect on economic growth and development. Besides entrepreneurial spirit, power of ideas as innovations is also valued and involved in the process of production that puts an additional value increment into both tangible and intangible products as well as all sorts of services supplied by human capital agents.

Romer (1996) pointed out the situation succinctly as such: “Neoclassical growth theory explains growth in terms of interactions between two basic types of factors: technology and conventional inputs. New growth theory divides the world into two fundamentally different types of productive inputs that we can call ‘ideas’ and ‘things’. Ideas are nonrival goods. Things are rival goods. Ideas are goods that are produced and distributed just as other goods are.” The distinction between material things and abstract ideas opens up a new conversation for the reformulation of neoclassical production function.

New categories arise as a result of this reformulation. For the capital factor of production, tangible and intangible capital, and human capital can be mentioned. For the labor factor of production, the categorization is usually made on the skill level. These are unskilled labor, semiskilled labor, skilled labor, and professional labor. However, qualification of labor needs much elaboration beyond skill level categorization. Because all workers, as human beings, are not alike. Their temperaments, mental and physical abilities are different. Labor is not a quantity unit about the index-number problem (Robinson, 1953-54).

1. The Entrepreneur as a Socioeconomic Typology in the Formation of Human Capital

The labor of entrepreneur copmpires different as well as difficult tasks in various phases of production process. Intricate abilities of entrepreneurship generally minlge with those of managers and executives in theory and practice. For this reason, in order to set the general theory of entrepreneurship within the framework of human capital construct, chief functions of entrepreneurial activity must be defined. Becker (1964) definies human capital with a particular reference to training. Investment in human capital requires learning of new skills and acquiring knowledge. Knowledge becomes information that has market value after considerable transformation through entrepreneurial activities.

Skills of entrepreneurship to deal with challanges and create opportunities can be traced from historical backgrounds to modern views in line with intellectual economics. After all, human capital and intellectual economics are likned in a way to show mutual relationship.

Hébert and Albert (1988) search for the meaning of entrepreneur that can be carried out to an epistemological investigation. The idea of entrepreneur comes with the knowledge of production in general and eventually the invention of new technologies.

In the formation of human capital supply and demand of entrepreneur reflects another area of research that has hitherto not been discovered in the relevant literature (Marvel *et al.*, 2016). So what are the qualifications of typical entrepreneur in the business life and economic activity? We shall look into the mind of entrepreneur that is considered as black box so as to understand how invisible hand of entrepreneur operates production machine. We define twelve propositions each of which corresponds to particular trait of entrepreneurship and support them with references to the ideas of scholars in the history of economic thought.

PROPOSITION 1. *The entrepreneur is the person who assumes the risk associated with uncertainty.* In this statement a dynamic role is attributed to the entrepreneur. This definition links the element of risk to that of uncertainty. Risk can be predicted and estimated but uncertainty is an intrinsic nature of economic life. This perspective is in line with Cantillon, Thünen, Mill, Hawley, Knight, Mises, Kirzner, Cole and Shackle.

PROPOSITION 2. *The entrepreneur is the person who supplies financial capital.* By this definition, the entrepreneurial function sets in a static state in the framework of general equilibrium analysis. It reflects the classical and neoclassical views of economists such as Smith, Turgot, Böhm-Bawerk, Pigou, Mises and Kirzner who was a pupil of Mises.

PROPOSITION 3. *The entrepreneur is an innovator.* The chief function of entrepreneur as a human agent of change is innovation in a dynamic disequilibrium fashion. Innovative entrepreneur is an intangible engine behind the wheels of economic development. The innovative entrepreneur pointed out by Baudeau, Bentham, Thünen, Schmoller, Sombart, Weber and Schumpeter in economic literature.

PROPOSITION 4. *The entrepreneur is a decision maker.* This is also a dynamic function of entrepreneur under uncertainty. The element of time and interest rate enters into the economic calculations and cost considerations in the mathematical context of discounted present value. This aspect is examined by Cantillon, Menger, Marshall, Wieser, Amasa Walker, Francis Walker, Keynes, Mises, Shackle, Cole, Lange, Schumpeter and Schultz.

PROPOSITION 5. *The entrepreneur is an industrial leader.* The dynamic function of leadership is a predominant character of entrepreneurial spirit. In every age, the “industrial atmosphere,”—in the spirit of Marshall—is creatively destructed and reconstructed by entrepreneurs who are industrial leaders at their times. Say, Saint-Simon, Amasa Walker, Francis Walker, Marshall, Wieser, Sombart, Weber and Schumpeter were those economists who depicted a picture of entrepreneur as an industrial leader.

PROPOSITION 6. *The entrepreneur is a manager or super-intendent.* This static function of entrepreneur is usually misused in the general discourse of entrepreneurial definitions. Although it avails only a narrow perspective to constrict entrepreneurial activity in the form of a manager or super-intendent. It

complies with static equilibrium analysis of classical and neoclassical economists such as Say, Mill, Marshall and Menger.

PROPOSITION 7. *The entrepreneur is an organizer and coordinator of economic resources.* This definition is a dynamic function of entrepreneur who organizes and coordinates factors of production in the most efficient manner and “gets things done.” A widely accepted classical view by Say, Walras, Wieser, Schmoller, Sombart, Weber, Clark, Davenport, Schumpeter and Coase is also in accord with the production function approach to economic growth and neoclassical firm theory.

PROPOSITION 8. *The entrepreneur is the owner of an enterprise.* The static and simple view of ownership associates property with entrepreneur. The chief proponents of this property ownership approach were Quesnay, Wieser, Pigou and Hawley.

PROPOSITION 9. *The entrepreneur is an employer of factors of production.* Another static aspect of entrepreneurial function is of employment. The entrepreneur becomes an employer by directly hiring factors of production. This view is appropriate as far as small business enterprises are concerned. However, the static employment decision can be linked to a dynamic decision-making process. Amasa Walker, Francis Walker, Wieser and Keynes were defenders of employer-entrepreneur view.

PROPOSITION 10. *The entrepreneur is a contractor.* The dynamic function of entrepreneur as a contractor is in relation of (8) and (9) functions. Ownership of a small business enterprise assigns the role of an employer to the entrepreneur and in the same way it also assigns the role of a contractor to hire factors of production. The chief figure of this view was Bentham.

PROPOSITION 11. *The entrepreneur is an arbitrageur.* The activities of competitive speculation and arbitrage create profit opportunity. Arbitrage occurs by buying cheap and selling dear at the same point of time. The entrepreneur’s alertness to profit opportunity allows arbitrage to become a rational choice. Cantillon, Walras and Kirzner inspected the entrepreneurial activity in connection with arbitrage and competitive speculation.

PROPOSITION 12. *The entrepreneur is an allocator of resources among alternative uses.* The dynamic function of resource allocation aspect of entrepreneur points out the importance of productive performance. Every firm is endowed with different resources. Availability of human, capital and natural resources are not same among firms. For this reason, this function determines the competitive power of firms. Cantillon, Kirzner and Schultz were among those economists who articulated the resource allocation function of entrepreneur.

2. The Human Capital Approach: The Entrepreneurship Augmented Production Function

Schultz's (1975, 1979, and 1982) theory of entrepreneurship analyzes the dynamic function of entrepreneur under disequilibrium conditions (Clein & Cook, 2006). The ability of entrepreneur to deal with disequilibria which are caused by exogenous shocks is valued under the human-capital approach. Schultz starts his analysis from a realistic observation that the market does not clear automatically and instantaneously after fully expected exogenous nominal and real shocks. "[R]egaining equilibrium takes time, and how people proceed over time depends on their efficiency in responding to any given disequilibrium and on the costs and returns of the sequence of adjustments available to them" (Schultz, 1975, p. 829).

The dynamic function of entrepreneur in the adjustment process of economy to the equilibrium position after an exogenous shock was largely neglected by the relevant literature. In Schultz's theory, the entrepreneur has the ability to adjust or reallocate resources or factors of production as a creative response to cyclical economic circumstances. This dynamic function in the human capital approach directly corresponds to the propositional classifications for the entrepreneurial abilities of the previous section in the previous section. In order to integrate diverse functions of entrepreneurship into the production function as a parametrical element of human capital and thereby endogenize it within the production function framework, we have to formulate propositional classifications under functional system.

According to Schultz (1979) the entrepreneurial ability has a market value, and thereby price and quantity. The entrepreneurship is a scarce resource. This was in contrast to Knight (1921) and Kirzner (1973). According to them the entrepreneurial ability is not measurable and for this reason it cannot be priced on the market. But Schultz (1979) formalizes entrepreneurial ability as a form of human capital. Nevertheless, he did not investigate a full analysis of the theory of supply and demand for entrepreneurship in competitive market. Schultz's theory is an equilibrium model of technology adoption.

Marvel et al. (2016) gives brief account for the current status of research and literature on human capital approach to entrepreneurship. There is an increasing trend to search for the subject especially since last a two decades. There are also certain entrepreneurial traits to contribute for the concrete human capital constructs in addition to the classical categorization under knowledge and skills together with general and specific classification (Becker, 1964). Common human capital constructs are work experience, education, entrepreneurial experience, demographics and cognition which is a multi-theoretical factor with others such as learning, strategy, motivation etc.

The configuration of white box as opposed to black approach to production function comprises chief forms of entrepreneurial functions. Thereby we can arrange the Entrepreneurship Augmented production function in which production process and additional value creation mechanism can be observed and scrutinized clearly. Accordingly just like in Table 1, and following the similar line of reasoning, Table 2 depicts a dataflow diagram to configure the interactive white box by dynamic system of entrepreneurship augmented production function as follows within an environment of innovation ecosystem. In this innovation system approach, the entrepreneurship augmented production function represents the formation of human capital.

Table 2.—Innovation Ecosystem with White Box Conception

INPUT DATA	<i>Configuration of Interactive White Box by Dynamic System of Production Function</i>	OUTPUT DATA
<u><i>Factors of Production</i></u>	<u><i>Chief Forms of Entrepreneurial Functions as Tools of Transformation Mechanism</i></u>	<u><i>Goods & Services</i></u>
<ul style="list-style-type: none"> • Capital (<i>K</i>) • Labor (<i>L</i>) • Land (<i>N</i>) • Entrepreneur (<i>E</i>) 	<ul style="list-style-type: none"> • Planning (<i>P</i>) • Organization (<i>O</i>) • Decision Making (<i>D</i>) • Management (<i>M</i>) • Innovation (<i>N</i>) • Risk Taking (<i>R</i>) • Uncertainty (<i>U</i>) 	<ul style="list-style-type: none"> • Networks • Markets • Information
<u><i>Exogenous Factors</i></u>	<u><i>Infrastructure Investments</i></u>	<u><i>New Products & Services</i></u>
<ul style="list-style-type: none"> • Economic Shocks 	<ul style="list-style-type: none"> • R&D Activities • Inventions & Innovations • High Value-Added Activities 	<ul style="list-style-type: none"> • Improved Production Possibilities

The most important difference between black box and white box configuration comes from the fact that chief forms of entrepreneurial functions constitute the parametrical element of the formation of human capital. Due to the parametrical element of the formation of human capital, entrepreneur as a factor of production is endogenized into the Entrepreneurship Augmented production function. By this rearrangement, sole source of exogenous factors for the system are unexpected economic shocks.

In line with the above structure of white box configuration, partial second derivatives of factors of production denoting diminishing marginal productivity (MP) of relevant resources in (3.1) can be rearranged according to the entrepreneurship augmented production function.

$$f(K, L, N, E) = \left\{ \begin{array}{l} f : K \rightarrow \frac{\partial^2 f}{\partial K^2} = f\left(\frac{dA}{dt}\right) = \alpha E < 0. \\ f : L \rightarrow \frac{\partial^2 f}{\partial L^2} = f\left(\frac{dA}{dt}\right) = \alpha E < 0. \\ f : N \rightarrow \frac{\partial^2 f}{\partial N^2} = f\left(\frac{dA}{dt}\right) = \alpha E < 0. \end{array} \right\} \quad (5.1)$$

In this formulation, the parameter α represents average growth rate of human capital embedded in the chief forms of entrepreneurial functions as indicated at the centre of white box configuration. Except risk taking and uncertainty, all other entrepreneurial functions have positive average growth rate through time. But the diminishing marginal productivity of other three factors of production outweigh in the long-run and net outcome turns out to be negative till a point is attained at which new technology and state-of-the-art techniques oust the old

techniques and render them obsolete. After the new technology is introduced into the economic system, a new equilibrium will be established with a lag of adaptation period. The velocity of technology diffusion throughout the institutions and organizations in the economy has a determinate effect on the adoption of innovations (Geroski, 2000; Keller, 2004; Benhabib & Spiegel, 2005; Comin & Hobbin, 2010).

3. Conclusion

The research agenda on individual entrepreneur and entrepreneurship as an economic phenomenon reached little consistency on the definition and meaning of multidimensional and interdisciplinary concept of entrepreneur. There is still no universally affirmed theory of entrepreneurship as “there is no real theory of the firm in neo classical microeconomics. What goes by that name is really a theory of the industry (populated by identical firms) not a theory of the firm *per se*” (Lewin, 2004, p. 3).

The theory of the firm in standard neoclassical framework is nothing but a theory of production function with strict assumptions of homogeneity of factors of production and firms. The formulation of dynamic production function which incorporates innovative entrepreneur as a human factor of economic change is difficult but important task for future research. In order to understand the economic function of entrepreneurial activity as a creative human behavior, a dynamic analysis beyond comparative statics is necessary. The human-capital approach to entrepreneurship requires new investigations to fulfill its promises.

The comparison between human capital approach and production function approach to entrepreneurship reveals radical theoretical and practical differences. An innovation ecosystem with black box configuration is devoid of entrepreneur as human capital. In classical growth models, technology and entrepreneurship have hitherto been thought to be exogenous factors. For this reason, the configuration of interactive black box by static innovation system of production functions such as Cobb-Douglas production function, the Leontief production function, Constant Elasticity of Substitution (CES) production function and the Ricardian production function requires some modifications to accommodate entrepreneurial activities within its ecosystem.

The entrepreneur as a socioeconomic typology has crucial features in the formation of human capital. Typology of human capital incorporates certain entrepreneurial traits that can be conceptualized as behavioral patterns of business success. The quality and quantity of education as an investment determine broad range of skills critical to be acquired in order for competitive advantage. The components of human capital model and entrepreneurial skills as tools of transformation mechanism comprise of education, experience and recruitment as investment decisions on the one hand, knowledge, skills and abilities under outcome expectations on the other hand. Risk and uncertainty, innovation, decision making, coordination, strategic planning, organization are among the most important entrepreneurial characteristic for creation of additional value and utility in production process.

In this study, we contribute to the human capital constructs with an alternative modern macroeconomic perspective. The original formulation of entrepreneurship augmented production function takes place in the centre of innovation ecosystem with white box conception as opposed to the black box approach. Within this framework, planning, organization, decision making, risk taking, management, innovation and uncertainty are considered as chief forms of dynamic entrepreneurial functions as tools of transformation mechanism. Thereby entrepreneur is endogenized as human capital into the production function.

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Organizations, Covid-19, and the War of Drugs

Mariateresa Gammone

1. The world and biosafety at risk

Globalization has joined, bridged and connected the remote corners and the local problems of the Earth. On Covid-19, national organizations have set their analysis, and addressed the assessed dangers accordingly with their own health danger standards, considering their national interest definitions. I present here the main thesis that derives from a different paradigm: global survival.

The threats we face as a species and a civilization are overwhelming and all too real. Despite being the main actors of urgent change, national organizations are the main obstacle to full adoption of global compliance, as the organizational culture regarding their supervision is despairingly inserted in a rule accordance verification and not on the appraisal provided by international interests. The threat of war, or worse; environmental degradation; climate change; all of these are issues with worldwide implications. However, the national organizational answers are dangerously short-sighted and narrowly focused, often increasing other, equally crucial issues - or even creating new ones. Many organizations are so encased in their own specialties that they fail to see the greater global problems. It is in light of this that many scholars offer keen examinations of such topics as the political sides of resource management and the roles of public and private organizations in creating and maintaining rational sustainability agendas.

2. Wars that have been lost and a war that has just begun

Many scholars have noted that warfare is a feature of most human societies. Those in which it has been lacking tend to be societies that were dominated and exploited. Warfare could not be understood apart from political life in general (Hanson, 2001).

After World War II, many Western wars have been lost, from war to poverty to the war on drugs. The war on drugs is 50 years old. In June 1971, President Nixon declared a “war on drugs”. But drug traffickers produce more cocaine now than they did in the early 1990s when Pablo Escobar was at the height of his notoriety.

The war on drugs is a war that Westerners have not been able to win. And a war that lasts for 50 years and is not won is a war that's lost.

There is a pressure in the world to end the “forever war” on drugs. Once a war is over, another war can always be fought. In dealing with the problem of war, we should seek a proper middle path between absolute pacifism and extreme cynicism. Frequently, the expected benefits from victory outweigh the costs of war. One should take into account not only the costs but also the grounds of the ethical constraints of global wars, which now directly involve the basic principle of human survival. "I know not with what weapons World War III will be fought, but World War IV will be fought with sticks and stones", Einstein said.

To investigate Covid-19 is not only to investigate the disease itself as a biological entity. UN children's agency UNICEF warned that many children had been forced into precarious work since the pandemic began — despite it being forbidden to employ those under 16. The World Bank said that the official poverty rate will increase. Child labor increased dramatically. Many minors experts say children have been forced prematurely into labor market.

Schools throughout nations have been closed and the economic fallout from the novel coronavirus pandemic has compressed the breadwinners' capacity to feed their families. Day laborers have struggled to find work due to the coronavirus downturn (Arslan, H. and Rata, G., 2015)

Experts have pointed to both the rise in poverty and the pandemic's negative impact on educational structure as drivers of a dire situation. Children must return to school as soon as possible.

The vicious circle can be countered by a virtuous circle able to pursue two main goals: a) to promote institutional mechanisms that create, favor, facilitate, opportunities for disadvantaged and humble people and, b) to promote institutional mechanisms that hinder, discourage, disadvantage, the unscrupulous use of sophisticated tools of predatory finance for the higher social levels (Arlacchi, 2018, 2020). Covid-19 could be the catalyst that finally assembles the social and biological aspects of medicine, bridging reorganization into organizations that have been divided for too long.

A new human alliance needs to be bipartisan, even nonpartisan, because how national organizations will restructure their global relationships, going forward will have very serious implications. Governments should stress the importance of sincere alliances, working with all partners, and the seriousness of international agreements. All governments should converge into the Paris accord on climate change and somehow reconstitute the Iran agreement on the nuclear arsenal.

The recent global war of vaccines, drugs, disinformation is a symbol of all the wars that have been lost by the human combativeness. As mankind, we have often been more engaged in wars than in building peace.

3. Despair intensified during the Covid-19 emergency

Life expectancy in the United States dropped by one year during the first half of 2020 as the Covid-19 pandemic caused its first wave of deaths, according to preliminary estimates from the Centers for Disease Control and Prevention. With 4% of the world's population, the U.S. had more than 20% of the world's coronavirus deaths. 2020 was the deadliest year in U.S. history, with deaths topping 3 million for the first time. Covid-19 had a profound impact, not just on deaths directly due to coronavirus infections but also from heart disease, cancer, and other health problems. People of color suffered the greater shock, losing years of life expectancy. Many experts said: "This is a huge decline. You have to go back to World War II, the 1940s, to find a decline like this. Overall, the drop in life expectancy is more evidence of our mishandling of the pandemic. We have been devastated by the coronavirus, more so than any other country".

According to C. Guilluy, French society has become a kind of "American society": increasingly multicultural and increasingly unequal, with a division between winners and losers (victims of the neo-liberal economy) that has replaced the old left-right division and has abandoned many people in despair, anger, periphery, and exclusion. According to Ch. R. Martin, all contemporary societies (Gammone, 2018) have moved from an "open society" to a "closed society", walled up for the benefit of the upper classes. Complacent mainstream sociology describes the themes that are preferred by wealthy people: privileged urban groups mirror each other in the media. They paint an unreal new brave world, freed from ordinary people (who become invisible).

The middle class is dwindling in the United States and many European countries (Gammone, 2015). To place some of these issues in the broader international scenario, see M. Klein, M. Pettis, 2020. "Declinism" has been a relevant literary genre in France for many years (Wieviorka, 2007; Julliard, 2019; Onfray, 2020). In the press, a much-cited data is a 2012 poll, in which three out of four French people thought their country was in decline and as many as 88% were of the opinion that "regardless of whether they are right or left, governments don't care about people like us".

In U.S., consumers researching ways to protect against the novel coronavirus tangled with many pandemic-related cyber schemes. Scammers took advantage of widespread anxiety

about Covid-19, enticing people to give up their money with the promise of a vaccine. Companies were aware of the impostors. Interpol warned that phishing intrigues and fake websites were impersonating government and health authorities in Europe. The U.S. Department of Homeland Security used undercover agents. As people searched for remedies, fraudsters and bad companies (Gallino, 2003, 2011) took advantage of their desperation.

4. From "war on drugs" to "war of drugs"

Since the emergence of the novel coronavirus in December 2019, several vaccines have started to be rolled out. Scientists worked faster than ever to develop and produce vaccines to stop the epidemic of Covid-19. Developments of several candidate vaccines in clinical trials have been astonishing.

In few months Russia and China discovered an effective treatment for Covid-19. Russia approved its Sputnik V vaccine in August 2020, saying it was the first country to do so for a Covid-19 shot. Peer-reviewed trials months later proved it was almost 92% effective in fighting the virus.

Pfizer, headquartered in New York, and Germany's BioNTech, produced the first vaccine that was authorized in the United States, which regulators approved in December 2020. The second, made by Moderna, headquartered in Massachusetts, was authorized later that month. In contrast to U.S. dramatic numbers on despair and poverty, there are the extraordinary successes of the pharmaceutical industry in the United States. From this last point of view, a similar reasoning can be made for the United Kingdom.

The UK is a much-cited success story. In few months a trial discovered the first effective treatment for Covid-19: dexamethasone, a cheap steroid that estimates say has saved hundreds of thousands of lives on the face of the Earth. In less than a year British scientists discovered another effective steroid, tocilizumab, and ruled out many further wonders. Britain won the race to discover these wonderful biotech products that flourished in the US thanks to the mix of scientific collective knowledge, extreme competition, governmental funding, and venture capital. Britain's scientific response to the pandemic has been the mirror's desire for its politics. The themes of scientific self-containment and its search for excellence in the mirror of past global dominance soon blended with popular irritation at the government's failure to sacrifice its democratic ego to the superior medical system. Thus, in political matters, a glance in the medical mirror became representative of a diffuse unwillingness to recognize the obliged duty to yield old imperial ego to the new democratic will.

Although the British government's advisers admitted blame for the delayed response in March 2020, they boasted a subsequent world-leading campaign. Alongside vast clinical trials, the UK has been home to most of the world's genetic sequencing, the expansion of a flourishing market and its fast roll-out. But, "To let the facts speak for themselves" is the most unfair way of putting over an ideological position. Life sciences came to the rescue. However, many people expressed concern over "contradictory" rescue. The official Western version is that a powerful research base has been combined with good decision-making to save human lives.

In February 2021, the U.S. State Department has accused three online publications (News Front, New Eastern Outlook and Oriental Review), saying they were seeking to undermine Covid-19 vaccines produced by Pfizer and Moderna. The outlets "spread many types of disinformation, including about both the Pfizer and Moderna vaccines, as well as international organizations, military conflicts, protests, and any divisive issue that they can exploit".

The Wall Street Journal (WSJ) first reported on the identification of the alleged disinformation campaign. A Kremlin spokesman denied the U.S. claim Russia was spreading false information about vaccines to the WSJ.

The State Department's Global Engagement Center, set up to counter propaganda and disinformation, identified the three outlets, a U.S. government spokeswoman said.

According to Reuters, News Front is controlled by Russia's federal security service. New Eastern Outlook and Oriental Review are directed and controlled by the Russian foreign intelligence service. "The Department will continue to expose Russia's nefarious activities online," spokeswoman added. "We will also continue to work closely with our allies and partners to provide a global response to countering disinformation."

The international vaccine competition was delivered to remote information areas. The international vaccine competition is a new war, and a global disinformation campaign questions the safety of the various competing vaccines. It's a new drug war, a war that all the citizens of the world risk losing. As in the Italian case (Gammone, 2021), the American search for truth does not describe a criminal professional, scientific and institutional world, rather a professional, scientific and institutional world that is characterized by a particular sensitivity towards possible international dangers. Fear and anxiety cause an exaggerated response.

5. China and its viruses

China is a great theoretical challenge for the political experts (Bell, 2015; Berggruen & Gardels 2012). Aspects of the Chinese economic system have been studied in perspectives that are sometimes sweeping and reductive. Poverty alleviation has been a central goal of the Chinese Communist Party (CPC) and an important pillar of its legitimacy. About 750m people in China have escaped extreme poverty since 1990. China has repeated the best Western prototype on a large scale, because it has disarmed the self-destructive charge of the markets and saved capitalism from itself.

The CPC prefers top-down governance and a strong, centralized state. The CPC wants to encourage private enterprise while asserting socialist direction. The big question is what this "socialist direction" means for foreign investors, in particular Goldman Sachs, Wall Street banks, and BlackRock, and the other leaders of American capitalism.

Despite a trade war between China and the Trump administration, demand for Chinese goods has soared amid pandemic lockdowns. And the European Union signed an important economic deal with Beijing in December 2020. The trade agreement originated worries about Europe's compliance to heed US crusade toward China. This European deal was hailed as an astonishing success for President Xi Jinping.

China wanted to show off its success (Rozsa, 2021) and its brave new vaccines. Not only is the envious person rendered unhappy by his situation, but that person wishes to inflict misery on others to reduce their status. Overzealous success backfired. Western media warned against the *influence of issues related to geopolitics* in promoting vaccines. "Delays, inconsistent data, spotty disclosures, and the country's attacks on Western rivals have marred its ambitious effort to portray itself as a leader in global health", they said. China has been accused of using criteria that "are not transparent" to win emergency approval of its coronavirus vaccine.

U.S. secretary of state (2018-21) and director of the Central Intelligence Agency (2017-18), Mike Pompeo was obsessed with Chinese viruses. He stated that "the Communist party's negligence on biosafety" was troubling and accused the Wuhan Institute of Virology, or WIV, as the source of Covid-19. Reservations and criticism of the Chinese vaccines were motivated by the fact that China (Russia too) hasn't completed Western standard trials to test the vaccines and the roll-out of an inadequately vetted vaccine could endanger the people who receive it.

In stark contrast to the obvious gravity of these very serious allegations, there are the observations of very famous and respected scientists, who offer another picture (totally different) about the coronavirus conundrum.

Richard Horton, editor-in-chief of *The Lancet*, explained that the Covid-19 pandemic was unnecessarily worsened by profound economic and political cleavages, from policies that left millions of people particularly vulnerable to governments who made erroneous and awful assumptions. He does not call this situation a pandemic, but a "syndemic", a synthesis of epidemics, which together — the biological and the social — together has caused the global emergency. The World Health Organization declared an "infodemic" of incorrect information about the virus that poses risks to global health.

Horton indicted the past 40 years of capitalism, particularly the version made by Margaret Thatcher and Ronald Reagan. Neo-liberalism falsely elevated the market as the supreme arbiter. However, in a global emergency, people do not need market-based societies, but resilient societies which are resilient and able to absorb shocks. "I'm thinking here of China, as an example. It's not a trade-off between health and the economy. In order to get back on track with economic growth, you need to put health first. And what we in the West have done is not understand that lesson. And as a result, we're constantly cycling back and forth between lockdowns, release, resurgence of the epidemic, lockdowns, release, resurgence, in this endless cycle, which is doing far greater harm to our economy and at the same time driving up mortality. We have the worst of both worlds. ... I personally feel that there has been a tendency to vilify China. ... I think we have to be very nuanced about our judgments of China. I worked very closely with a group of Chinese scientists and doctors who were on the frontline at the outbreak in Wuhan last year, and I can honestly say that the world owes them a debt of gratitude for the way they fought this outbreak when it first took place, for the fact that they sequenced the genome of this virus and posted it in early January for the world to be able to use, for the fact that they wrote up the first case descriptions, which we published in the last week of January, so that the world could get an accurate understanding of the threat that we were facing, the fact that they signaled to the world the dangers of person-to-person transmission. And finally, they raised the alarm about the risk of a global pandemic. This work was done in China. So when I see and hear Western political leaders vilifying China in the way that they do, I think that there is a dimension of Sinophobia, even racism, against the Chinese. ... When you compare the way China acted, which was decisively and quickly in those early stages, and I compare the way my government in the United Kingdom or President Trump's government acted in those weeks in January and February and early March, I'm afraid that showed the dangerous incompetence of our democracies, and actually points to a potentially very dangerous flaw in our democracies, that we were not able to apply our scientific knowledge and translate it into political decision-making that protected the lives of our people. And that is a terrible, terrible failure of the democratic system. I'm thinking here of China, as an example. It's not a trade-off between health and the economy. In order to get back on track with economic growth, you need to put health first. And what we in the West have done is not understand that lesson. And as a result, we're constantly cycling back and forth between lockdowns, release, resurgence of the epidemic, lockdowns, release, resurgence, in this endless cycle, which is doing far greater harm to our economy and at the same time driving up mortality. We have the worst of both worlds. ... I personally feel that there has been a tendency to vilify China" (Horton 2021).

In "anti-communist" propaganda, decades of Chinese history have been frequently feigned in passages that are simultaneously radical and simplified. For instance, "Modern mainland Chinese ideals tend to place higher value on social stability than human rights". In this culture war, we often see the negative description of labor practices in China and the expansion of a vast detention and forced system. Pang goes like this: the way we consume is unsustainable and our good are entangled in a system that hides atrocity by design and makes complicity with authoritarian governments, with dangerous working conditions and even with religious persecution (Pang 2021).

6. Russia and its vaccines

Even Russia won the struggle to produce the big biotech products that flourished in the UK and the US, thanks to a different mix of scientific knowledge, direction from above, governmental funding. In few months Russia and China discovered an effective treatment for Covid-19 and have saved hundreds of thousands of lives on the face of the Earth.

At the beginning rejected and ridiculed by Western elites, Russia's Sputnik V vaccine has not only been rehabilitated; it's emerged as a powerful tool of soft power abroad for President Vladimir Putin. "For an authoritarian state, this coronavirus is paradise," a Western diplomat in Moscow said, because the situation allows for the testing of tools of surveillance and control that can be used in the future to counter public unrest. For Vladimir V. Putin, the coronavirus was an unexpected dress rehearsal.

The spread of the virus provides a sudden test for Russian governmental capabilities — and a high-stakes opportunity for Russian elites to win support for hard-line measures. The coronavirus was an opportunity for them to show everyone the effectiveness of severe top-down governance and of a strong, centralized state. Russia's possible grand bargain with some Western countries has been to provide stability, predictable governance and effective military intervention in crisis areas, at the cost of fewer democratic rights at home.

Many Westerners drew comparisons to the 1986 Chernobyl nuclear disaster, when the Soviet government was slow to admit the scale of the problem. First greeted with skepticism, experts have since been convinced of the effectiveness of the Russian coronavirus vaccine, Sputnik V, with positive results published in *The Lancet* medical journal. It confirmed the vaccine is "safe and effective." While the journal noted Sputnik V's development faced criticism for "an absence of transparency" and "corner cutting," it said the vaccine maker, Moscow's Gamaleya National Centre of Epidemiology and Microbiology, had, in fact, demonstrated solid scientific principles. The vaccine, named after the first satellite sent into space almost 70 years ago, was meant to evoke historic images of Russian glory. The success of the vaccine restored Russian research capabilities to the world's top echelons after the USSR's sudden collapse in 1991. Russia's government reports that Sputnik V has been approved in more than 30 countries. Russia's Sputnik V vaccine has been a political and medical victory for the country, with many nations scrambling to get doses.

The United States government has determined the first sanctions imposed on Russia during Joe Biden term, targeting companies and individuals involved both in the use of chemical weapons and in the Sputnik V vaccine (at a stage where this comes to a few steps from the green light to diffusion also in the continent on the outskirts of Moscow, Europe, and in various allied states). Sanctions were severe. Therefore, license applications subject to waivers were reviewed on a case-by-case basis. Existing export-related waivers were removed, including the waivers for license exceptions Service and Replacement of Parts and Equipment (RPL), Technology and Software Unrestricted (TSU), and Additional Permissive Reexports (APR). Exporters were no longer be able to use these exceptions for exports and reexports of NS items to Russia. The waiver for exports and reexports of NS items to commercial end-users in Russia for civil end-uses was removed. Applications for such exports must then be reviewed under a "presumption of denial" policy.

We read in the websites of the State Department: "The 33rd TsNII, GosNIIOKhT, and the 27th Scientific Center have engaged in activities to develop Russia's chemical weapons capabilities, including technologies for delivering such weapons" (State Department, 2021a). The United States government clarified that GosNIIOKhT is a Russian institute with a longstanding role in scientific research and in expanding its development, testing, and evaluation capabilities on chemical weapons. Therefore, Sputnik V was implicitly in Washington's sights. The U. S. government has determined that it is essential to U.S. national security interests to waive specific restrictions on foreign assistance and exports. The 48th Central Scientific Research

Institute Kirov of the Russian Defense Ministry, founded in 1937 in Stalin's time to manage the production of unconventional weapons, and the 33rd Scientific Research and Testing Institute (both sanctioned by the Treasury Department) actively contributed to the research on Sputnik, for which Moscow has used the technological and scientific apparatus of its National Defense.

We read also in the websites of the State Department: "The United States joins the European Union in condemning and responding to the Russian Federation's use of a chemical weapon... We share the EU's concerns regarding Russia's deepening authoritarianism and welcome the EU's determination to impose sanctions on Russia under its new global human rights authorities.

The U.S. government has exercised its authorities to send a clear signal that Russia's use of chemical weapons and abuse of human rights have severe consequences... The Department of State has also implemented measures under Executive Order (E.O.) 13382, which targets weapons of mass destruction proliferators, as well as the Countering America's Adversaries Through Sanctions Act (CAATSA) against multiple Russian individuals and entities associated with the Russian Federation's chemical weapons program and defense and intelligence sectors" (State Department, 2021b).

Anti-Russian political rhetoric coming from aggressive and old-fashioned Western groups has received wide echo in international mainstream media. It is indicative of the fear shared by some U.S. and European bellicose theoreticians. They do not appreciate Russia's government, however they do not make the necessary distinction between the government and the Russians, thus effectively vilifying an entire nation (Sidoti, 2015).

7. A cold war of viruses, vaccines, drugs

India, among the world's largest producers of generic medicines, has also moved to develop its own vaccines and to ship them abroad.

China has made sharing its homegrown vaccines a centerpiece of its "Belt and Road Initiative," a global strategy to invest in more than 70 countries and international organizations. China's vaccine diplomacy has had its glitches, but for many poor countries, China's vaccines are far better than nothing. For example, China announced it would donate 300,000 doses to Egypt.

Many countries have approved use of Chinese vaccines and some governments in Europe have said they would consider them. Doses have been delivered to places such as Morocco. Indonesia has secured the most from China, signing up for 125 million Sinovac doses, according to the firm.

Hungarian prime minister Viktor Orbán has been inoculated against COVID-19 with the vaccine from the Chinese laboratory Sinopharm. "National leaders who have been publicly inoculated with Chinese shots range from Mohammed bin Rashid al Maktoum, the ruler of Dubai, to Indonesian President Joko Widodo and Turkish President Recep Tayyip Erdogan", media reported. Many million coronavirus tests have been done in Turkey. The country began a mass Covid-19 vaccination campaign. The country planned to reach more than 50 million doses in a few months. The problematic of westernization had many implications for understanding the relationship between public health and public authorities in the context of modernization (Sidoti, 2016, 2019).

Chinese vaccine makers have signed contracts to supply more than 500 million doses to other countries, according to press reports. Russia claims it has orders for its Sputnik V vaccine from about 20 countries — including America's southern neighbor, Mexico, which has contracted to receive 7.4 million doses between February and April.

China has been accused, but Chinese state media organizations have also begun a campaign that questions the safety of the Moderna and Pfizer-BioNTech shots and promotes Chinese vaccines as better alternatives.

Many scientists feel to read a crime story in which the narrator has not yet decided the ending. As in the best detective novels, the smoking gun is missing, but an impressive set of clues converge against the awful culpable: China and the villainous Wuhan Institute of Virology, or WIV, as the source of Covid-19.

The finale is open to the most varied conclusions. It is not even known who is the "bad guy" in a dirty story that could end in an immense bloodshed (Gammone, 2017). Not even Putin's Russia is fixed forever in the hellish realm of evil. On Hitler's invasion of Russia, and Britain's alliance with Stalin, Churchill said: "If Hitler invaded Hell I would make at least a favorable reference to the Devil in the House of Commons." At the end, China, Russia, Venezuela, Iran are not yet known which role of the play they should be in.

The Covid-19 pandemic was a global challenge. National organization gatekeepers shall find an increasing intelligent role in rational public concerns regarding Covid-19, since their *interna corporis* guidelines are getting closer to *externa corporis* requirements set by international organizations and global needs.

"As things are, in the real world of countries belatedly mobilising to contain the virus, one should not lose sight of a still more redoubtable scenario: another pandemic is just a matter of time. Contrary to what prophets say, the global outbreak of Covid-19 is in no way a departure from normal life, old or new; infectious diseases are emerging and re-emerging more quickly than ever before. Between 1980 and 2013, the number of annual epidemics has gone from fewer than 1,000 to over 3,000, so that infectious diseases such as Zika, MERS-CoV, SARS, cholera, tuberculosis, HIV/AIDS, influenza, and Ebola kill millions every year. Their outbreaks decimate economies, trigger aftershocks, panic and institutional crises around the world. A dire situation highlighting a disturbing reality about the fragility of our global economy, an inadequacy of national social safety nets, and a persistent underinvestment in public health preparedness" (Scuro, 2020).

8. Is the global health crisis controlled?

In the United States, Americans qualify for distinct medical programs depending on their age, health status, and employer. The Affordable Care Act has increased coverage, but roughly 30 million people still remain uninsured.

As President Trump was leaving office, just over 1 in 10 Americans said the coronavirus pandemic in the United States was mostly under control, despite the departing president's assertions that record case levels were exaggerations. According to nationwide survey (a Washington PostABC News poll), large majorities of people of all political affiliations said the Covid-19 was only somewhat under control or not at all controlled.

Several sources of federal funding are available if an hospital had determined a person has coronavirus: the Covid-19 Uninsured Program. Created in 2020, the Covid-19 Uninsured Program pays the health bills of coronavirus patients who lack medical coverage. It reimburses hospitals at the same prices that Medicare pays therapeutic suppliers. Meanwhile, low-income countries have tried not to make their situation worse.

The global context is bleak. The concerns of *Silent Spring* and *The Sixth Extinction* are still relevant and urgent. Having studied the subject for decades and distilling information harvested from hundreds of published scientific research, a respected epidemiologist concluded that is very dangerous the growing exposure to endocrine-disrupting chemicals that are found everywhere: pesticides, plastics, food packaging, flame retardants, cosmetics, electronics, and personal care products (Swan, 2020). Hormone-warping chemicals interfere with normal physiological function, including testosterone and estrogen structures. Even in small doses, they pose specific harm to unborn babies and children whose bodies are growing. Endocrine-disrupting chemical substances can enter even the placenta, and have the ability to change the bodily structure of girls and boys, alter brain development and impair the immune

system. Perhaps most important, the DNA is also damaged. Chemicals in the modern environment are changing human sexuality and endangering fertility.

Companies and scientists prioritized the Covid-19 pandemic. Healthcare companies and researchers around the world mobilized to create a quick medical answer. Technology shifted to emphasize solutions for working at home; clean energy has become even more in focus; and firms worried about their impact on the environment.

"We need, first and foremost, to reinforce the capacity of our public health systems to detect and contain diseases through central data surveillance systems linking laboratory data with population data and clinical measures. Secondly, strengthen communication and coordination between centers of control and prevention with nongovernmental organizations capable to guide our responses during public health crises and to 'prepare evidence-based epidemic protocols and practices during times of peace'. Finally, address the underlying inequalities that make a crisis like this one so devastating for vulnerable people, including those in fields like hospitality, retail, and the gig economy. In the long run, it means bolstering our social safety net—by expanding unemployment insurance, paid sick leave, health care access, small-business assistance, and food and housing security" (Scuro, 2020).

9. An uncensored truth?

Experts feared that misinformation could foster public distrust that erodes Western influence as well as the democratic value of relying on true facts as a basis for decision-making (Sidoti, 1991). Many people said the coronavirus was a germ weapon designed to incapacitate and kill. Because public interest in safety runs high, health misinformation can have a disproportionately large political consequence.

The fact that some information is missing in the documentation made available by scientists and politicians is due to processing times, delays and/or regulations which mean that organizations are badly updated. The September 11 attacks killed thousands of Americans. A 2016 study from Chapman University in California, stated more than half of U.S. citizens believe the government is concealing information about the 9/11 attacks. Conspiracy theories have been propelled by several films and books. On April 10, 2020, the CBS program "60 Minutes" aired a story about missing documents about September 11. Several former public officials — including Bob Kerrey, former ambassador Tim Roemer, former Navy secretary John Lehman, and former House Intelligence Committee chairman and CIA director Porter Goss — called on the White House to declassify and release documents still secret.

There are people holding on to alternate realities. Consider two images about Covid-19: the image that it was planned by Bill Gates for some kind of world-domination project, and the image that it doesn't actually exist, but is a plot by the globalist elite to take away popular freedoms. It has been suggested, without evidence, that the worst of the pandemic might be a conspiracy. Too many false images create space for predators who exploit our all-too-human limitations

The culture wars are dependent on revolutionary changes (new technologies, different markets, and inexperienced organizations). The digital era profoundly alters the mechanisms of perception of reality. The consciousness-manufacturing industry is in deep crisis, because of revolutionary changes related to a drastic drop in sales of the old printed information, and to market saturation (Rata, Runcan and Arslan, 2013). Revolutionary changes compels mainstream traditional media to fight with many new opponents. Hence the need to manage anger, to concoct news unceasingly, to trip up enemies in politics and ask their punishment. China and Russia are sort of perfect enemies.

We're dealing with a new political situation in which people assimilate and spread misinformation. The internet has forged an age of widespread false opinion. It's not much worse than the flu, skeptics have argued.

Many Americans believe that progress for some comes at the expense of others. As the pandemic has laid bare, the United States is a rich country that also happens to be "one of the stingiest when it comes to the welfare of its own people" (McGhee, 2021). Supported by extraordinary data-driven research and dense interviews with those directly affected by social problems, McGhee paints a powerful picture of the main American issues. Most white voters have not chosen their own rational self-interest. As a presidential candidate, Trump made all sorts of racist innuendo. There have been numerous studies that found support for Trump was closely linked to racial resentment. Trump's program pledged to create political, economic, institutional and environmental devastation on his supporters along with everyone else. However, millions of voters advanced a self-defeating kind of exclusion, a single-mindedness not to share the national wealth. McGhee speaks with white people about losing jobs, homes, and hope. McGhee writes about health care; she argues that white Americans have been steeped in the notion that any gains by another minority group would come at white people's expense. Through a courageous odyssey across America's racial divide, she explores why some believe that progress for some comes at the expense of others. She assesses white superiority's collateral victims. McGhee laments US citizens being stuck in the past -- clinging to old economic patterns, a perspective then directly concluded with born out of racist policies from the last century that that perpetuate segregation and inequality today. In her viewpoint, a jammed perception is a consequence of colonialism and slavery. Zero-sum vision "has always optimally benefited only the few while limiting the potential of the rest of us, and therefore the whole". Against zero-sum thinking McGhee proposes "win-win". There is a greater, more decent America available to ordinary citizens. She shows evidence of what she terms the Solidarity Dividend: the substantial gains that derive when people come together across ethnicity. She brings a momentous global potential to light.

10. Conclusions

Our planet is undergoing extreme transformations due to humankind's footprint upon it. On Covid-19, we need a paradigm change: global survival. A broad array of activities interact to intensify the global issues we face. Our world is becoming more dangerous and degraded every day. Ecological hubris constitutes a multi-faceted threat. While most focus on one or several sides of a worldwide emergency (viruses, pollution, species diversity, violence, groundwater depletion), our fragmented organizational ways of acting is flopping to face the global condition threatening the continuity of human existence.

This essay studied the Covid-19 health prescriptions, in order to show that they are more a new kind of medical war tools than global health measures. The effects for the low-income countries are very negative, quite contrary to what the official agenda suggests. The fight against viruses does not take place, after all, in favor of countries most affected by poverty and it is important that this becomes crystal clear, in order political propaganda manipulations not to happen against them. After all, the new war of drugs seems not to be more than a mere tool in the hands of some central countries in favor of their financial interests.

Developing a universal flu vaccine is very difficult and scientists have been trying since the 1930s. By the late 1990s, international immunisation programs were stalling. In 2000, the Global Alliance for Vaccines and Immunisation was founded – today Gavi, the Vaccine Alliance.

Gavi's impact draws on the strengths of its core partners, the Bill & Melinda Gates Foundation, the World Health Organization, the World Bank and UNICEF. By improving access to new and under-used vaccines for millions of the most vulnerable children, Gavi transforms nations and persons, helping to boost the societies of lower-income countries and making the world safer for all.

In a society of knowledge it is important to support global ideal assessment. After World War II, in the West, the covetousness of predatory economy was restricted by democratic states. War economy is felt to be a hazardous drive even by many Americans, both left and right-wing (the first charge against the military-industrial complex was made by General Eisenhower!). Criticism of some American governments is not biased anti-American criticism; it is often American-born criticism, underscored by sincere American observers, especially those who believe in the urgent need to arrive at shared, forward-looking forms of managing globalization (Reich, 2003, 2020). Great Americans, such as Franklin Delano Roosevelt, proposed a vision of international order that is still pertinent and relevant today. In contrast to national selfishness and warmongering policies, the alternative is the peaceful global collaboration that has been recommended by many influential religious leaders. Covid-19 Western narrative offered suspicion without truth, death without condolence, sin without shame, sensation without feeling, society without sociology, and, ultimately, politics without vision.

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A Research on Nomophobia Levels of Civil Aviation Employees

Sibel Bilkay

1. Introduction

In the globalizing world, the aviation sector has a considerable place in countries' incomes. It is considered to be a soft power factor that enhances not only the incomes but the promotion and recognition of countries as well. In aviation employees' point of view, since international rules and regulations are in use on duty, this labour and knowledge-intensive sector operates under intense stress. The importance of the "human" factor for aviation companies that strive to provide the best, most reliable, safest and highest quality service in a highly competitive environment becomes more and more important.

In terms of aviation, providing safe and secure service is possible with the realization of employees' duties within the framework of international rules and regulations. In this context, in the first part of our study, the concept of nomophobia will be given. In the second part, aviation safety, security and the human element will be evaluated. In the last part, the nomophobia levels of aviation workers will be examined; it will be investigated whether it differs according to age, gender, experience, department, and education level. In this direction, answers to the following questions have been sought:

1. What is the nomophobia level of aviation employees?
2. Nomophobia levels of aviation employees,
 - a. By gender,
 - b. By age,
 - c. Marital status,
 - d. Education status,
 - e. Department,
 - f. Experience,
 - g. Occupation,
 - h. Does it differ according to the types of jobs?

In the last part of our study, scientific data will be provided to both international and local civil aviation institutions and organizations as it is the first scientific study investigating the nomophobia level of those working in the aviation field.

2. Nomophobia from a Conceptual Point

In addition to ensuring that all kinds of information flow are realized in a short time by mobile phones or tablets, the information age has brought brand new communication channels with it, and social media channels such as Facebook, Tweeter, and Instagram have become global communication tools. However, scientific studies show that we have overdosed on social media tracking and smartphone use. According to "the Household Information Technology Usage Survey" carried out by the Turkish Statistical Institute in 2019, compared to 2018, internet usage rate for individuals aged between 16 and 74 has increased by 2.4% reaching 75.9%, and the rate of connecting to the internet from home with broadband is 87.9% (TÜİK, 2019). While messaging is the leading reason for individuals' internet usage with a rate of 93.6%, it has been determined that 81.4% of this usage is for the purposes of creating profiles, sending messages, sharing photos or content on social media (TÜİK, 2019). According to the research conducted by We're Social in 2019, 67% of the world's population uses mobile phones and 48% are active social media users (We're Social, 2019).

Nomophobia, which is called the new phobia of the technology age in the literature, has taken its place as the “phobia of the age”. The only study to determine the components of nomophobia was conducted by Yildirim and Correia (2015). It consists of components such as inability to communicate (individuals' feelings of communicating at any time and using services that allow instant communication); losing the connection (it is the fear of individuals about losing their internet connection and the worry of people about being unavailable); inability to access information (the inconvenience caused by the inability of individuals to access information via their smartphones whenever they want) and feeling uncomfortable (the unrest caused by the individuals not being able to access the comfort provided by smart phones). Nomophobia causes individuals to experience psychosocial disorders such as fear, anxiety disorders, psychological instability, and changing moods that individuals experience when they cannot access their smart devices (King vd.2013; Yildirim and Correia, 2015; Dixit et al., 2010; Adnan and Gezgin, 2016). According to Greenfield (2014), nomophobia causes dopamine irregularity in the human brain due to its psychological origin and in this respect, it is similar to other addictions. The American Society of Addiction Medicine (ASAM), American Psychiatric Association (APA) and World Health Organization (WHO) are among the leading international organizations that acknowledge that nomophobia is observed at stable levels and coincides with the definition of clinical behavioural addiction (Bilkay, 2020).

Not every smartphone user has got nomophobia. There are some precursors that push individuals into nomophobia. Situations such as feeling or fear of loneliness, sense of belonging, fear of missing the agenda and social media usage habits and insufficient perceived social support cause nomophobia.

Nomophobia has negative psychological, sociological and physiological consequences. When the individuals with nomophobia cannot reach their smartphones, just as other addicted individuals, they have signs of anxiety, discomfort, and extreme irritability; when they reach their smartphones, this state of anxiety and fear disappears (Bragazzi ve Del Puente, 2014).

3. Aviation Safety, Security and Human Factor

Civil aviation activities in the world and Turkey are conducted by the rules applied by local institutions and organizations which have been determined by internationally signed Chicago Convention and the International Civil Aviation Organization (ICAO) which was established later. The most important elements of civil aviation activities are the concepts of safety and security.

Aviation safety is conceptually the realization of aviation activities at an acceptable risk level where known risk factors are revealed and avoided. *Aviation security*, on the other hand, is a concept that includes activities and resources related to the protection of people, who are directly or indirectly within the scope of aviation activities, aircraft and air transport infrastructure from deliberately organized dangers that have criminal elements such as sabotage and terrorist attacks.

Ensuring safety and security in aviation is possible with the human factor, that is, aviation employees should carry out their duties in line with the training they have received and in accordance with international legislation and rules. On the other hand, the human factor in the occurrence of accidents / crimes in aviation is 80% (Erdem et al., 2015). This ratio is the resultant of error, negligence and violation chains while conducting aviation activities.

4. Research

4.1. Method

This study, conducted to examine the prevalence of nomophobia among aviation workers according to different variables, is a causal comparison study. Causal comparison studies are studies aimed at comparing the causes of a naturally occurring or existing situation, or the variables or consequences that affect these causes. (Buyukozturk et al., 2008). In this context, based on the responses of aviation workers within the framework of their demographic characteristics, the effect on nomophobia levels will be examined.

1073 employees from various departments of civil aviation companies operating in Istanbul (IST), Istanbul Ataturk (ISL), and Istanbul Sabiha Gokcen (SAW) airports participated in the study. The demographic characteristics of aviation employees are given in Table 1.

Since the studies in the field of aviation are limited, it was deemed necessary to make separate groupings according to the units and types of jobs:

- Within this framework, those who are distinguished according to **Department**,
 - "Apron" includes all units such as technical maintenance, ground handling, operation and ramp, and it includes the operations of aviation activities carried out on the apron,
 - In the "Cabin" section, captain pilot, co-pilot F/O (first officer), cabin supervisor, cabin attendant and if any, flight technicians,
 - "Head Office", on the other hand, includes the "administrative" units of the airline companies, which are defined as back and support services, such as head office employees, catering, training and technical units.
- Those who are separated by **Occupation**,
 - "Officer" A title without any discrimination of operation or back unit but this title does not yet have any managerial qualifications such as general manager, technical, catering, cabin clerk,
 - "Supervisor", employees with "middle level" titles working in both operations and back and support units (such as Cabin Supervisor, Invoice Follow-up Supervisor, Contract Chief, Accounting Supervisor, Shift Supervisor etc.)
 - "Senior Manager", on the other hand, is the employees working in all kinds of units of the airline companies (Captain Pilot, Deputy General Manager, General Manager, Accounting Manager, Square Manager, Technical President etc.)
- Categorized as **Types of Jobs**,
 - "Shift" represents all personnel working in both double and triple shifts in all units,
 - "Cabin" represents cabin workers who perform their duties in accordance with the given schedule without working hours,
 - "Officer" represents airline personnel working in the order of 8 am to 5 pm.

Table 1: Demographic Information of Aviation Employees

Gender	N	%
Female	482	44,9
Male	591	55,1
Age		
20-30	386	36,0

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31-40	330	30,8
41-50	298	27,8
51-60	56	5,2
Over 60	3	,3

Marital Status

Single	569	53
Married	504	47

Education Status

High School	203	18,9
Associate degree	289	26,9
Bachelor's degree	393	36,6
Master's degree	157	14,6
Doctoral degree	31	2,9

Department

Airport Operation	589	54,9
Cabin Services	229	21,3
Head Office / Technical / Catering / Education Directorates	255	23,8

Experience

1-5 Years	420	39,1
6-10 Years	202	18,8
11-15 Years	132	12,3
16-20 Years	99	9,2
More than 20 Years	220	20,5

Occupation

Officer / Worker	695	64,8
Manager / Supervisor	336	31,3
Senior Manager	42	3,9

Types of Jobs

Apron / Shift	600	55,9
Cabin	241	22,5
Officer (from 8 am to 5 pm)	232	21,6
Total	1073	100

4.2. Data Collection Technique

In the study, the Nomophobia Scale (NMP-Q), developed by Yildirim and Correia in 2015 and adapted to Turkish, has been used as a data collection technique. The scale, which consists of 20 items in total, consists of sub-dimensions of inability to access information (4 items), losing connection (5 items), inability to communicate (6 items), and inability to feel comfortable (5 items). The scale was itemized according to 7-point Likert type and was graded and scored as "Absolutely Disagree" (1 point) and "Strongly Agree" (7 points).

4.3. No Data Collection and Analysis Technique

The data collection process of the research has been provided with the voluntary participation of aviation employees. In the questionnaire forms, in order to ensure that the participants give clear answers, their names and the name of the company they work for have not been directly asked, and the departments they work with have been grouped under 3 main headings (Airport, Cabin Services and General Directorate / Technical / Catering). Analyses in the study were performed using SPSS 23.0 (The Statistical Package for the Social Science). The answers to the sub-problems of the research were found by using standard deviation, average, T-Test, Anova (one-way variance) analysis. The Kolmogorov-Smirnov test was used to control the distribution of the participants, and it was observed that the distribution value was lower than the statistical significance level ($p > 0.05$). If the number of participants in a research group is high Kurtosis-skewness value between ± 1.96 provides the assumption of normality (Tabachnick and Fidell, 2007).

5. Results

Cronbach Alpha Coefficient (CA) was used to measure the reliability of the scale used in the study. Confirmatory Factor Analysis (CFA) was used to evaluate the structural validity of the nomophobia scale. Cronbach Alpha coefficient should be over 0.70, factor loadings should be over 0.50. (Hair et al., 2006). The CA value of the nomophobia scale was measured as 0.939. CA values of the sub-dimensions of the scale were found to be 0.764 for *Inability to Access Information*, 0.764 for *Loss of Connection*, 0.895 for *Inability to Communicate*, and 0.889 for *Feeling Uncomfortable*. It is seen that the internal consistency of the scale is high. Since the skewness and kurtosis values of the scale are within the limits determined in the literature, it is assumed that the data are distributed normally.

The findings of the study investigating the relationship between the nomophobia levels of aviation employees and their demographic characteristics are discussed in turn under the headings appropriate to the questions for which answers are sought, and are presented in detail with statistical analysis. Detailed item analysis, which includes the average scores and standard deviations of the sub-dimensions and items of the scale is given in Table 2.

Table 2: Sub-Dimensions of the Scale, Analysis of Items and DFA Weights

Items	Factor Average Standardized Regression Coefficient Weights
Inability to access information	
1 I would feel uncomfortable without constant access to information through my smartphone.	3,87 0,640 2,12

- 2 I would be annoyed if I could not look information up on my smartphone when I wanted to do so. 4,06
0,760 2,11
- 3 Being unable to get the news on my smartphone would make me nervous. 3,82
0,650 2,38
- 4 I would be annoyed if I could not use my smartphone and its capabilities. 3,71
0,657 2,02

Loss of Connection

- 5 Running out of battery in my smartphone would scare me. 4,00
0,661 2,20
- 6 If I were to run out of credits or hit my monthly data limit, I would panic. 2,94
0,743 1,93
- 7 If my phone failed to get signal or couldn't access the wireless internet connection, I would constantly check to see whether I could find a signal or a wireless connection or not. 3,82
0,542 2,14
- 8 If I couldn't use my smartphone, I would be afraid of being stuck somewhere. 2,96
0,637 1,99
- 9 If I couldn't check my smartphone for a while, I feel a strong desire to check it. 3,42
0,582 2,04

Inability to Communicate

- If I didn't have my smartphone with me,
- 10 I would feel anxious because I could not instantly communicate with my family and/or friends. 4,03
0,705 2,14
- 11 I would be worried because my family and/or friends could not reach me. 0,697 3,72
1,87
- 12 I would feel nervous because I would not be able to receive text messages and calls. 0,700 3,52
1,88
- 13 I would be anxious because I could not keep in touch with my family and/or friends. 0,771 3,57
1,89
- 14 I would be nervous because I could not know if someone had tried to get a hold of me. 0,679 3,19
1,84
- 15 I would feel anxious because my constant connection to my family and friends would be broken. 0,750 3,45
1,83
-

Feeling Uncomfortable			
16	I would be nervous because I would be disconnected from my online identity.	0,719	2,62 1,70
17	I would be uncomfortable because I could not stay up-to-date with social media and online networks.	0,818	2,53 1,66
18	I would feel awkward because I could not check my notifications for updates from my connections and online networks.	0,806	2,60 1,70
19	I would feel anxious because I could not check my email messages.	0,588	3,05 1,83
20	I would feel weird because I would not know what to do.	0,774	2,66 1,82

As seen in Table 2, the factor loads of the expressions in the scale are above 0.50 and the expressions in the scale represent the dimensions they belong to.

5.1. Nomophobia Levels of Aviation Employees

The nomophobia levels of the participants were evaluated according to their scores from the scale and their arithmetic averages. The minimum score that can be taken from the scale, which is measured with 7-Point Likert and includes 20 expressions, is evaluated as 20 and the maximum score as 140. A value between 0-20 points indicates “no nomophobia”, 21-60 point range indicates “low level nomophobia”, 61-100 points range indicates “moderate nomophobia”, 101-140 point range indicates “high level nomophobia” (Gezgin, Sahin and Yildirim, 2017). When the scores of the participants are evaluated, it was concluded that 1.40% (15 individuals) of aviation employees do not have nomophobia, 45.66% (490 individuals) have a low-level of nomophobia, 38.49% (413 individuals) are moderate and 14.45% (155 individuals) had a high level of nomophobia.

5.1.1. Differences in Nomophobia Levels of Aviation Employees by Gender

In order to find out whether there is a significant difference between the gender of aviation employees and their nomophobia levels, an independent sample T-Test was conducted and the results have been given in Table 3.

Table 3: Independent T-Test Results Regarding the Difference of Nomophobia Level by Gender

Gender	N	Avg.	β^*	t	df	p
Female	482	3,40	1,31	0,517	1.071	0,04
Male	591	3,36	1,33	0,518	1.031	0,04

* Standardized Regression Coefficient Weights

As can be seen in Table 3, there is no significant difference in the distribution of nomophobia levels of aviation workers by gender ($p < 0,05$).

5.1.2. Differences in Nomophobia Levels of Aviation Employees by Age

One-way analysis of variance ANOVA was conducted to determine whether the levels of nomophobia vary according to the ages of aviation workers. According to the analysis results, it was concluded that the nomophobia levels of aviation employees showed a significant difference according to the age factor ($p < 0,05$). Accordingly, employees between the ages of 31-40 have the highest level with an average of 3.56, while those over 60 years old have the lowest level of nomophobia with an average of 3.18.

Table 4: One-Way Analysis of Variance Regarding the Difference in Nomophobia Level by Age

Age	N	Avg.	β	df	p
20-30 y/o	386	3,34	1,33	4	0,032
31-40 y/o	330	3,56	1,35		
41-50 y/o	298	3,25	1,25		
51-60 y/o	56	3,21	1,38		
Over 60 y/o	3	3,18	1,60		

5.1.3. Differences in Nomophobia Levels of Aviation Employees by Marital Status

In order to find out whether there is a significant difference between the nomophobia levels and marital status of aviation workers, an independent sample T-Test was conducted and the results have been given in Table 5. According to Table 5, there is a homogeneous distribution between singles and married people. However, married workers have higher levels of nomophobia than single workers.

Table 5: Independent T-Test Results Regarding the Difference of Nomophobia Level by Marital Status

Marital Status	N	Ort.	β	Sig. (2tailed)	t	df	p
Single	569	3,29	1,27	0,028	-2,205	1.071	0,53
Married	504	3,46	1,37	0,028	-2,195	1.032	0,46

5.1.4. Differences in the Nomophobia Levels of Aviation Employees by Education Level

One-way ANOVA analysis of variance was conducted to find out whether there is a significant difference between the nomophobia levels and educational status of aviation workers. According to Table 6, the lowest rate of nomophobia is seen among employees who are high school graduates ($X = 3.25$). High school graduate employees are followed by master's degree graduates ($X = 3.32$) and it has been found that doctorate graduates ($X = 4.08$) have the highest level of nomophobia.

Table 6: Results of the One-Way Variance ANOVA Test Regarding the Difference of Nomophobia Level by Educational Background

Education Status	N	Avg.	β	df	p
High School	203	3,25	1,38	4	0,023
Associate degree	289	3,36	1,17		
Bachelor's degree	393	3,41	1,35		
Master's degree	157	3,32	1,33		

Doctoral degree	31	4,08	1,52		
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5.1.5. Differences in Nomophobia Levels of Aviation Employees in Terms of Department of Work

A one-way ANOVA analysis of variance was conducted to find out whether there is a significant difference between nomophobia level of aviation employees and their department. According to Table 7, it was found that the lowest nomophobia level was observed among the employees of the General Directorate / Technical / Catering / Training Departments ($X = 3.33$), and the personnel on the operation side of the airports were ranked as the second with ($X = 3.34$). Although cabin workers seem to have the highest level of nomophobia with the rate of ($X = 3.50$), scientific research should be conducted to determine to what extent their desire to hear from their relatives during sleepovers or flights would be considered as nomophobia, inasmuch as “during working hours”, in other words, during the flight they do not have the possibility to find internet.

Table 7: Results of One-Way Variance ANOVA Test Regarding the Difference in Nomophobia Level According to the Department

Department	N	Avg.	β	df	p
Airport Operation	589	3,34	1,30	2	0,229
Cabin Services	229	3,50	1,38		
General Directorate / Technical / Catering / Head of Education	255	3,33	1,32		

5.1.6. The Difference Between the Nomophobia Levels of Aviation Employees in terms of Experience

One-way ANOVA analysis of variance was conducted to find out whether there is a significant difference between the nomophobia levels of aviation workers and their sectoral experience. It was found that there is a significant difference between the years of experience of aviation employees and their nomophobia levels. According to Table 8, employees with 1-5 years of experience have an average of ($X = 3.39$), employees with 6-10 years of experience have an average of ($X = 3.63$), employees with 11-15 years of experience have an average of ($X = 3,46$), those with 15-20 years of experience have an average of ($X = 3.31$). Employees with the lowest level of nomophobia are those who have an experience of more than 20 years ($X = 3.09$).

Table 8: Results of One-Way Variance ANOVA Test Regarding Difference in Nomophobia Level According to Sectoral Experience

Sectoral Experience	N	Avg.	β	df	p
1-5 Years	420	3,39	1,30	4	0,001
6-10 Years	202	3,63	1,47		
11-15 Years	132	3,46	1,38		
16-20 Years	99	3,31	1,11		
More than 20 Years	220	3,09	1,20		

5.1.7. Differences in Nomophobia Levels of Aviation Employees in Terms of Occupations

One-way ANOVA analysis of variance was performed to find out whether there is a significant difference between the levels of nomophobia of aviation workers and their occupations. It was found that there is a significant difference according to the position of

aviation employees. According to Table 9, while officers and workers have an average of ($X = 3.40$), those work as supervisors have the lowest average level of nomophobia with ($X = 3.25$). Senior managers ($X = 3.81$) have the highest level of nomophobia.

Table 9: Results of the One-Way Variance ANOVA Test Regarding the Difference in Nomophobia Level According to the Occupation

Occupation	N	Avg.	β	df	p
Officer / Worker	695	3,40	1,34	2	0,022
Chief	336	3,25	1,21		
Senior Manager	42	3,81	1,58		

5.1.8. Differences in Nomophobia Levels of Aviation Employees in Terms of Types of Jobs

One-way ANOVA analysis of variance was conducted to find out whether there is a significant difference between the nomophobia levels of aviation employees and types of jobs they have. It was found that there is no significant difference according to the types of jobs that aviation employees have. According to Table 10, those categorized as apron / shift have an average of ($X = 3.24$), cabin employees have an average of ($X = 3.50$) and officers have an average of ($X = 3.61$). Although they are above average, there is no significant difference between their levels.

Table 10: Results of One-Way Variance ANOVA Test Regarding the Difference in Nomophobia Level According to the Job Types

Job Types	N	Avg.	β	df	p
Apron / Shift	641	3,24	1,29	2	0,000
Cabin	241	3,50	1,39		
Officer (from 8 am to 5 pm)	232	3,61	1,29		

6. Conclusion

Investigating the nomophobia levels of aviation employees, in this study it has been concluded that the nomophobia levels of the employees were high. Studies in the literature show that nomophobia is becoming more common (Kaur&Sharma, 2015). Nomophobia, which has psychological, physiological and sociological negative consequences in individual terms, has to be examined carefully in the field of aviation when it is considered that the main element of aviation safety and security is human. The fact that there is no difference in nomophobia levels between men and women in our study is attributed to the absence of gender discrimination in aviation profession groups.

When evaluated in terms of aviation safety and security, distraction, inability to be channelled to work, and illegal behaviours will have enormous consequences. Although it is not yet predictable whether the negative effects of nomophobia in aviation or the consequences of the tendencies of employees with nomophobia will cause accidents / breakdowns, possible situations that may occur raise serious concerns about ensuring the safety and security of aviation.

Although nomophobia, which is included in the literature as social media addiction or smartphone addiction, is not considered as a positive situation in the aviation sector and there is no international ban or obstacle, some restrictions have started in aviation businesses. Based on the anticipation that posts could affect the company's image negatively, Turkish Airlines (THY) is known to have a unit responsible for following the social media posts of the personnel or candidate personnel. Jet 2 Airlines, the airline company that makes the third

largest scheduled flights in England, has banned flight personnel (cabin and cockpit) from bringing phones to the plane. Only the flight technician has a telephone on the plane and in case of an emergency, he or she can provide a connection from an 800 line. Corendon Airlines, operating in Antalya, has banned the flight cabin personnel from taking a phone with them, allowing only captain pilot and co-pilot F/O (first officer) to take phone with them. Only the Republican Guard on duty on each flight is permitted to have a telephone at Mohan Airlines. Fly Service and Bilen Aviation companies, which provide ground services in our country, have banned the use and sharing of social media during working hours. The only airport in the world that imposes a smartphone ban within the airport is Bole Airport in Addis Ababa, Ethiopia. It is strictly forbidden to use mobile phones in the airspace, which means in the customs area.

Considering from the legal framework, although it is possible that such obstacles are inconvenient in terms of local laws, an implementation that will be brought by ICAO, of which the countries are a member, will be above the law. It will prevent a problem in practice. Because nomophobia is a condition that negatively affects employee performance and is described as time theft (Ergul at all., 2017).

As a 23-year former aviation employee, he has repeatedly experienced that the participation in the survey studies on negative values in aviation is low and that the employees responded "appropriately" to the managers of the airline they work with, rather than "correct", in the surveys, the name of the company was not requested from the participants. Making a research by international institutions and organizations by independent research companies rather than by airline companies will provide the most accurate result. As it is experienced, survey studies are returned to the personnel as mobbing in aviation companies. For this reason, it is necessary to investigate the causes of nomophobia, which has the consequences of loneliness, alienation from organizational belonging, low levels of perceived social support in aviation employees, urgent measures should be taken in this regard, and the drawbacks of SMS should be investigated.

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Deans in Higher Education

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1. Introduction

Deans face many responsibilities that must be fulfilled when they begin their duties. They have responsibilities in various areas such as faculty demands, student and staff demands, programs, financial resources, and support for scientific studies. Globalization and rapid technological developments bring with them changing student profiles and demands. In order to fulfill these responsibilities, Deans acting as a leader need to follow the right strategy to strike a balance between senior management and faculty. For this reason, the ability of deans to perform the tasks expected of them by a sustainable method also increases their success.

Krahenbuhl (1998) emphasizes that deans who can comprehend the current development possibilities within the institution and have vision and communication skills are more successful. Deans face many challenges in a political environment, such as rapidly changing technology, keeping up with the economy, and meeting increasing demands. The roles of the academic dean in higher education have changed in recent years (Arntzen, 2016; Bright & Richards, 2001). Nowadays, academic deans deal with numerous tasks, including fundraising, environmental relations, as well as managing staff and education programs (Butin, 2016). At the same time, deans are expected to follow both managerial and daily work (Mech, 1997). Subjects such as decision making, conflict management, team building, evaluation of individuals and programs, budgeting, organizing, recruiting, time management and problem solving are among the skills expected from deans (Sarros, Gmelch & Tanewski, 1998). In addition, senior executives have expectations from deans such as funding, accreditation arrangements, legal compliance, and advanced programs. In this case, it is not only sufficient to have academic and administrative knowledge and skills, but also to have the character and quality to continue education (Towsend & Bassoppo-Moyo, 1997). Academic deans must both represent the management and maintain respectful relationships with staff. This situation sometimes causes role confusion. The organizations they work for must understand this role confusion and take the necessary steps to minimize these situations. One of the necessary steps is for academic deans to receive training (Wolverton, Wolverton, Gmelch, 1999). In addition, in higher education, deans are assumed to have the skills and abilities to fulfill the necessary duties. Skills are learned, but abilities can be developed through professional development activities. (Wolverton and Gmelch 2002, p.10). Deans should be prepared as leaders with many challenges, such as financial resources, accountability, pressures for curriculum and programs, faculty and student demands, and advanced technology. (Wolverton, Gmelch, Montez, Nies, 2001). A leader is someone who influences followers to achieve group or organization goals that reflect excellence defined as higher (Rost, 1991). A leader is someone who encourages followers to take action. Leaders are those who ensure that expectations are met for specific goals, wants, and needs representing values and motivations (Burns, 1978). Gardner (1990), leadership is a persuasion process. It is the orientation of the individual or group in line with the determined goals. Leadership is power (Etzioni, 1965). Leadership works are synonymous with management, power, and authority because there are overlapping meanings and connotations for these concepts. (Hackman & Johnson, 2013; House & Aditya, 1997; Kotter, 1990). In this case, deans are expected to act as a leader in their institutions.

Universities are institutions that play a key role in contributing to production by educating a large part of the population and in the formation of modern societies (Perkmanna et al., 2013, p.423). For this reason, service to society is one of the important duties of universities. The studies of the university administration on this subject are very important for

the development of society. Universities will fulfill one of their goals as long as both the senior management and the middle management do the necessary work to bring the studies in the university together with the society and enlighten the public (Beytekin, O.F., Yalçinkay, M., Doğan, M. and Karakoç, N., 2010).

The roles and responsibilities of deans in middle management in the academic world are as many authors have mentioned. In order to fulfill these duties, deans need to have the necessary knowledge and skills and even develop themselves continuously with professional developments. The limited term of office also creates a problem for those who have to learn the profession on the job.

2. Method

This study was done with qualitative research method. The most frequently used qualitative method is interview. Interviewing is a very powerful method used to reveal people's perspectives, experiences, feelings and perceptions (Bogdan & Biklen, 1998). In qualitative research, the principle of induction is dominant, and the researcher is in an effort to reveal the main themes of the problem he has studied, based on the descriptive and detailed information he has collected, to make the information he collected a meaningful structure, that is, to form a theory based on this information (Glaser & Strauss, 1967).

2.1. Universe and Sample

Çanakkale province constitutes the universe of the study. The sample of the study is composed of deans working at Çanakkale Onsekiz Mart University.

2.2. Data Collection Tool

The semi-structured interview forms used in the study were prepared by the researchers. After the interview questions were prepared, two expert opinions were consulted and the compatibility and understandability of the questions with the topic were tested. The questions in the interview form were prepared in four areas as academic competence, leadership, social service and research, based on the working roles of academic deans during their duties as a result of an extensive literature review. During the interview, permission was obtained from the participants to record, and the opinions of those who did not want to be recorded were noted by the researcher at the time of the interview. The interviews lasted between 30 and 45 minutes on average.

2.3. Data Analysis

The data obtained were recorded electronically. The records were written in a word file, analyzed by the researchers, and the codes obtained were collected under the determined themes. Descriptive analysis has been done in this study. In descriptive analysis, the researcher can often include direct quotations in order to reflect the views of the individuals with whom he meets in a striking way. In this type of analysis, the main goal is to achieve presenting the findings to the reader in a summarized and interpreted form (Yildirim & Şimşek, 2005).

3. Findings

Table 1. The Demographic Characteristics of Deans

Professional Experience Year	Working Time as Dean
25	3
30	5
27	9
30	3 ay
34	9
22	5
24	2
27	2

The eight deans from Çanakkale Onsekiz Mart University were interviewed. The deans have between 22 and 30 years of professional experience, and their working time as deans varies between 3 months and 9 years.

Table 2. The Deans' Strongest Abilities

THEME	SUB THEME	CODE	f	n
Leadership	Abilities	-Effective communication	6	8
		-Being solution oriented	2	8
		-Being fair	2	8
		-Doing teamwork	2	8
		-Caring for a person	2	8
		-Dominating legislation	2	8
		-Ability to convince	2	8
		-Being a social person	2	8
		-Being calm	1	8
		-Being participative	1	8
		-Being sincere	1	8
		-Being democratic	1	8
		-Look who you are	1	8
		-Corporate affiliation	1	8
		-Taking responsibility	1	8
		-Taking the initiative	1	8
		-Having analytical thinking skills	1	8
		-Being a researcher	1	8
		-Constantly renew oneself	1	8
		-Being determined	1	8
		-Emphasis on merit	1	8
		-Being practical	1	8
		-Absolutely finish the work started	1	8
		-Being planned and programmed	1	8
		-Be unifying	1	8
		-Being hardworking	1	8
		-Do not distinguish between people	1	8

When deans were asked to indicate their strongest talents, six out of eight deans were united in effective communication. Among his abilities are being solution-oriented, fairness, teamwork, valuing people, dominating legislation, persuasion and being social. A participant said *"I can say that I am calm and well versed in legislation. I care about people, I listen, I try to solve their problems as much as possible. I pay attention to laws and personal rights and try to be constructive. It does not discriminate between academic and administrative students"*. Another participant said, *"I can say that my communication is strong. I think I am sincere, fair, democratic, I value people because they are human"*.

Table 3. The Abilities That Lead Deans to Success

THEME	SUB THEME	CODE	f	n
Leadership	Abilities That Lead to Success	-Effective communication	3	8
		-Being social	3	8
		-Being reliable	2	8
		-Being hardworking	2	8
		-Behaving in a democratic way	1	8
		-Being calm	1	8
		-Being patient	1	8
		-Knowing the legislation	1	8
		-Successful applications in the field	1	8
		-Taking the initiative	1	8
		-Being responsible	1	8
		-Corporate affiliation	1	8
		-Having analytical thinking skills	1	8
		-Being a researcher	1	8
		-Being open to development	1	8
		-Being stable	1	8
		-Being determined	1	8
		-Being fair	1	8
		-Being at equal distance from everyone	1	8
		-Being selfless	1	8
		-Being meticulous	1	8
		-Being careful	1	8
		-Being good at time management	1	8
		-Being unifying	1	8

When deans are asked to tell about their abilities that carry them to their success, it is seen that characteristics such as effective communication, being social, being reliable and being diligent are in the first place. Calmness, patience, taking initiative, corporate belonging, determination and time management are among the other qualities that lead to success. One participant said, *"To be stable and decisive. I think that being fair in administration and being fair brings success to a special manager. When you are at an equal distance to everyone, you actually eliminate some prejudices against you."* The other stated his thoughts as *"I am good in communication, I behave democratically and I am hardworking"*.

Table 4. The Deans' Role-Model Behaviors for Their Staff and Students

THEME	SUB THEME	CODE	f	n
Leadership	Role-Model Behaviors	-Communicating well with everyone	4	8
		-Be constructive	2	8
		-Doing a job oneself beforehand	2	8
		-Being fair	1	8
		-Being hardworking	1	8
		-Being goog humoured	1	8
		-Giving confidence to the students	1	8
		-Being natural	1	8
		-By contributing to their professional development	1	8
		-By sharing our experiences	1	8
		-Being a state man (Knowledgeable, cultured, knowing where to act)	1	8
		-Doing what you do in the best way	1	8
		-Doing business fondly	1	8
		-Behaving sincerely and sincerely	1	8
		-Teaching the necessary things and repeat patiently	1	8
	Feedback	-Orally	5	8
		-Social media	1	8
		-E-mail	1	8
		-With a survey system	1	8
		-All the students want to work with me	1	8
		-I can observe the progress in students	1	8

When deans are asked about their role-model behaviors to their employees and students, good communication with everyone comes first. Being constructive and doing a job by themselves beforehand is in the second place, while being fair, hardworking, smiling, giving confidence to the student and doing the job lovingly are among the behaviors of which he is a role model. One participant said, *“Doing what you do in the best way, that is, doing whatever the job is required, the other, doing your job lovingly, treating your students or your officer, whatever they deserve, that is, a student to a civil servant like a student. like a civil servant. This is my most role model. Neither too close nor too far, when you put a certain distance, you do not have difficulty in controlling everything. For example, you do not have difficulties in class, nor in management, it must be sweet tough ”*. Another participant expressed his opinions by saying *“Working and being constructive, being positive”*. It was emphasized that the feedbacks of the role model behaviors are usually done verbally.

Table 5. The Necessity of the University to Focus on Social Issues and to Make it Functional

THEME	SUB THEME	CODE	f	n
Service to the Community	Method Necessity	The need to ensure the connection between the university and the society	8	8
		- The need to transfer knowledge to the society, to contribute to solving the possible problems of the society	2	8

- Organization of activities on issues needed by the society (artistic-social-sports)	7	8
- Through NGOs	3	8
-By integrating with the people	3	8
-By sharing the developments in the field with the public	2	8
-With on-site visit	1	8
-Visit to the organized industry	1	8
-Technical trips (It is important for students to take part)	1	8
-To cooperate with public institutions	1	8
-Through student communities	1	8
-By organizing workshops	1	8
-With career days organized by students	1	8
-Entrepreneurship Center (giving private courses)	1	8
-Cooperation with İŞKUR	1	8
-Social responsibility projects	1	8
-Projects regarding the issues of public interest to be made by academic staff in each discipline	1	8
-Giving students real-life problem-solving tasks	1	8
-By bringing the parties closer together	1	8

All deans who were interviewed about the necessity of the university deal with social issues stated that the connection between the university and the society should be provided. Both deans said that the university should transfer knowledge to the society and contribute to solving the possible problems of the society. To make this situation more functional, organizing activities on issues needed by the society, cooperating with NGOs, integrating with the public, sharing developments in the field with the society, working in cooperation with public and private organizations and conducting social responsibility projects are among the emphasized topics. One participant on this issue said, *“Conducting researches and transferring the experience gained from all these researches to the society is possible by contributing to solving the possible problems of the society. How could these be? These are realized both through NGOs and by integrating with the public during the foundation year of the university, opening, invitation and various special important days. I think the on-site visit is important. A visit to a village coffee house, a visit to the organized industry, and technical trips are important for each individual in the most appropriate way in their field. It is important to have students here. I think it will contribute to bring the parties closer together, to understand each other, to share their problems and to produce solutions”* expressed his thoughts on this issue.

Table 6. Studies Carried Out to Bring Scientific Studies Outside the University

THEME	SUB THEME	CODE	f	n
Service to the Commu nity	Institio ns and target audience Works	-Publications (book, magazine, article)	7	8
		-Congresses / conferences	4	8
		-Project	4	8

-Seminars	2	8
-Symposiums	2	8
-Briefing	2	8
-Workshops	1	8
- Events	1	8
-Conversations	1	8
-Media visit	1	8
-Panels	1	8

Publishing such as books, journals, and articles is one of the activities carried out to carry scientific studies out of the university. Congresses, projects, seminars, symposiums, information meetings, briefing, workshops, events, interviews, media visits and panels are among the activities held. One of the participants said, *"The work done at the university is realized by participating in meetings, congresses, interviews, ministerial activities of NGOs and various institutions, by sharing, telling them, inviting them, listening to their problems and sharing their problems"*. Another participant said, *"We are in cooperation with many institutions. We have connections with European Union projects, TUBITAK "other institutions, Turks abroad, projects in Turkey and abroad, NGOs abroad. We especially cooperate with public institutions. For example, we have a public industry cooperation coordinator. We used to meet every 6 months before, now they meet every 3 months, public institutions, university and industry representatives come together every 3 months. What is being done about it? They are discussed and projects are implemented"*.

Table 7. Environment-Society Analysis Before Studies Conducted in Cooperation with the Environment

THEME	SUB THEME	CODE	f	n
Service to the Community	Analyzes	-Yes	7	8
		-No	1	8
		-To do a preliminary study in determining research topics, project topics, thesis topics	2	8
		-Those we can contribute to and related to our field	1	8
		-Working with academicians and graduate students	1	8
		-Determining the priority areas and the priority areas within these areas	1	8
		-Doing market research and creating a model	1	8
		-People from the sector outside the university to be stakeholders	1	8
		-Landscape Architecture - planning people's living spaces	1	8
		-Don't talk to people, what people think, don't try to learn	1	8
		-Observing the environment	1	8
		-In line with the incoming demands	1	8
		-SWOT Analysis	1	8
		-Stakeholder analysis	1	8
		-Analysis of how I affect the environment and how I will be affected by the environment	1	8

-Identifying the deficiencies of the region we are in	1	8
-Meeting with public institutions and private sector representatives	1	8
-Meetings with the district governorship, municipality, chamber of commerce, chambers of tradesmen	1	8

When asked whether an environmental-society analysis was conducted prior to the work carried out in collaboration with the environment, seven deans stated that the analysis was made and one dean stated that no analysis was made. In the analysis types, research subjects, project subjects, preliminary work in determining the thesis subjects, determining the priority areas and the priority areas in these areas, making market research and creating a model, making stakeholders from the sector and outside the university, SWOT analysis and district governorship, municipality, chamber of commerce, Interviews with chambers of tradesmen were specified. One of the participants said, *"Of course, we always do a preliminary study with our academic colleagues and graduate students, and we create a model by doing research topics, project topics, the priority areas in determining the thesis topics and the priority areas in these areas, let's call it market research. Accordingly, when we create a model, people from the sector, from fields outside of the university are definitely found to be shared"*.

Table 8. Ability to Spend Time for Scientific Research

THEME	CODE	f	n
Research	-It is not possible to say that I reached my goal	5	8
	-I can't spare too much time	4	8
	-I work as hard as I can	4	8
	-We can prepare projects and publications	3	8
	-I always spare 4 hours a week	1	8
	-I have a good team	1	8
	-Without a business concept yeah	1	8
	-We try to use time effectively	1	8
	-Directing the assistants	1	8
	-By making presentations	1	8
	-Conferences / panels we attended as invited speakers	1	8
	-Theses we have done with our graduate students and their publication	1	8
	-Student theses	1	8
	-Attending congresses	1	8
	-Writing a book	1	8
	-Writing a book section	1	8
	-One international article a year	1	8
	-One international article a year, two or three national articles	1	8
	-Symposium	1	8

When asked how much time the deans could devote to doing scientific research, it was stated that they generally did not reach their goals and did not spare a lot of time. In addition, they emphasized that some of the deans are trying to devote time as much as possible. A dean stated that *"I always allocate four hours a week, this is two days from two hours a day or one hour every day"*. In the studies conducted, it was stated that the student theses were transformed into publication by directing the students and assistants. Another participant clarified the subject by saying, *"Unfortunately, we cannot achieve the work we aimed at, but*

we try not to break away, we do not break away from these studies in order to be a role model for our students or to be a role model for our assistants".

Table 9. Motivating Academic Staff and Students to Do Further Research

THEME	CODE	f	n
Research	-Giving research assignments to students and assistants	3	8
	-Incentives provided by HEI	2	8
	-Directing to projects	2	8
	-Access to library and access resources through both our faculty and university	1	8
	-By doing research	1	8
	-Economic gain in return for projects with the public and private sector	1	8
	-Don't try to give them opportunities	1	8
	-Do not show a procedure	1	8
	-Writing a book	1	8
	-By giving seminars	1	8
	-By organizing conferences	1	8
	-By having applications for the field in the courses	1	8
	-Providing a peaceful environment	1	8
	-Eliminating interpersonal conflicts	1	8

Assigning research assignments to students and assistants to motivate academic staff and students to do more research, encouragement given by HEI, directing to projects, economic gain in return for the project, practices made in lessons and providing a peaceful environment. A dean stated his opinion as, *"If you provide a peaceful environment in your environment, if you provide an academic environment, if you eliminate interpersonal conflicts, people do not deal with other jobs, they do their own work"*. Another view was stated as *"First of all, I give weekly homework to the students I attend to my undergraduate course, I ask them for the weekly homework at the end of each month or in the first lesson of the week, and I expect them to present a few assignments randomly"*.

Table 10. Providing Financial Support to Faculty Members and Students for Research

THEME	CODE	f	n
Research	-SRP	5	8
	-European Union projects	5	8
	-No financial support	3	8
	-University's institutional contribution	2	8
	-Cooperation with the municipality	1	8
	-Chamber of Commerce	1	8
	-KOSKEP	1	8
	-Çanakkale Organized Industry	1	8
	-Technical tours	1	8
	-With financial support from top management	1	8
	-With the support of the guardianship	1	8
	-With sponsorships	1	8
	-Especially among the projects that will be made in the subjects needed by the private sectors	1	8
	-Receiving financial support from senior management	1	8

It was emphasized that for researches requiring financial support, contribution was made to academic staff and students, generally through SRP, European Union projects and the university's contribution. Three deans stated that they could not make financial aid. It was also stated that financial support was provided by the support of the governorship, sponsorships, the private sector and cooperation with various organizations. A dean said, *“First of all, I am directing my own friends. Everyone should do at least one SRP project every year, at worst every two years. There, both equipment, resources and materials are provided to our university and information increase is provided. Secondly, they offer resources to research the sector, that is, when the meetings with non-university people before the study meet their needs. Thirdly, I focus on it the most. When I come almost every day, I definitely check three pages of the Ministry related to my field. Similar to the South Marmara Development Agency, where are the Chambers of Commerce and what projects are there, for example KOSKEP, I always go sometimes, we meet, we meet, where we can talk about what we can do”*.

Table 11. Balancing The Various Demands of The Academic Position

THEME	CODE	f	n
Academic Proficiency	-Weekly meeting with the board of directors	4	8
	-By doing what the legislation requires	2	8
	-Acting fairly	2	8
	-Weekly or bi-weekly meeting with senior management	1	8
	-One-on-one meeting with students or student representatives	1	8
	-By analyzing the current needs	1	8
	-Other stakeholders, both in senior management and in the faculty, are doing this carefully.	1	8
	-By visiting department heads at regular intervals	1	8
	-By creating office hours between 2 and 3 o'clock every day	1	8
	-By meeting with the advisors	1	8
	-By providing personal rights	1	8
	-Sharing and explanatory with students	1	8
	-By convincing	1	8
	-Paying attention to merit	1	8
	-By prioritizing the benefits of the state, nation, society and science	1	8
	-By working towards the same goals		8
	-By working In harmony	1	8
	-Working in line with the vision and mission of the university	1	8
	-Working within the strategic plan of the university	1	8
	-By ensuring that there is no conflict environment	1	8
	-By trying to solve problems on time, by prioritizing dialogue between people	1	8
	-If there are complaints, by meeting them directly, by meeting them face to face	1	8
	-Doing the right thing	1	8
	-By keeping the egalitarian principle in the foreground	1	8
	-First from the perspective of the state and then the community	1	8
	-By prioritizing realizability		8

-By ensuring that the person is not harmed	1	8
-By prioritizing the benefit to the institution	1	8

In balancing the various demands of the academic position, half of the deans stated that they had achieved this balance by holding a weekly meeting with the board of directors, two of them by doing what the legislation required and acting fairly. Balancing factors such as sharing and explanatory, convincing, paying attention to merit, prioritizing the benefits of the state, nation, society and science and prioritizing the principle of egalitarianism were also specified with the students. In this regard, one participant stated his thoughts as *"If the request is in accordance with the legislation, if it can be done, if it can be realized and if the other person will not be harmed in line with this request, if it will benefit the institution and the person, we will not have any problems"*.

Table 12. Supervising Teaching and Research Functions

THEME	CODE	f	n
Academic Proficiency	-Academic General Assemblies	3	8
	-Department meetings	3	8
	- Sharing the burden for department managers	3	8
	-Our vice dean and faculty secretary go around the faculty especially at the beginning and end of the week	1	8
	-Through commissions	1	8
	-By working with a plan and program	1	8
	-Providing feedback	1	8
	-If he needs to go out of the province for scientific work, I'll let him go	1	8
	-By requesting annual reports	1	8
	-I can't say anything exact as an hour	1	8
	-By reading, reviewing and guiding friends and students' research at home at the weekend	1	8
	-By making sure that the teachers enter the class	1	8
	-I would like them to prepare a national international study	1	8
	-I can't say I can spare too much time	1	8

In order to supervise the teaching and research functions of deans, academic general assemblies, department meetings, and sharing the burden of department managers are among the most preferred methods. Planned and scheduled work, establishing commissions, providing feedback and requesting annual reports are also among those performed for auditing. One of the participants said, *"I am very meticulous about this. If he is a teacher, he has to definitely do the lesson, including me. Of course, we make the necessary warnings about those who do not enter. Do they do anything academically that matters? It is also very important to us"*. He also said that there are some incentives such as *"Everybody should do one national and one international work"* in a more motivated way rather than questioning them.

Table 13. Limitations Regarding Role Diversity and Suggested Solutions

THEME	SUB THEME	CODE	f	n
Academic Proficiency	Solutions Limitations	-Yes	8	8
		-No	0	8
		-Their duties need to be reduced	4	8

Bureaucratic affairs are very intense	2	8
I'm taking a hard time for the real stuff	2	8
-The quality of every mission is getting lower	1	8
The most essential is the top priority	1	8
-By acting according to the role I'm in and not mixing roles	5	8
-By distributing duties and powers	3	8
-Within the scope of accountability	2	8
-Democratically	1	8
-Based on need	1	8
-By dominating the legislation	1	8
-Working at the weekend	1	8
-By spending 12 hours of work	1	8
-Running everything in a balanced way	1	8

All deans agree that the diversity of roles of deans imposes restrictions on what should be the principal job. It was stated that their duties should be reduced, bureaucratic work is very intense and the quality of each task is reduced. In this diversity of roles, it was seen that they found solutions by acting according to the roles of the deans, not mixing roles, distributing duties and powers, and acting within the framework of accountability. One participant expressed his opinion as *"The most essential or the most needed subject is unfortunately the most important issue"*. Another participant said, *"We meet with the top management once a week or every two weeks and share our demands and problems. Within the faculty, we meet with administrative staff almost once a month"*. He expressed his thoughts by saying *"I visit the department heads from time to time"*.

4. Results and Discussion

As a result of the interviews with eight deans whose professional experience ranges from 22 to 30 years and whose working periods as deans are between 3 months and 9 years, having effective communication in the dimension of leadership, being solution-oriented, being fair, teamwork, valuing people, legislation The features of being dominant, having the ability to persuade and being social come to the fore. It is seen that effective communication, being social, being reliable and hardworking are at the top of their abilities that carry the deans to their position and success. In the leadership dimension, good communication with everyone comes first among the features in which deans are role-models. Being constructive and doing a job beforehand are among the behaviors in which he is a role model. Regarding deans, Wergin (2003) stated that they are good listeners and respect the collective wisdom of their colleagues.

All of the deans who were interviewed on the social service dimension emphasized that the connection between the university and the society should be provided and agreed on this matter. In addition, it was stated that the university should transfer knowledge to the society and contribute to solving possible problems of the society. Universities are believed to be powerful drivers of innovation and change in society. All of them carry out three tasks, but each institution contributes differently (NU, 2009). Organizing the activities of the university in terms of service to society, cooperating with NGOs, integrating with the public, sharing the developments in the field with the society, working in cooperation with public and private organizations and making social responsibility projects are among the things to be done to make the subject more functional. It was emphasized that publications such as books, journals

and articles were made in order to carry scientific studies outside the university, congresses, projects, seminars, symposiums, information meetings, briefing, workshops, events, interviews, media visits and panels were among the activities held. It has been stated that an environmental-society analysis is generally carried out prior to the work to be carried out on community service. In the analysis types, SWOT analysis, research subjects, determining project subjects, making market research and creating a model, being stakeholders from the sector and outside the university, and interviews with the district governorship, the municipality, the chamber of commerce and the artisans' chambers were specified.

One of the most striking issues encountered in the research dimension is the result that deans generally do not have time to do research, there is no concept of overtime to do research, they are devoted to the intensity of work at the weekend and they cannot reach the work they target. It is also among the studies that deans assign research assignments to students and assistants to motivate academic staff and students to do more research. BAP, European Union Projects and the university's contribution to research that require financial support have come to the fore. It was also stated that financial support was provided through sponsorships, cooperation with the private sector and various organizations.

In terms of academic competence, meetings held with the board of directors, especially in balancing the various demands of the academic position of the deans, are among the primary methods used to achieve this balance, as required by the legislation. Sharing with students, acting with merit, prioritizing the benefit of the state, nation, society and science, and being equitable are among the balancing factors. In order to supervise the teaching and research functions of deans, academic general assemblies, department meetings, and sharing the burden of department managers are among the most preferred methods (Beytekin, O. F. & Kadi, A., 2014). In order to supervise the teaching and research functions of deans, academic general assemblies, department meetings, and sharing the burden of department managers are among the most preferred methods. The limitations of the diversity of roles deans have been accepted by all deans. It has been concluded that their duties in this regard should be reduced, bureaucratic work is very intense, and the quality of each task is reduced. In this diversity of roles, it was observed that the deans found solutions by acting according to their roles and not mixing roles, distributing duties and powers, and acting within the framework of accountability. As academic dean's duties and responsibilities are unclear, it creates role ambiguity and causes conflict (Wolverton, & Gmelch 2002; Tucker & Bryan, 1988).

The areas where deans serve are changing rapidly with globalization and technological changes and bringing increasing work pressure, difficulties and stress. These elements once again reveal professional development and professional development needs for deans. It is an important situation especially on the way to professional deanery. Understanding the various career paths that lead to this position will provide a better understanding of the professional and personal development characteristics that deans should have. There is no determined career path in the dean's career, however, factors such as deans' previous academic achievements and faculty experience are among the common characteristics taken into account in the evaluation of candidates (Green & Ridenour, 2004).

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Issues of Progressive and Regressive Development of The Philosophy of Artificial Intelligence

Khatira Guliyeva

1. Introduction

The article "Issues of progressive and regressive development of the philosophy of artificial intelligence" deals with the most important scientific and technical phenomenon of globalization and one of the new and serious topics of philosophy, the impact of artificial intelligence on the human mind and its perceived.

Of course, the essence of the issues of progressive and regressive development and at the same time incomprehensible problems of the philosophy of artificial intelligence is also the main issue analyzed in this article, and special attention is paid to the importance of the progressive aspects of regression.

The author tries to follow the dynamics of this topical event in the public consciousness, which unites the whole world, all mankind in the same thought and philosophy of life. The article also analyzes the situation and importance of the philosophy of artificial intelligence in young, independent and underdeveloped countries as leading world powers, citing the works of world-renowned scientists.

1.1. Hypothesis

It is known that since the creation of the world, the world around us was perceived by thought. Based on a simple approach, the world and man, current events are understood with the precise conclusions of wise philosophers. With the help of thinking, man was able to get rid of the impact of harsh nature and wild animals. Caves and huge and beautiful palaces that appeared thousands of years later are also a product of human wisdom. The discovery of the Universe, the Earth, the interior and existence in general was made on the basis of common sense, and the essence of philosophy is to understand the universe, man and nature through thought. Philosophy discovers and appreciates truths with understanding.

The philosophy of the old world in which we live is also overload by their own perceptions. At the beginning of the existence of the world, philosophy understood only existence, the universe and nature, but from time to time it became a source of extensive, even scale-free knowledge. In such a simple approach, the philosophy of life, philosophy of science, philosophy of morality, philosophy of aesthetics, philosophy of religion, philosophy of art, philosophy the identity of human society from birth to death, as well as the philosophy of countless fields of science, etc.

From this point of view, artificial intelligence first passes through the filter of philosophy or has already passed, or it will still be the subject of thought and understanding for some time.

Since the first task of philosophy is to understand the question, the first question is what is artificial intelligence.

So what is artificial intelligence? Artificial intelligence, which is the focus of the world's thinking today, is essentially a system of thinking without a living organism - control and management.

If modernism, with the evolution of the human mind and intellect, destroyed the obsolete feudal system and destroyed the whole system and established the ideas of secular-modern society, postmodernism replaced that system with artificial intelligence and continues to develop.

The field of artificial intelligence is wide and full. While the replacement of the human mind with artificial intelligence began with computer engineering, this process has from time to

time been enriched by both new intelligent computer stages and more sophisticated robot technology. It is no coincidence that in a world now characterized as a stage of globalization, all attention is focused on the complete victory of artificial intelligence. So what is artificial intelligence - the question can be answered like smart thinking machines. But we cannot use the expression: a car is as sensitive as a real person. But can machines replace a man who has been tried and accepted wisely by the masses of artificially intelligent creatures? If he can give the first answer, the one who thinks deeply will answer "no". Because as time goes on, creativity requires innovation, and also the consciousness of machines cannot be equated with the imagination of the creative individual.

If we compare the intellect of the most perfect man with the most powerful computer, the former still has the advantage, because the creator of the latter is again a perfect man. We all know the saying, "His brain works like a machine," for intelligent people. But we cannot use the expression: a car is as sensitive as a real person.

Regardless of the field of science, the power to create is characteristic. It is based on innovation. However, no matter how synthetic the information of a computer's memory, it is not as vast as the archive of human consciousness, nor does it have the quality of "impermanence".

To give such a simple example, let's take the sensitive buttons of a computer to "create" with a person who is in good health and in good spirits for creativity. This person can think tirelessly for hours during the day. However, a smart car, a computer must "rest" after a certain hour. The latter's creativity can also be hampered by a power outage or internet connection, but once a person begins to create for the creator, these strokes cannot be an obstacle.

From this point of view, artificial intelligence cannot create the "miracles" that man creates with his natural intellect and in any field. The machine does not think, its mind is simply to present the information of its choice in the directions determined by the person as an exhibition. He can also say that smart cars, like guides, only have the function of showing. Smart machines do not take on the task of analyzing and drawing conclusions (Arslan, 2018).

Psychological approaches and predictions of an intelligent person cannot be replaced even by machines "loaded" with the strongest logical syllogisms. If the issue is still assessed by the criteria of nationality and identity, no intelligent machine will be able to replace the national creative person. That is, no matter what or what subject can be modeled, it seems impossible to find a smart machine button that can replace a smart person in the indices of ethnogenesis and ethnopsychology.

2. Methodology

Artificial intelligence, which is an important progress in the process of understanding the world, one of the serious issues of the multidisciplinary system that forms the basis of modern science, especially mathematics, logic, physiology, neurophysiology, psychology, cognition, epistemology, philosophy. It is impossible to understand and imagine artificial intelligence methodology without the theory of these sciences and without philosophical analysis and evaluation, as it is about consciousness. For many years, these two sciences - artificial intelligence and philosophy - created a new and comprehensive multidisciplinary methodology with the influences of epistemology and qneseologiya. Of course, no matter how old the history and methodology of philosophy, the methodology of the artificial intelligence system has been developing specifically since 1936. The artificial intelligence system, based on the work of British mathematician and logician Alan Turing, has been successfully observed both theoretically and experimentally for 85 years. Practice without methodology, methodology without experience is impossible. From this point of view, the evaluation of new theoretical topics in the context of scientific multidisciplinary research of intelligent machine

systems has accelerated the development of this scientific philosophy of artificial intelligence and its methodology. Their assessment determines the development of artificial intelligence scientific philosophy and methodology.

Based on this, we can say that A. Turing gave the world thinking the methodology of "smart" computers in the face of millions of human questions. This was the revolutionary progress of the new civilization. At the same time, artificial intelligence has brought about the collapse of modernism, which is based on the enormous potential of the human mind and its practical activity.

Artificial intelligence has evolved from simple intelligent machines to computers with a wide range of capabilities, to the level of progress in the field of robot technique. At present, the science of artificial intelligence is experiencing such a strong postmodernist leap that the world's surrender to the power of artificial intelligence and its replacement by man is very thought-provoking. From smart computers to smart cities, the phenomenon of millions of artificial controls is rapidly making its way into the future.

It is not excluded that in this history there are problems of a regressive nature, as well as progressive. Most importantly, the two interdependent phenomena of the - progress and regress - are related to Humanity.

Here, the line of progress and regress development itself is of interest as a theory and methodology. It should be noted that in the past centuries, mechanical machines were a great scientific and progressive development of the time, and the failure of mankind to master this progress en masse, as well as the weak dynamics of the widespread application of the achievement to production, was tantamount to regression. Rapid advancement of mental intelligence on the one hand and backwardness on the other. Computers and robotics - the generation of intelligent machines is ideal, that is, the progress of development. In terms of intelligence, its opposite - the obsolescence of form and content - is assessed as an indicator of the level of regression. The progressive and regressive essence of the development of artificial intelligence is the dialectic of its philosophy, which has followed this phenomenon throughout history, and it is an ongoing phenomenon. By studying the historical stages of artificial intelligence, it is possible to assess the progress and development of regression.

Thus, the second interest of philosophical thought is the analogy of artificial intelligence, and here the history of the progressive and regressive effects of development is of great importance.

2.1 The analogy of the field of artificial intelligence

First of all, it should be noted that the analogy of artificial intelligence, like all dialectical and metaphysical, is based on antiquity.

Artificial intelligence preceded not only the invention of electronic engineering, computers or robots, but also simple mechanical large and complex machines, and in general, the substitution of artificial intelligence for human intelligence is of interest.

Historical sources in all fields lead researchers to myths and ancient Greek philosophy. First of all, it should be noted that the traces of artificial intelligence in myths not only determine the history of the phenomenon, but also expand its field of interdisciplinary research with the sciences of mythology, anthropology, ethnography, ethnogenesis.

Thus, the first robot created by Zeus and named Talos with bronze wings from ancient Greek legends can be regarded as the "father" of modern artificial intelligence robots. One of the main features of this human-like robot is explained by the insertion of a tube of molten steel that flows from shoulder to foot into its "body". Tolos, like modern electronic robots, had features such as sharp speed and stone throwing to replace humans.

Therefore, as the sources state, "Talos is a bronze legendary giant, the first robot in history to protect the Minoan Griti from invasions"⁵.

Interestingly, although Tolos had a different defensive power than humans, Minoan could not defend Griti for long and exploded in an enemy attack. The legendary imagination describes the sounds the Talos robot makes when it explodes as its laughter and emphasizes that the term "ardonic laughter" comes from here.

Adrienne Mayor, a researcher at the School of Classical Sciences at Stanford University, focuses on myths about the artificial female robot Pandora, like Tolos. The first subjects of artificial intelligence, robots and self-propelled objects were found in BC. It appears in the works of the ancient Greek poets Hesiod and Homer, who lived between 750-650 BC. Concluding that the 700-year-old Talos legend is the oldest example of a robot, the researcher said, "Historians often date the idea of the machine to the Middle Ages, when the first self-propelled devices were invented, but the concept of Artificial, living being at least 2,700. . Myths are the subject of Old Machine and Technology Dreams. Our ability to imagine artificial intelligence goes back a long way. The idea of creating artificial life and robots was explored in ancient myths long before technological advances made self-propelled devices possible"⁶.

Researcher Adrienne Mayor also analyzes the ancient world's Pandore myth and calls it an artificial intelligence agent. This idea is the original interpretation and the agent can be thought of as a signal of dialogue with the modern world in the human subconscious system.

An interesting topic here is confirmed by the fact that the myths and legends of the ancient world created a rich library of science fiction and science fiction works in the history of the development of artificial intelligence. Similarly, in these studies, artificial intelligence covers the past and future of the world, and the solution of human needs, large and small, with the effect of involuntary forces.

Karel Chapek's "Intelligent Universal Robots", Arthur C. Clarke's "The City and the Stars", "Press the Button for Frankenstein," E van Vogt's "The World of Moment," Robert A. Heinlein's "The Moon is a Tough Mistress," and Dan Simmons' Hyperion Songs, "Angels and Spaceships", "I'm a robot", "Two-year-old", "Cyber", "2001: Space Adventure" and many more is an artificial intelligence onology.

In these works, the fantastic transformation of the computer into a human being actually predicted that in the future, intelligent machines would replace human activity.

As time went on, the development of science fiction also contributed to the development of screen art and played an important role in the worldview as a whole.

Like myths, written literary and philosophical works of antiquity had similar definitions confirming the existence and possibility of artificial intelligence. However, during the Enlightenment period, there was a serious scientific interest in the main fields of artificial intelligence, especially in Europe, which was the cradle of modernism.

R. Descartes, T. Hobbs, Blaise Pascal and Leibniz and later Charles Babbage and Ada Lovelace, Bertrand Russell and Whitehead, Conrad Tsuze, Warren McCullough and Walter Pitts and others enriched the field with valuable scientific innovations.

⁵ Талос - бронзовый мифический великан. <https://www.grekomania.ru/articles/114-talos>

⁶ 6 Earliest Fascinating Concepts Of Artificial Intelligence And Robots In Ancient Myths – Examined <https://www.ancientpages.com/2019/03/06/earliest-fascinating-concepts-of-artificial-intelligence-and-robots-in-ancient-myths-examined/>

Although the research of these scientists was based on the analysis of mechanical materialism in humans and living organisms in general, they revealed the possibilities of the mind and produced experimental examples of this.

In this regard, the beginnings of artificial intelligence super digital computers are analog systems such as nomogram, slide rule, astrolabe, oscilloscope, television, analog sound processor, autopilot, as well as acabus. Therefore, the analogous field of artificial intelligence is strong and wide, as well as sustainable.

2.2. Harmonic mask technique

Cognitive science, an interdisciplinary field of study, sees the development of representative artificial intelligence from legends to fantastic written sources and its continuation to mechanical engineering as a hormonal law and does not exclude contradictions.

From this point of view, artificial intelligence is a science and has a history of its origin and development, no matter how many similar experiments form the basis of the modern intelligence management system. Digital, a very important scientific innovation of its time, is now being pushed into the background compared to thinking, intelligent machines. In fact, they are not worn out yet. But Machines, where all the possibilities of modern Intellect are focused, are beginning to replace them better. Artificial intelligence machines try to mimic even the most complex tasks, such as language, emotion, ordered landscapes, images. Artificial intelligence - smart machines are even able to replace cities and large institutions.

Thus, we can say that in a short time, an artificial mechanism capable of replacing a person in any field could not become a scientific methodology full of content and essence. The reality is that such experiments confirm that the world's scientific thought has undergone a long and complex quest and change, ranging from revolutionary artificial intelligence to consciousness and technology.

Observations also show that the progressive and regressive effects of the harmonic mask technique in the world of artificial intelligence are developing at the same rate. On the one hand, successful technology or electronics, created by the development of a strong intellect, on the other hand, the higher existence of the world, pushing man into the background, rejection of labor and physical strength. In this controversial development as a whole, the importance of human existence is reduced to zero. It is even argued that artificial intelligence will take over the world from humans and become the dominant force.

There are a number of important examples of hormonal masking techniques in the progressive nature of artificial intelligence. For example, artificial intelligence primarily includes the revolutionary evolution of the century of science - the progress of civilization. On an interdisciplinary level, he writes his story, penetrating almost every field of science. Secondly, artificial intelligence is useful for the state, the simplest example is cost reduction by limiting labor in all areas, and thirdly, artificial intelligence is the inexhaustible material and spiritual interest of people. A person expands his intelligence with a computer or smartphone, satisfies his desires for music, video, games, entertainment, shopping, as well as artificial intelligence products with robots for housework, automated services, etc. As we mentioned above, the transition to virtual worlds with computers or phones, which is a branch of artificial intelligence, is also human.

But as soon as "smart buttons" become inaccessible to a person, he himself becomes useless. This is the most inevitable mask of creative artificial intelligence, where hormonal antiquity manifests itself.

Thus, subjective approaches, unlike those that value and defend artificial intelligence, insist that it cannot rule the world. In our opinion, the current regression effects in the process of artificial intelligence are undeniable, although stable and even rapid dynamics are observed in

the line of harmonious progressive development. This is the most realistic view of the artificial intelligence system and the mask technique of the worldview.

2.2.1. Questionnaire on artificial intelligence in the USA, China, Great Britain

It is no coincidence that in this part of the article we want to observe the development of artificial intelligence in the United Kingdom before the United States and China. This is due to the fact that the system of artificial intelligence has opened the way to world thinking from England, and now the UK occupies the first place in Europe for the development of systemic intelligence. In our opinion, it is necessary to briefly recall the unique services of the English mathematician and logician Alan Turing, whose name is synonymous with the history of artificial intelligence, in the development of computer science. Thus, at the age of 24, in 1936, Alan Turing published a book entitled "On Computable Numbers, with an Application to the Entscheidungsproblem". In this work, he introduced the new idea of "Turing machine", which is considered the "father" of modern universal computers, which took the science of computer science with a powerful leap and forever engraved its name in the world scientific thought.

With a thorough education in mathematics and cryptology, Turing's life included working at Cypher School, a government code-breaking organization, as well as being a leading participant in wartime code-breaking, and five major advances in cryptanalysis used to decipher German Enigma cipher signals. It is also important to write two works, "Code" and "Super School".

A. Turing's scientific activity in the 1940s attracted greater success. He started working at the National Physical Laboratory in London, overseeing the design of the Automatic Computing Engine, and in recent years, in nearly 70 years, has brought the world's first widely used personal, shop computers to the market.

In the late 1940s, this unique intellectual, who held senior positions in mathematics and computation, substantiated and proposed the subject of artificial intelligence specifically in his valuable works known in 1950 as "Computing and Intelligence" and the "Turing Test."

Alan Turing's "Chemical Foundations of Morphogenesis", published in 1952, has a special place in his scientific legacy. It is that Alan Turing made great scientific achievements in 1950-1952, but after an accident in 1952, he met the bitter end of his life and died mysteriously in 1954.

The works of the great scientist were published in large numbers 40 years after his death, and for 28 years the world has benefited widely from A. Turing's artificial intelligence system, and a generation of scientists following his path is developing scientific experiments with their innovations.

Currently, the UK ranks first in Europe in terms of AI development. In the UK, which ranks third in the world after the United States and China, AI is widely used to increase the efficiency and development of digital services, land use using satellite photography, and so on. The UK, along with Canada and Israel, plays a key role in the evolving AI ecosystem. In April 2018, the government released a strategy document on artificial intelligence, stating that an artificial council in the industry would be established in collaboration with academics. The council will lead the development of AI, oversee the implementation of state policy in this area, promote industry and advise the Government on artificial intelligence. In addition, the government will set up an AI unit to work with the council, which will promote the implementation of a national strategy in this area and co-operate with other governments (Rata, Runcan and Arslan, 2013).

Of course, the United States is one of the top three countries in the world that embraces and uses the field of artificial intelligence, which is considered the father of Thuringia. In fact, the role of artificial intelligence in the economic and military development of the United States is enormous. This can be confirmed with a very exclusive look.

For example, according to an Internet summary, the current level of artificial intelligence in the United States is as follows: “1. The development of AI in the United States is estimated at 33% (100%) of the total level of development of AI in the world. 2. Leading the Third Defense Innovation Initiative in military AI technologies is a key goal of the United States. 3. The Interim National Security Commission on AI was established (March 2018). 4. An interdepartmental body has been set up to review advances in AI technology, and Commissioners have been appointed Secretary of Commerce, Secretary of Defense, and chair of various committees in the US Congress. 5. Numerous structures of the military and intelligence community are involved in military AI research activities, including the Defense Advanced Research Projects Agency (DARPA), the Air Force Research Laboratory (AFOSR), the Army Research Laboratory (ARL), and the Behavioral Institute. 6. A Joint AI Center was established to unite the efforts of the national military community on developments in the field of AI. For the coordination of military programs alone, \$ 1.7 billion has been allocated to AI use departments over six years. 7. More than 600 programs of the US Department of Defense cover the use of AI technologies. 8. The Maven Project is the most important and successful project in the US Department of Defense. Implemented by the "Algorithmic War" section. The aim of the project is to move from a one-time effort to the use of artificial intelligence in the armed forces to the sustainability of this process. The frequency of available innovations is every three months. 9. The 2019 U.S. National Defense Budget Act completely prohibits the U.S. military from using "non-traditional technologies," including AI, as well as online translators, unmanned vehicles, cancer detection systems, satellite imagery analysis, and includes cyber defense organizations that are available to everyone”⁷.

In the People's Republic of China, one of the three largest countries in the world in East Asia, the field of artificial intelligence continues to develop with great success. It is governed by public administration, industry, commerce, military, economic, public and judicial services, medical care, security, and artificial intelligence capabilities. Analysts estimate the overall AI growth rate in China at 17 percent. In this regard, China ranks second after the United States. State-level funds have been created for the development of artificial intelligence; In the largest IT companies, the state creates "party committees" and purchases "management packs" to increase control over the implementation of government duties in the business and scientific community. The state established "party committees" in the largest IT companies and purchased shares - "management packs" to strengthen control over the performance of government functions in business and science; China's central government selects the best performing companies and helps them develop national AI innovation platforms; Priorities have been set for the development of AI at the state level; After studying at leading universities and working in leading companies in the AI field, it implements highly effective programs that attract AI professionals from abroad and enable SI leaders to return to their home countries⁸.

In terms of artificial intelligence, Canada, India, Israel, France, Germany, Sweden and Spain are in the top 10 after these three countries.

Regression is no exception, as is progressive development in the United States, China, and the United Kingdom, which we selected for artificial intelligence research. From this point of view, it would be appropriate to address the problems that are indicative of decline in all three countries.

⁷ Развитие искусственного интеллекта в странах мира: США, Китай, Великобритания <https://d-russia.ru/razvitie-iskusstvennogo-intellekta-v-stranah-mira-ssha-kitaj-veliko-britaniya.html>

⁸ Развитие искусственного интеллекта в странах мира: США, Китай, Великобритания <https://d-russia.ru/razvitie-iskusstvennogo-intellekta-v-stranah-mira-ssha-kitaj-veliko-britaniya.html>

Thus, the "competition that threatens China's absolute leadership in artificial intelligence," which is characterized as a weakness of artificial intelligence in the United States, The possible negative consequences of AI are also regression: the emergence of an uncontrolled use of technologies of the Fourth Industrial Revolution in military operations, which are poorly covered by international law; AI-powered military developments pose an existing threat to human life; Under weak, traditional valuation methods, states and non-state actors will be able to deliver high-precision strikes from a distance against strong states; AI will automate cyberattacks and introduce this technology to the black market; "Algorithmic discrimination" between users or groups of citizens due to individual preferences of programmers and incorrect information processed by AI systems; One-third of US men between the ages of 25 and 54 will lose their jobs at the end of this half-century because of AI⁹.

Regression problems have also been reported in China. In China, this is defined as "machine learning and implementation of information lagging behind the United States in three areas of AI (machine learning and implementation of AI algorithms, research and development of AI algorithms, and equipment for building commercial AI ecosystems).

Britain, the third world leader in SI, is also a significant weakness in the "brain drain" compared to the United States and China. Exit from the EU, Rising Unemployment Rate, Systemic Changes in the Structure of the Labor Market "are serious regressive consequences.

3. Results

As a result, the world is advancing rapidly in the field of artificial intelligence and robotics on the one hand, and all countries are trying to join this progressive wave in this direction. On the other hand, parallel to the progress, there are problems of a global regression nature. Even those that were recently recognized and appreciated as AI advances have now become the "red line", which is a sign of a declining situation.

Thus, in the modern world where artificial intelligence is inevitable, the parallel development of progress and regression is also philosophically subjective objective.

But man is an eternal being, and it seems impossible for artificial intelligence to completely replace him. Here, the development of artificial intelligence is unequal in the example of the integration of 195 countries of the world. Even the most developed countries are at such a competitive level. This represents an ongoing regression, and the faster the improvement, the stronger the regression. Rather, there are countless "intelligences" - convincing scientific evidence that a logical, living person's intelligence is superior to an artificial intelligence system. Artificial intelligence, for example, needs 3 million words for the author of this article to speak only in their native - Azerbaijan language. If we multiply this number by 6,900 world languages, the success of artificial intelligence in this area is impossible. At the same time, artificial algorithmic systems do not seem convincing enough to replace the emotional intelligence of the creative people of the nations.

3.1 Measuring the artificial intelligence resource

The term "artificial intelligence", borrowed from A. Turing's machines or Thuringian tests, was coined in 1956 by John McCarthy, an American computer scientist and recipient of the Turing Award for Distinguished Service in SI (1971).

The essence of artificial intelligence is the idea of replacing human consciousness and activity with artificial mechanical-engineering machines. The most important question in Artificial Intelligence Philosophy is about the sustainability of Artificial Intelligence as traditional Intelligence. Modern scientific opinion is not unanimous in its answer to this

⁹ Hareag.

question. Therefore, the general opinion does not believe in the future of artificial intelligence and does not even want to imagine that it will rule the world.

There are even thinkers who regard its end as the end of Tholos, an example of ancient artificial intelligence.

However, the idea of the benefits of artificial intelligence is based on a more realistic basis. For example, the importance of artificial intelligence in the inevitable health of our lives is reaffirmed in the following quote:

"According to the WHO, the world's 2.4 million doctors, nurses, and midwives are in short supply, and the need for telehealth, self-examination biochip sensors, and other automated systems could increase dramatically as people live longer."

Or the measures in the Global Challenge 8: "Increase telemedicine and AI diagnostics as the shortage of health workers in the poorer parts of the world worsens"; "Promote telemedicine, including online diagnosis and AI, an expert program."

In addition, the usefulness of artificial intelligence in the field of education is high. "The combination of advances in nanotechnology, neurology, artificial intelligence and interactive object-based artificial online worlds will make education even more empirical and attractive by 2030; Many traditional education systems will be replaced by Internet-based systems; The demand for traditional schools and human teachers will disappear.

4. Discussion

First of all, it should be noted that the modern world is experiencing the highest stage of scientific progress compared to previous periods. Whether it is the understanding and use of the universe, the application of global satellite navigation systems, as well as the development of interplanetary development technologies, electronic devices, etc. In general, the field of artificial intelligence confirms the great scientific achievements of the time.

The author of this article, Kh. Guliyeva (2019, p. 38), while assessing the progressive development of AI, recalls the services of the world-famous artificial intelligence scientist Lotfi Zadeh and shows that "Lotfi Zadeh is one of the scientists who enriched the historical period of new navigation in modern societies. He is the only person of Azerbaijani origin, Lutvi Rahim oglu Askarzadeh - in short, Lotfi Zadeh - who was elected a lifelong professor at AI for his great services in the field of artificial intelligence.

Lotfi Zadeh's services are valued in the same way as those of Harry Nuquist, the world's first television communications scientist, Richard Belman, a scientist in dynamic programming and computing, Rudolf Kalman, one of the founders of control theory, and Carl Astrom. Lotfi Zadeh of Azerbaijani origin is the winner of the most prestigious Honda and Okawa awards. He was awarded the highest awards of such well-known organizations as Gregor Moisil, Rudolf Oldenburger, Richard W. Hamming, and Kempe de Feriye. LotfiZadeh is also a member of the US National Academy of Engineering, the Russian Academy of Natural Sciences, and an honorary academician of the Azerbaijan National Academy of Sciences. In addition, in 2016, Japanese scientists developed the first robot with artificial intelligence based on the theory of Lotfi Zadeh or L. Zade. This robot named Alter is on display at the International Science Museum in Tokyo.

Thus, since the middle of the last century, Lotfi Zadeh developed his most famous historical scientific discovery - the theory of fuzzy logic, which was quickly confirmed in practice, shaking the fuzzy logic of history and applied in science and industry.

Thus, world superpowers such as the United States and Japan have widely used the theory of the Azerbaijani scientist Lotfi Zadeh, based on the concept of modern fuzzy logic, in the wealthy industries of their countries.

The discoveries of Lotfi Zadeh as the basis of SI in many complex areas of globalization - "Hitachi", "Matsushita", "Mitsubishi", "Sharp", "Nissan", "Canon", "Fuji", "Electric", -

"Toshiba ", " Omron ", " Sanyo ", " Sony Trinitron ", " Daewoo ", " Samsung ", " Nec ", " Honda ", as well as in the American space flight industry" General Motors ", " General Famous Electric Brands ", Motorola, DuPont, Kodak formed the basis for sustainable development of global companies, and this achievement continues.

Our compatriot Lotfi Zadeh, a genius of science who conquered the pinnacle of scientific achievements at the stage of globalization, also left his mark on history by updating mathematics. This theory of Lotfi Zadeh is also considered a revolution in science because of its essence and value. Because the renewal of mathematical science, to be more precise, its duplication and a significant narrowing of its scope, realized the need for revolution in other sciences as well. However, the exact sciences such as physics, chemistry and natural sciences naturally changed their criteria in the face of this genius.

The scientific giant of the new era, Lotfi Zadeh, has enriched the scientific achievements of lived and recorded history with a new global scientific theory that will attract the world - navigation with double uncertainty. Lotfi Zadeh, who replaced fluent logic with fuzzy logic, proposed a project to combine with it the theory of probability underlying fuzzy. This theory is borne out as a recreated and creative approach to an event that has failed in many experiments throughout history (Arslan and Rata, 2015).

Like other theories of Lotfi Zadeh, a leading expert on NASA and NATO, it can be expected that the application of this theory in both industry and the humanities will show a way out of the global threats facing humanity, affecting the fate of both material and spiritual values.

However, it is known that modern world science - AI, along with all these scientific achievements, collides in a whirlpool of global material and spiritual tension. Since this regressive development coincides with the highest period of development of science and technology in the world, that is, with the 21st century, it does not seem easy to get rid of the complexity of the problems. On the contrary, along with the progressive AI, the realities of the progressive AI are rapidly expanding their scope and, most importantly, putting human societies in crisis.

5. Conclusions

In the article "Progressive and Regressive Development of the Philosophy of Artificial Intelligence" we examined the science of artificial intelligence, the history of its progressive and regressive development, having analyzed the past, present and future of this most important scientific and technological event of globalization. we tried to evaluate. At the same time, we studied the problem of progressive and regressive development in the context of the science of artificial intelligence, one of the serious philosophical topics in this article, and came to the conclusion that as the world develops, such factors as artificial intelligence exist and will not be excluded. For example, if the forefront of artificial intelligence in the United States, China, Britain and all other countries replaces humans in manufacturing and so on, this gap will lead to unemployment and even countless problems caused by unemployment.

The author also draws attention to the differences in attitudes towards artificial intelligence, assessing the real situation in this area, and concludes that if we turn to legends and classics such as Homer, we can think that artificial intelligence existed in antiquity. Historical materialism argues that, regardless of reaching convincing and well-founded theoretical conclusions in the field of artificial intelligence, progress can undergo regressive effects with expected and unexpected changes. Thus, our final conclusion is that just as all scientific and theoretical navigation was brought to a person by artificial intelligence, control over this area is possible at the will of a person. In other words, artificial intelligence cannot replace or destroy labor, the consciousness of labor, which are useful for humans and civilization, despite all its limitations. Comparing the limits and continuity of the often outdated electronic artificial intelligence, which is in the process of dynamically updating with human brain size

and creativity, is actually objectively in favor of the former, no matter how subjective. There is still no consensus on how long this will last.

Thus, based on all this, we draw a more neutral conclusion from our analysis: the creation of the most progressive model of an artificial intelligence machine to replace a person and its full functioning in at least 3 countries is currently theoretically and empirically unreasonable and probable. The main reason for this is the parallel movement of progressive and regressive development, which constitutes the opposite. Of course, the issues of progressive and regressive development of the philosophy of artificial intelligence have not yet received extensive scientific research. The progressive and regressive problem in the artificial intelligence system must also be evaluated from an ethical point of view.

Of course, we are the people of the time, the thinking scientists. This is a reality for our critical approach to innovation. Regardless of our critical or appreciative attitude, the field and philosophy of artificial intelligence continues to develop objectively. The consequences of progressive and regressive issues depend on time. In essence, this is the main issue analyzed in this article, and the source of all that is objective is subjectivity.

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The Changing Role of Education and Leadership in The Context of 4.0

Osman Ferda Beytekin, Figen Ata Çiğdem

1. Introduction

The information society formed with globalization which brings learning and school to the forefront and causes individuals to turn to out-of-school learning environments. Requirements from education differ due to the various variables. School is a social open system and it is the necessity of the system to interact with its environment. In the transformation of schools to new generation schools, the knowledge and experience of the environment is one of the most important elements. Self-developing and managing individuals have an important role in the development of new generation schools. It is possible for teachers and administrators to have the tools to transform themselves as part of the information society (Yavuz, 2016). Nowadays we are talking about Industry 4.0, developments in artificial intelligence, machine learning, robotics, nanotechnology, 3D printers and genetics and biotechnology, technological developments that were once subject to science fiction movies such as smart homes, factories, farms, kitchens, cities is included our daily life. It is thought that the reflections of Industry 4.0 to education are realized as transformation phases. In the process up to the 4.0 stage of education; In the process up to the 4.0 stage of education; In Education 1.0, there is expression and memorization-oriented education, Education 2.0 in computer and internet-oriented education, then in Education 3.0, information-production-oriented education and innovation and production-oriented education within the scope of ongoing Education 4.0 (Demir, 2018). It is seen that organizations are in an environment where competition and innovations are increasing rapidly in Industry 4.0 period and organizations must be able to cope with them. In terms of Industry 4.0, developing the digital culture and skills in the organization is as important as using the right technology (Oberer and Erkollar, 2018). Industry 4.0 leaders need to be equipped with skills and features that will be the leaders of tomorrow (Raza, 2016).

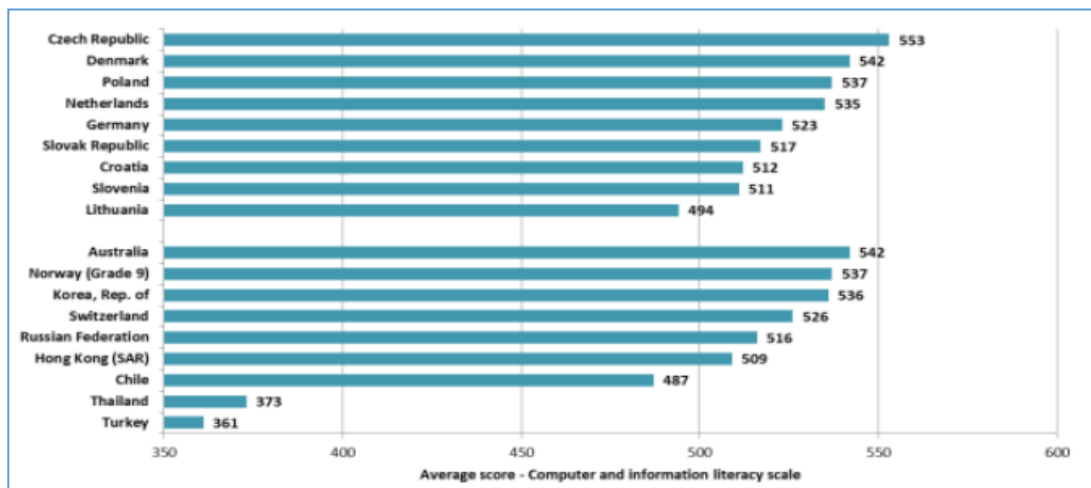
2. Education 4.0

Industry 4.0 consist of artificial intelligence developments, machine learning, robotics, nanotechnology, 3D printers and developments in genetic and biotechnology, technological developments etc. The first industrial revolution, the invention of steam machines; second industry revolution, mass production thanks to electrical technologies, third industry revolution, computer, robot-automation systems and the fourth the industrial revolution is the period that eliminates the “arm strength” of people with smart technologies and switches to the internet of objects where machines communicate with each other. With Industry 4.0, expert manpower training that can design, develop, produce and use the desired technology in every field is an inevitable reality. The realities of Industry 4.0; rather than the information level, it is the ability to think at a high level, that is, methods that thinking will not be sufficient and thinking will become compulsory (Nar, 2017). It is seen that the role of education has experienced four main transformations; as expression and memorization in Education1.0 to computer and internet-oriented in Education 2.0, the information production-oriented in Education 3.0 and the innovation oriented in Education 4.0.

The main points of change and transformation that will occur under Education 4. 0 implies that people will be able to receive distance learning based on individual learning differences. The theoretical part of the knowledge can be reinforced in the classrooms and the practical part by the applications. ironments independent of time and space by using different

technological tools. Individualized course based on students' abilities platforms can be formed. The contents of the education will vary according to the learning speed and status of the students. It will be made possible to reinforce the issues that students have difficulties and to encourage students in the process. Thus, students will be provided with self-confidence. In addition, teachers will have tools to see which students have more support in which subjects. In other words, instead of adapting students to the education system, it will be possible to shape the system according to the students' abilities and abilities (Öztemel, 2018). It is also stated that the emergence of virtual leadership (Kuşçu & Arslan, 2016) features of administrators in schools independent of the specified time and space, ie in distance education processes, and that there may be a change in operation in this sense.

Education is a process that begins with birth and continues until the end of life. The education system also focuses on children starting from pre-school until graduation. The main gains of education are provided by the fact that the people attend school with a higher participation every year (Arslan, 2018). Learning will be important with new approaches such as blended learning, classless learning, models where students can choose methods according to their own learning styles. The ideas that students should realize problem-oriented productions will reveal the importance of project based learning and studies. For this reason, it is expected that students will be given trainings to gain skills to solve real world problems. This will be mostly through internships, mentors, projects and team work and collaborative approaches. This will provide a return to process evaluation in the examination system. Students' learning is expected to become more independent and individualized, and therefore using mentors will make a significant contribution to the student's success. Since education will be carried out from a distance, teachers and educational institutions will come to the fore. In the education 4.0, the function of virtual mentoring is a much emphasized concept (Öztemel, 2018). With Education 4.0, new technologies are emerging which are expected to configure all-time technologies. It is inevitable that these technologies are also a part of education systems. The development of technologies also causes digital transformations, and information literacy will become important gradually. The International Computer and Information Literacy Questionnaire (ICILS), which was supported by the European Commission in 2012, was applied to 6000 students in 3300 schools from 21 countries (Graphic 1).



Graphic 1. International Computer and Information Literacy Survey (European Commission Report, 2014)

ean Commission Report, 2014)

The survey identifies the readiness level of children for digitization transformation, processing data, computer literacy and it tries to find solutions and to reveal how much importance is given to the education systems of the countries in the research (Nar, 2017). It can be seen that computers will be able to make all kinds of statistical analysis, analyze data

and make predictions about the future. What people need to do is to be able to interpret this data and reveal future innovations from the data. Students need to be trained and skilled on big data (Öztemel, 2018).

Scientific studies have focused on developments related to the thinking machine or smart robot called artificial intelligence. In the previous scientific era, the machines which work for human beings have reached the stage of evolution and after that machines which think and know emerged so far. Although the place of artificial intelligence in education is changing day by day, and whether human life and educating man with human will go down in history, it is sought to answer questions such as whether it will transfer human life as well as its moral existence (Filiz, 2018).

3. Leadership 4.0

With the Industry 4.0 revolution, the leadership models, which are foreseen to change, are very important for the managers who play a leading role in the management of education. A good leader is a special person who can perceive the characteristics of the people they are with, approach them with a pleasant view, guide them in line with goals and visions, solve problems, think critically, change their perspectives according to the situation, and never lose hope. It is difficult to find a common definition for leadership. The definitions vary depending on which aspect of the leader is investigated, according to which disciplines or theoretical perspective and which practical purpose is pursued (Hogg & Vaughan, 2014). From a social psychological perspective, Chemers (2001) defined leadership as the process of influence that enables the individual to mobilize others in achieving a collective goal (Cited in Hogg & Vaughan, 2014). In order to define leadership, it is necessary to ask what leadership is not. Leaders play a very important role in defining collective goals. Therefore, leadership is generally a group process rather than an interpersonal process. For example, if your friend has convinced you to develop a cleaning norm for the community and you have followed this norm, then this is an example of leadership (Hogg & Vaughan, 2014).

Leadership evolution can be summed up in four main periods where each era is represented by the dominant leadership thought at the moment, but this may be less effective in the current business environment (Wong, et. Al., 2019).

3.1. Leadership Period 1. This is a period before industrial evolution. The business environment is stable and the organization is small and easy to manage. Therefore, a person who can see the big picture and fix all puzzles together is considered a hero in the eyes of society. This is the era of the Great Man leadership and emphasis is on feature theories.

3.2. Leadership Period 2. This is the period when the concept of hierarchy and bureaucracy emerged as part of the process of managing an organization. While the business environment was still stable, an organization had grown so large that it is no longer managed by a single person. Rules and procedures are designed and implemented to ensure that business activities are carried out efficiently and effectively. This management style has provided the organization with an effective mechanism for supervising and controlling the employee and making informed decisions based on precise procedures. In this period, the rise of the rational manager who managed and controls subordinates using a non-personal approach was observed. Behavior and probability theories work well in this period environment as well as in this stable environment, leaders are given time to develop a careful plan to help them analyze the situation and control what is happening. However, in the next period, when the business environment becomes chaotic, these theories are no longer valid.

3.3. Leadership Period 3. In this period, the business environment has become chaotic and it is seen that a new leadership approach is required for the institutions to survive and grow. Therefore, this change in the business environment provides an opportunity to evaluate and discuss the new idea, and from this development, new leadership styles such as team leader and change leader appear. The art of influence has become a highly sought-after skill as there is a great need to change organizational structures and cultures. The lead factor of the leader helps to facilitate this process. The concept of leadership is no longer related to being a responsible person, and in this new environment, leadership is a concept that passes from one person to another, among the leaders and members responsible for leaders, depending on which person has the most information.

3.4. Leadership Period 4. This addresses the period of the digital information age. In the previous period, changes occurred in the business environment, and in this period, environmental changes became faster and everything seems to change. Information is easily accessible and is facilitated by the internet opening as soon as possible. It represents learning leaders who emphasize the importance of the relationship and influence others through vision and value. In both their personal and professional lives, they believe in the concept of a learning organization, where they not only learn and change, but also aim to stimulate the development and growth of others. These relational theories lead to the emergence of new theories.

Digital leadership (Leadership 4.0) is a fast, cross-hierarchical, team-oriented and collaborative approach that strongly focuses on innovation (Figure 1). Leader's personal competence, mentality, and ability to apply new methods and tools, such as design thinking, are critical dimensions for Leadership 4.0 (Oberer and Erkollar, 2018).

Figure 1. Leadership 4.0 Matrix (Oberer and Erkollar, 2018).



two-dimensional Leadership 4.0 matrix has been developed

ed in Figure 1. This matrix should help choose the most appropriate leadership 4.0 style based on the degree of innovation and technology orientation and leaders. The matrix is divided into four parts. Each dial lists a leadership style that is best suited for a particular person. The X axis defines the individual's capacity and focuses on technology and innovation orientation. There are several factors that affect an individual's orientation towards technology/innovation, such as education, expertise, skill and motivation. For example, a person with a higher education level in a technology related field is likely to want a technology-oriented leadership style such as TL (Technology leader 4.0) or DL (also Digital leader 4.0 if a high employee

orientation). Often, a person looking for employees' commitment to decisions tends to prefer an employee-oriented leadership style such as SL (social leader 4.0). It has a low / low state that does not have a specific orientation, neither against people's concerns nor technology / innovation concerns, has low person anxiety and low technology / innovation anxiety. FL (First Class Leader 4.0) is concerned with the ability to focus on traditional manufacturing structures that focus on the final product; Employee orientation, there are no customer needs that require equally small attention for emerging technologies. SL (Social Leader 4.0) expresses the ability to create a friendly environment for employees, regardless of innovation and technology. It is important to support employees. TL (Technological Leader 4.0) is concerned with the ability to determine how new technology can be used to deliver more value; It has a strong focus on innovation and low employee focus. DL (Digital Leader 4.0) focuses on the ability to understand how technology affects people and the organizational model is compatible with human nature (Oberer and Erkollar, 2018).

4. The Transformation of Schools

Digitalization leads to the transformation of production, logistics, communication and human resources management. Innovative approaches need to create value from smart devices and create new ways of communication and collaboration without digitalization. Industry 4.0 is about competitiveness and innovation. Organizations need to adapt their skills to meet new challenges. Apart from change management, which is an ordered concept, design thinking is an iterative approach that connects creative and analytical methods. The aim is to encourage the development of new ideas and concepts and to increase the innovative power of organizations as well as their competitiveness. A major challenge for Industry 4.0 is not only finding or applying the right technology, but also the lack of digital culture and skills in the organization (Oberer & Erkollar, 2018).

The concepts of anatomy, physiology, hierarchy, role and status are the elements that make up the structure of the organization. Hierarchy, role and status are closely related to the decision phase that constitutes the anatomy of the organization (Bursalioğlu, 2016). All parts of the school structure today have changed both in concepts and functions. One of the most important differences can be considered as international accreditation. Accreditation has come to the forefront with the acceleration of globalization where schools have adaptation in the new era. In the coming years, it is expected that there will be spiral education systems that intertwine more than one education system in the country. The acceleration of development and the effort of the environmental element of the school to keep up with this change causes imbalances in the system and especially reveals the economic dimension of education. In OECD countries, the rate of applying for education from out-of-school resources has increased up to 80 hours per year. Massive, open and distance learning platforms such as Coursera, Edx and Udacity are also increasing in the new educational context (Yavuz, 2016).

The school needs to restructure its units to adapt to these changes in its environment. School management processes are also the most important element of this configuration. It is unlikely that education systems will be effective without involving all the stakeholders of the school. In order for schools, which are the smallest units of educational organizations at the center of changes, to adapt the change, they must have high autonomy, at the same time, transparent and accountable features in all management processes that can make their own decisions, plan and organize. School autonomy is a very important factor in student success and school reform processes. With a school-based management approach, autonomy will increase and the probability of transformation may increase. The school should be the leading role in these transformations (Yavuz, 2016). It is seen that organizations are in an environment where competition and innovations are increasing rapidly in Industry 4.0 period

and organizations must be able to cope with them. In terms of Industry 4.0, developing the digital culture and skills in the organization is as important as using the appropriate technology (Oberer and Erkollar, 2018).

As in all areas of life, development in technology continues to contribute to the field of education. When it comes to education, the class, teacher and student trio that comes to mind, in recent years, it has been replaced by a system that can be used not only in the classroom environment, but regardless of location and time, in another sense, asynchronous system. Based on distance learning and blended learning approach based on these changes and developments, The Reverse Classroom (TYS) model, a new strategy for teaching and learning, has emerged (Gençer, 2015). TYS model, which is a system that gives importance to students' individual learning and enables them to improve their problem solving skills; substitution of practices and assignments given to students to reinforce the subject through classroom teaching. The inverted class consists of two-part educational technique: group learning activities in the interactive classroom and direct computer-based individual teaching (Verleger & Bishop, 2013). Seven components of inverse learning are defined as flexible learning environment, learning culture, designed content, expert educator, progressive learning activities, engaging and effective learning experiences and continuous learning environments (Figure 2).



Figure 2. The seven pillars

of flipped learning (Wu, Hsieh and Yang, 2017)

Post-modernism approaches make it difficult for schools to adapt to change in an environment where the limits are uncertain and reality is complex. It can be seen that this complexity can be overcome by blending educational processes that will be created with models such as the reverse model where information can be taught in a more structured way by integrating schools with more than one discipline and with the help of lessons and applications that go beyond the classroom (Yavuz, 2016).

5. Conclusions

Education 4.0 focused on developments related to the thinking machine or intelligent robot called artificial Intelligence. There are many contributions that artificial intelligence can make to education within the scope of Education 4.0 (Karsenti, Bugmann, and Gros, 2017). The utifen project, which is a personalized learning project, is one of its most important reflections. It is expected to increase the academic success rate. With the use of artificial intelligence, automatic correction of some school types will benefit teachers in terms of time saving. Ongoing student assessment can be made in the form of real-time monitoring of students' learning along the learning path, to accurately measure their skill gains over time. Artificial intelligence can collect student data and quickly alert schools to those at risk of dropping out, so problems can get proper support before it breaks down.

In the management of schools, news bulletins and student absences can be handled more quickly. Teachers will help them to adjust their courses to some extent, for example, Coursera¹⁰, a MOOC¹¹ platform, will be able to report to teachers which questions the students are doing wrong or responding to poor work. Using artificial intelligence will be able to create private lesson platforms for smart distance education. New ways to interact with information have emerged with the use of artificial intelligence, for example, Google can adjust search results based on our geographic location or previous searches, often without our knowledge. Amazon also does the same when it offers shopping in the light of what we have purchased in the past. Apple's voice recognition assistant, Siri, is also one of these ways to adapt to individual voices, needs and wishes.

The use of artificial intelligence takes important steps in providing educational feedback. For instance, utifen sends personalized texts to students as they follow their learning path, and feedback is not only personalized, it is faster and more frequent, allows for automatic grading, and offers support and specific suggestions. With the use of artificial intelligence, expanded opportunities are created for students to communicate and collaborate with each other. There is more opportunity for interaction between students and academic content. Better teaching can be achieved by facilitating content transfer. However, the teacher is still in place, only artificial intelligence plays a supportive role by performing complex digital tasks.

Students can do personalized homework assignments that match their academic skills and challenges. More learning can be provided because artificial intelligence can personalize the exercises to make learning more meaningful and fun. Three-dimensional virtual worlds, interactive with immersive environments or virtual reality, encourage students to interact with course materials, for example, For example, Assassin's Creed educational game enables students to understand and "live" in vivid and detailed historical situations and perform engaging tasks.

Artificial intelligence makes distance learning more accessible and attractive. People can learn and measure programs wherever and whenever they want. The language learning system Duolingo is an outstanding example. Learners' autonomy is a key task for educators. Class management with the use of artificial intelligence can produce better results. Classcraft software can be used to enhance the effectiveness of the activities. Artificial intelligence applications are integrated into humanoid robots. Although they will never be able to replace teachers in real life, Hollywood fantasies seem to be able to play an even bigger role in classrooms, with realistic robots.

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Formation of Non-Governmental Organizations’ Institutional Identity Using Participatory Processes: The Case of ASKON Association

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1.1. Introduction

Integration of economic markets with each other locally, domestically and internationally changed the structure of business. Today many organizations whether they are small, medium or large, family owned or corporate, private business or non-governmental attempt to function in a very competitive business environment. Economic downturns, fluctuations and unstableness in the international markets make it even harder to survive. Everyday thousands of new entries into the economic markets are seen and other thousands diminish. Those businesses which survive and establish a sustainable market condition for themselves have several strategic assets. Indeed businesses need to build strategic assets to help them survive in the economy.

Corporate identity is a strategic asset that needs to be created by the entity of the organization regardless of its type. While the meaning of the concept basically conveys a response to the questions “who are we?” and “what are we?”, it gives much more than that to organizations that create their corporate identity. Organizations develop their own identity that enables them to function in the markets. Each organization has distinguishing features with respect to their ownership, style of management, organizational structure, business activities, markets covered, the range and quality of goods and services produced and overall business performance.

Corporate identity help organizations sustain in the competitive world. Thus, organizations create different corporate identities based on their certain characteristics. While some of them stress creation of value , the others may focus on organizations’ ability to deliver their promises. A survey conducted in 2014 over 720 executives revealed that companies that were considered as having a stronger identity outperformed others by 25% with respect to their average annual total shareholder return between the years 2010 and 2013 (Leinwand and Mainardi, 2014).

Non-governmental organizations function as the third sector entities with non-profit motives and they need to create a strong corporate identity too. Today in the pluralistic approach era they raise their voice to discuss the values that they support or take action against several business, social or politics related issues. Within the democratic rules they function to serve and protect their members. Individuals may choose to be a member of a non-governmental organization based on their religious, political, cultural, demographic or economic features. Like in the private sector, third sector also comprises of vast number of non-governmental organizations which increase the competition in their fields of operation.

Business associations as non-governmental organizations have a unique characteristic that ties third sector and private sector in that their members are businessmen. Businessmen that share the same ideals gather together and struggle in the business front. Business associations attempt to maintain and develop their members’ rights. They have connections with legal environments as well. Mainly they also interact with chamber of commerce of the local and domestic authorities. Increasing members market share and business profit are the main goals of business associations.

A strong corporate identity would help a business association reach its goals and sustain for the future by increasing its strength against its competitors. In the subsequent parts

the study includes the meaning and literature review of corporate identity. This part is followed by a qualitative case study about the creation of a business association's corporate identity.

1.1. The Concept of Corporate Identity

Among other concepts, the concept of corporate identity stressed in the literature since the 1950s by practitioners and managers (Balmer and Greyser; 2003:1). "Corporate identity is the set of meanings by which a company allows itself to be known and through which it allows people to describe, remember and relate to it" (Topalian 1984 as cited in Melewar 2003: 195; Vella and Melewar, 2008:9).

Many of the studies follow a pattern in this field based on their focus of the subject. Three main patterns can be stressed during the early development of the concept (Cornelissen and Elving, 2003:114). Lippincott and Margulies (1957) linked the concept of corporate identity and organization's logos and symbols which were seen as identifying signs of the organization for third parties. These scholars then tended to relate the term with all communication ways and organizational behavior which the organization performs against its key publics and stakeholders (Birkigt and Stadler, 1986; Van Riel and Balmer, 1997).

A second pattern discusses the subject from the public policy and legal sphere where organizations' accountability is pointed out (Czarniawska-Joerges, 1994). Organizations like individuals have juristic, artificial or legal aspects in their functions. In this pattern organizations are treated as individuals. A third pattern rose in the organization behavior field and management field in their attempts to understand organizational reality where organizations were perceived as organisms.

Later the term became symbolic outward presentation of a company. An organization's distinguishing and core activities define its organizational identity. Larcon and Deitter (1979) also pointed out that the concept related to a set of intrinsic features or tendencies such as strategy, culture and core competencies. These features enabled organizations its main distinctive nature with respect to its specificity, stability and coherence.

1.2. Literature Review

Corporate identity literature dates back to 1950s when Kenneth E. Boulding (1956) wrote his renowned book "The Image: Knowledge in Life and Society". In his book he established the link between personal image organizational structures. Abratt (1989) performed a seminal work and they systematically updated previous work by Olins (1979) and Bernstein (1984) and attracted marketing scholars' attention to this field. Moreover, he concluded that corporate personality transformed into corporate identity which found its meaning in corporate image (Bick et al., 2003: 835; He and Mukherjee, 2009: 3).

Bick et al. (2003) analyzed Abratt (1989) model and implied that early version of the model described corporate identity as an element that could be developed and controlled. The model included three phases; corporate personality, corporate identity and corporate image. Then the authors developed "A 21st Century Model of the Corporate Identity Management Process" in their work. Their modified model attempted to integrate all management disciplines in a way that could reflect multi-disciplinary aspects of corporate identity management.

David et al. (2005) investigated the relationship among corporate social responsibility, corporate identity and purchase intention for 4 corporations. They stressed duality of corporate identity and results of their study were elaborated within a dual process model of corporate identity by using corporate expertise and corporate social responsibility values. Their study found that corporate social responsibility practices and moral/ethical corporate

social responsibility practices played an important role as predictors of the corporate social values dimension.

Suvatjis and Chernatony (2005) put forward existing corporate identity modeling patterns in the literature and presented a new multi-dimensional model. The authors reviewed the corporate identity literature and criticized their pros and cons to reach their limitations. They designed the six station model.

Simoes and Sebastiani (2017) investigated the interface and relationship between corporate sustainability and corporate identity. The authors further expressed ethical identity as a relevant subject of corporate identity where stakeholders of the corporation interact with each other that needed to be aligned for the pursuit of sustainable relationship and ethical concerns. The authors also conducted an empirical research regarding corporate sustainability strategies of retail companies in two countries in Southern Europe. Their finding revealed that organizations demonstrated different patterns while establishing the link between corporate sustainability and identity.

Bravo et al. (2017) analyzed the effects of corporate identity management on the employees' responses and their moderating effects of two employee personality traits: proactive personality and resistance to change. Results of the study revealed that organizational identification was a key variable to explain the corporate identity management effects on answers of the participants. The authors suggested that human resources applications needed to take into account behaviours of proactive employees who tended to be more prone in externalizing their identification by spreading positive word of mouth.

Glanfield et al. (2017) conducted an empirical research on the characteristics of corporate identity at the stakeholder group level. Front-line employees were focused on the study since they were regarded as central to the development of organizations' corporate identity. The article put forward that front line employees were influenced by external corporate identity phenomena, their behavior was influenced by and supported the organization's corporate identity. They also offered five characteristics of the front-line employee corporate identity environment.

2. Methodology

2.1. Data

The data of the research was collected in the workshop of ASKON between the dates of November 7th and 10th, 2019 in Antalya. 300 members consisting of headquarters' managers, branch managers, industry presidents participated in the workshop.

2.2. Limitations

Data obtained by the authors was limited to the views of the participant member businessmen to the workshop. Moreover, each member belonged to different region of the country which had pros and cons for the research. The Country's socio-economic situation and conditions of businessmen also affected their responses.

2.3. Research Problem and Model

The aim of this research was to put forward a corporate identity for ASKON a non-governmental business association. 5 stage model for the research was constructed.

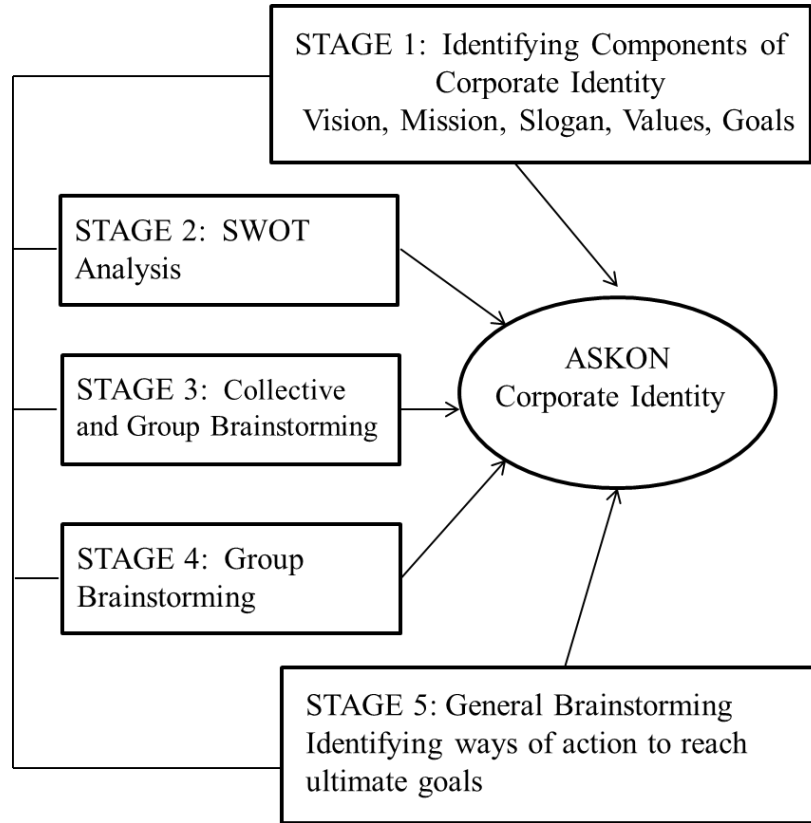


Figure 1: Research Model for ASKON's Corporate Identity Creation

Figure 1 represents research model of the study. The study is mixed research model including qualitative and quantitative techniques namely brainstorming, SWOT and survey.

2.4. Research

The research was conducted in the workshop of ASKON between the dates of November 7th and 10th, 2019 in Antalya in Spice Hotel. 300 members consisting of headquarters' managers, branch managers, industry presidents participated the workshop. 1 large hall and 1 small hall were used for the collective and group brainstorming activities. Responses to collective brainstorming activities were recorded and projected to the board during the brainstorming activities. Ideas that were stated in the group brainstorming activities were recorded on mobile boards first. They were then carried to the large hall and there they were again recorded and reflected on the projection screen. Questionnaires were designed to scale for the obtained ideas following the collective brainstorming activities. Obtained data from the questionnaires were then analyzed using Excel Software to reach weighted averages of the statements. Then they were prioritized.

Analyses were conducted to reveal corporate identity of ASKON based on the model described in Figure 1. First stage included identifying the components of corporate identity which included vision, mission, slogan, values and goals of the association.

Stage 2 included a SWOT analysis. In this phase the future oriented opportunities and threats determined by the members through collective and group brainstorming activities. All of the statements were recorded first. The statements were then scaled to prioritize. The developed scale-questionnaire was distributed to the members, prioritizing the identified opportunities and threats. Afterwards, prioritized opportunities and threats are grouped under the themes economics, culture, NGOs, politics. In the second part of the second stage, the

strengths and weaknesses of the headquarters and branches were analyzed. 121 statements were obtained during the collective brainstorming activity.

Third stage consisted goals of the Association. Member business people were divided into three groups and three different group brainstormings were organized. They were asked to set goals primarily in the following three categories:

- Goals for members entrepreneur business people
- Goals intended for Turkey
- University - business world - objectives for state cooperation

The expressions developed for above mentioned themes at the end of the group brainstorming activities were re-distributed to the members in scale and prioritized by weighed average. Thus prioritized goals were determined in all themes.

Stage 4 was organized under the theme: "Strategies". Participant members were organized to brainstorm in groups. Strategies that would serve to reach vision, mission, slogan and goals were asked through group brainstormings. In other words, this section included strategies to answer the question of "how we could achieve goals, vision, mission and slogan".

In Stage 5, participant members were asked to give concrete suggestions for the successful implementation of the workshop results through group brainstorming activities. Research was concluded by following this stage.

Research model in sum designed for seeking answers to four questions as known necessary for building corporate identity. These were;

- Who we are or what we are.
- What we want to be.
- How we will be
- How we will succeed.

Stages 1 and 2 sought answers to the questions "who we are or what we are". Stage 3 sought answers for the question "what we want to be" and Stage 4 sought answers for the questions "how we will be" and the final question how we will succeed was designed to identify recommendations for the effective implementation of the answers to total 3 questions.

3. Findings

Stage 1

Mixed research design and related techniques gave several insights about the vision, slogan, mission and values of the ASKON Association. Based on the analysis following findings were put forward.

Vision

By the help of its agencies in cities with international brands

With its branches in 81 provinces and towns

With the production and export of high value-added products developed by R&D activities

With thirty thousand registered member entrepreneurs

With the power of the capital formed by the rich culture and solidarity of Anatolia

"Realization of interest-free financial system as dominant structure in Turkey and around the World"

Slogan

“National Economic Development’s Strong name, ‘ASKON’”.

Mission

“We strive for a wealthy nation and strong Turkey”

Values, Beliefs and Principles

Entrepreneurship Values

We must have commercial ethics
We must share fairly
We must act as prudent traders
We must earn halal
We must be environmentally conscious
It is our priority to be innovative
We must work according to the interest-free financial system
We should structure R&D activities
We must have a vision and mission
we must work all the time to be productive
We depend on the abundance of halal and the strength of the crescent

Social and Administrative Values

We behave fairly and expect to be treated fairly in return
We must keep the brotherhood law superior among our members
The rightful sense of wealth is our generally accepted value
We must give the job to the people and make assignments based on merit
We should inherit our cultural values and environmental values for future generations
We must set targets according to our vision and mission
We must be with the oppressed and the victim

Stage 2: SWOT Analysis

SWOT Analysis was conducted with the title: “Possible Positivity and Negativities in Economy, Politics, Civil Society-NGOs, Culture, International Relations, Technology, City and Agricultural Life Today and in the Future: Collective and Team Brainstorming (SWOT Analysis)”. 121 raw-data statement were recorded as a result of the collective brainstorming. The theme priorities were determined by redistributing them with the sub-titles “Economy, Politics, Civil Society-NGO, Culture, International Relations, Technology, City and Agricultural Life” in a designed 5 scale questionnaire. From 1 to 5 (1: Least significance, 2: Significance, 3: Significant, 4: More Significant and 5: Most Significance), each statement is graded according to the Thematic priorities were determined.

Opportunities For ASKON

Weighted Classification	Statements Related to ECONOMY	Degree of Significance
1	Possibility to extract high density natural gas in the Eastern Mediterranean	4,27
2	We will continue to break records in the tourism industry	4,21
3	We have a potential to provide quality health services to the Middle East and economic health services to Europe.	4,09
4	There is a business world that doesn't give in to crises	3,83
	Statements Related to Culture and Education	
	Statements Related to Politics	
	Statements Related to NGOs	
	Statements Related to Technology	

Same pattern was applied for threats, strengths and weaknesses.

Strengths

The establishment of ASKON's e-commerce platform is a success.

ASKON's relationship with the bureaucracy is strong.

We support the good work of government.

Initiatives are going on well about Turkey wide business platform among members.

ASKON headquarters is working for establishing participatory banking (interest-free) system.

Weaknesses

Turkey wide business platform among members is not operational for now.

We do not have a corporate constitution.

There are difficulties in reaching companies on a sectoral basis via ASKON website.

The lack of standard introduction about ASKON to attract new members.

Large-scale enterprises in accordance with ASKON's corporate identity cannot be established.

Opportunities

We should support the national technology move.

If we are going to prosper in the economy we must reform education.

Success in domestic defense industry will be bridge for overall success for Turkey.

We need to convey the idea that production and development will increase where peace and tranquility will exist.

High probability of extracting natural gas in the eastern Mediterranean exists.

Threats

We do not have a training system that trains qualified human resources.

The intensity of moving to domestic production in the defense industry needs to be increased.

We need to be an exporter, not an importer.

Qualified personnel are not trained.

Domestic brands that would increase Turkey's brand value can not be created.

Stage 3: Goals

Businessmen were divided into three groups and three separate brainstormings were organized. They were asked to set their objectives primarily in the following three categories; Goals for member entrepreneur business people, goals for Turkey and goals for collaboration among university-business world and state. 5 of the most significant goals are stated herein as;

Weighted Classification	Statements Related to GOALS	Degree of Significance
1	To become a brand country by producing brands that will reach a respected position in the world.	4,63
2	Minimizing foreign dependency in the defense industry	4,59
3	Not just consuming; To strive for a country that is a pioneer in local and national quality production that is identity, qualified, competent and constantly producing	4,55
4	Introducing new product, service and company information developed by members	4,54
5	Formation of a unit that will assist member business people about exports, higher value added product design and on strategic issues as well as developing brand creation in Turkey	4,54

Stage 4: Strategies

Brainstorms were organized in the 4th part of the search conference of the ASKON Vision Workshop to determine the strategies. For this purpose, ASKON member businessmen were divided into five groups and asked to develop strategy statements in a one-hour period.

Strategies

Attaching importance to R&D and innovation and investing more.

Establishment of large-scale multi-partner companies.

The e-commerce structures of the members are developed, completed, and active use of online transactions,

Supporting the Agriculture Summit and organizing it throughout the country, establishing the National Seed Bank under the umbrella of ASKON,

Developing by giving importance to R&D, investing more in innovation

Traditionally planting saplings for taking ASKON in social projects,

Organizing ASKON based fairs annually at national and international level,

Cooperation with companies that have established an interest-free banking system based in London, under the leadership of ASKON,

Strengthening the ASKON Youth Organization, establishing a university commission within Genç ASKON, determining the university responsible for each province and conducting internship activities through these responsables, providing project support in technoparks and finding angel investors for projects,

Establishment of student clubs in universities in accordance with ASKON's corporate identity and values

Stage 5: Future Orientation and Suggestions

Corporate identity and goals-strategies set should be presented to the headquarters board of directors.

The booklet should be printed (minimum 1000) and distributed to all members.

In the form of an educational seminar, the content of the booklets prepared to branch heads and branch board members should be transferred.

A presentation should be made to ASKON young entrepreneurs.

The corporate identity booklet should be distributed to the institutions and managers who visit and visit.

The institutionalized ASKON Vision Workshops should be continued by expanding the time and annually.

In addition to the suggestions for the implementation of the 11th Vision Workshop results, 2-3 days of new workshops and search conference should be organized for all members.

4. Conclusion

This article contributes to the practices of corporate identity management at the level of constructing a sound pattern to build corporate identity for organizations. First it analyzes the literature and puts forward that corporate identity plays a significant role in earning organizations a competitive advantage which is crucial for their survival and sustainability in today's rapidly changing business environment.

Organizational values differ greatly based on their operational fields and third sector is heavily depended on their members. The research subject of the NGO analyzed in the study would make a good case study for future practices in the third sector. The study designed a model based on a 5 stages and sought for answers to the questions who are we, what are we, what we want to be, how we will be and how we will succeed. The answers of the participants pave way to formation of mission, vision, slogan, goals, values and strategies in the study.

It is recognized that the paper is limited in a number of aspects particularly as the research model depended heavily on the participant businessmen's responses and attendance to the workshop activities. However the paper intends to provide a good case study for future studies with its theoretical and practical value.

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Fundamental Values for Public Organizations

Mădălina Tomescu

1. Introductory considerations

Public organizations cannot exist outside a system, they are influenced by the components of the system they belong to and significantly influence each of its subsystems. The integrity of a system is strongly determined by a set of values and fundamental principles that specify, through their content, the basic coordinates between which the components of the whole work¹⁰.

The public sector is a component of the macrosystem with major implications for the functionality of the whole. This is obvious if the diversity of integrated sectors of activity in the public sector is taken into account.

Beyond this diversity, there is a set of universally valid fundamental values-principles that must be taken into account and that significantly determine the content of management processes and relationships in public institutions. They significantly mark the mission of public organizations, influence the organizational behaviour of them and of the employees directly involved in the processes of realization and provision of public services or administration of state interests in relation to the client citizens of public institutions¹¹.

In order to bring the administration closer to the citizens, "in recent years the central authorities have adopted a series of laws, decrees, decisions and ordinances in the name of values for which serious political battles have been fought: decentralization, autonomy, privatization, property, etc. The application of these laws did not have the expected effect: development, involvement and participation of citizens, transparency, equity, profitability. The new set of values was hardly accepted by traditional models, and this acceptance was gradually made to varying degrees from one area to another, from large cities to smaller administrative units. In many of them there is an ambiguous dominant orientation: old habits have been abandoned, but new ones do not arouse much interest. In addition, dissatisfaction, apathy, absenteeism, non-involvement of citizens have reached quite high levels, these states manifesting themselves in local elections by low turnout, people being too unconvinced that the new elected will be able to bring important changes in their localities (Arslan, 2018). The lack of minimal control by civil society over the way public money has been managed has strengthened this mood."¹²

2. The concept and classification of promoted values in public organizations

According to Paul Popescu-Neveanu, "Values are personological structures that manifest themselves strongly and fully in individual and social life. There is an ambivalence of individual reporting that is fundamental to the very structure and balance of the personality: to oneself and to others. (...) Values are personal structures, but they come and are expressed in interpersonal relationships."¹³

¹⁰ ANDRONICEANU, ARMENIA – News in public management – Universitara Publishing House Bucharest, 2004, p. 68

¹¹ Idem

¹² ȘTEFAN, BRUNO; Popescu-Neveanu, Paul; Ghiuruțan, Maria Manuela, Attitudes and values in local public administration, BCS Publishing House, Bucharest, 2001, disponibilă pe <https://biblio.flacsoandes.edu.ec/libros/digital/56717.pdf>

¹³ Ștefan, Bruno; Popescu-Neveanu, Paul; Ghiuruțan, Maria Manuela Attitudes and values in local public administration, BCS Publishing House, Bucharest, 2001, disponibilă pe <https://biblio.flacsoandes.edu.ec/libros/digital/56717.pdf>

The values and aspirations promoted in a public institution form the philosophy of the respective public institution. It is important that values are declared and integrated in the mission of the public institution, because it provides information about the perception of public management and other employees towards citizens and their relations, attitude towards work, ethical values considered in work processes by which public services are provided and provided to customers.¹⁴

According to Armenia Androniceanu, a value system could be structured according to two criteria¹⁵:

- Belonging: internal and external values
- degree of generality: universal and particular values

1. The internal values aim through their content those aspects related to the internal organizational activity of each public institution, which imprints a strong note of specificity to the organization and management .

The external values come from the external environment of the public institution and determine their organization and management, the mission and objectives of public organizations, the degree of diversification of activities, priority strategic options, etc.

2. The grouping of values into two categories according to this criterion determines the distinction between universal values, which, regardless of the field in which the public institution operates, must be respected and integrated in the management of all organizations and specific private ones, which involve a number of distinct connotations. determined by the field of activity in the public sector in which the public institution operates. The compatibility and complementarity of content between the two categories of values is absolutely obvious¹⁶.

In any state governed by the rule of law, in the public sector and in the activity carried out by public institutions, regardless of the field of activity: administration, health, education, culture, transport, tourism, etc., the following values are unanimously recognized and considered fundamental. fundamental principles for the management of public organizations:

1. ethics,
2. morality,
3. democracy.

Each of them has a special relevance on the organizational behavior, in general on the individual behaviour of human resources in public institutions and, implicitly, on the modes of action chosen by public managers in particular and each civil servant involved in management and execution processes, in actual activities. through which public services are performed and provided.¹⁷

3. What are the values promoted at the level of public organizations?

In the definition of public office, its ethical dimension is combined with its legal significance. Law on the Status of Civil Servants (art. 2. (1)), as well as the Emergency Ordinance no. 57/2019 on the New Administrative Code of Romania considers the public office as: "the set of attributions and responsibilities established under the law, in order to achieve the prerogatives of public power". Therefore, the legislator appeals simultaneously to two terms:

- the one of attributions, term that has rigorous legal connotations,

¹⁴ ANDRONICEANU, ARMENIA – News in public management – Universitara Publishing House, Bucharest, 2004, p. 336

¹⁵ ANDRONICEANU, ARMENIA – News in public management – Universitara Publishing House, Bucharest, 2004, pp. 68-69

¹⁶ TOMESCU, MĂDĂLINA, Public Management, Prouniversitaria Publishing House, Bucharest, 2020, p. 124

¹⁷ Ibidem, pp. 69-70

□ that of responsibilities, a term that brings to life the ethical dimension of the behavior of the civil servant.¹⁸

Both terms suggest the two dimensions in the meticulous and complex activity of realizing the prerogatives of public power.

Between the general interests of the community and the particular interests of the citizens are the public administration and the civil servants. They have a particularly important role in society, namely, to maintain public order by enforcing the law. They have this duty, and it is essential that every civil servant discern between justice and selfishness, duty, law, and self-interest.¹⁹

From this perspective, I consider that the values that must be promoted at the level of any public organization are found both in the Romanian Constitution and in the O.U.G. no. 57/2019.

Thus, from the Romanian Constitution, we identify the following values to be respected:

- Loyalty to the country

Romania's fundamental law enshrines one of the most important duties of all citizens, namely loyalty to the country²⁰. This duty is considered sacred.

Loyalty to the country has a special significance in the case of people who have public responsibilities, and even more so in the case of the military who have a special status. These persons are responsible for the faithful fulfillment of their obligations and, for this purpose, they will take the oath required by law²¹.

Professor Constantin Dissescu draws attention to the responsibility of dignitaries: "Freedom of action does not suppress responsibility, neither moral nor historical."²² He insists that responsibility lies with the mandate, including the consequences of decisions taken. "We, the citizens - writes Dissescu - who called the minister and give him honors, appointments and compensations, we have the right to ask him to work, to appear before us, not to come up with combinations to influence and evade liability. If the minister does not like it, all he has to do is retire, because we find ministers at any time and in tens of times more than we should"²³.

Likewise, civil servants have, in addition to criminal and disciplinary liability, personal liability. This also includes a conduct loyal to the Romanian state, the promotion and affirmation of national values²⁴, so a natural behaviour with the country to which they belong²⁵.

- Respect for the Romanian Constitution and for the laws of the country

Romania is a national, sovereign and independent state, unitary and indivisible, as even art. 1, paragraph 1 of the Constitution of our country. This aspect presupposes that there is a fundamental law on which the organization of the state itself and, implicitly, the organization of the public administration authorities are based. Art. 1 paragraph 5 specifies that in Romania, the observance of the Constitution and the laws is obligatory.

¹⁸ Ibidem

¹⁹ TOMESCU, MĂDĂLINA – Ethics of the civil servant –Prouniversitaria Publishing House, Bucharest, 2016, p. 93

²⁰ RĂDULESCU, CORINA MIHAELA – Ethics of civil service (course support), Universităţii Publishing House Bucharest, 2006,P.39

²¹ See art. 50 alin.1 from Romanian Constitution.

²² DISSESCU, C-TIN - Government power and responsibility in "Constitution in 1923"- 1923, p. 81

²³ DISSESCU, C-TIN - Government power and responsibility in "Constitution in 1923"- 1923, p. 83

²⁴ Mihai Eminescu, the greatest Romanian poet, pointed out that "nationality must be felt with the heart and not only spoken with the mouth. What is deeply felt and respected is seldom pronounced. "

²⁵ MAZILU, DUMITRU - Human rights. Concept, exigencies and contemporary realities - Lumina Lex Publishing House, Bucharest, 2008, p.132-133

By its essence, as well as by its social function, the Constitution has a legal value superior to any other norm of law. Consequently, all normative acts adopted by Parliament and the Government, as well as those issued by all other public authorities, must comply with constitutional norms and principles. If an act, including a law adopted at the level of the Parliament or the Regulation of its organization and functioning, contravenes the Constitution, it cannot produce legal effects.²⁶

The theoretical justification of the supremacy of the Constitution is found in its political and legal character. The Constitution finds the expression of the supreme will of the people with regard to the objectives and instruments of exercising political power. The constitutional norms fix the main instruments of government, establish the authorities that will carry out the government and the relations between them. Extremely important is the fact that the Constitution also finds the seat of civil rights and freedoms, as well as the fact that the supreme law is the structured factor of the legal order, which provides the guiding principles: equality of all citizens, legality, non-retroactivity of laws, etc.²⁷

The principle of supremacy of the Constitution requires, on the one hand, a greater importance in the hierarchy of legal standards over all other standards, where required their compliance with the Constitution and, on the other hand, a specific procedure to amend the Constitution, which differs substantially by amending the ordinary laws.²⁸

For the civil servant, as well as for any citizen, the supremacy of the Constitution presupposes that this, then the other normative acts must be placed at the base of the development of his activity. Of course, this obligation is more pressing for those who work in the public system²⁹.

- Equal opportunities

We live in a democratic society, and democracy also presupposes equality in the rights of citizens, of the opportunities that society offers, equality before the law. A just society provides its members with an equal chance of success in life, without privileges and without discrimination. Equality does not mean uniformity. People differ from each other in abilities, education, preferences, or skills. Diversity must be accepted and respected, because it is an important factor in the development of society and culture.

Art. 16 of the Romanian Constitution, regarding the equality in rights provides in par. (1) that "citizens are equal before the law and public authorities, without privileges and without discrimination." Also, in paragraph 3 it mentions that, in order to occupy public positions and dignities, women and men".

Equal opportunities for women and men is defined as "taking into account the different abilities, needs and aspirations of men and women and their equal treatment".³⁰

This means that there should be no discrimination in the acceptance of applications for a competition or in the objectivity of examiners in such a situation. However, at first glance, we notice that men occupy the leading public positions, while the public executive positions are mostly held by women.

- Respect for human dignity.

Art.1 align. 3 of the Romanian Constitution emphasizes the idea of human dignity, mentioning that our country is "a state of law, democratic and social, in which human dignity, rights and freedoms of citizens (...) represent supreme values", and art. 26 enshrines the

²⁶ IONESCU, CRISTIAN – Treaty of contemporary constitutional law, Edition 3- C.H.Beck Publishing House, Bucharest,, 2019, p. 149

²⁷ Idem

²⁸ CĂLINOIU, CONSTANȚA, DUCULESCU, VICTOR- Constitutional law and political institutions - Lumina Lex Publishing House, Bucharest, 2008, p. 168

²⁹ TOMESCU, MĂDĂLINA, Ethics of the civil servant", Prouniversitaria Publishing House, Bucharest,, 2016, p.140

³⁰ Law no. 202/2002 on equal opportunities between women and men.

obligation of public authorities to respect and protect the intimate, family and private life of persons”.

By human dignity is generally meant respect for other people, as well as respect for oneself. Related to dignity, expressions such as: nobility, honor, pride, grandeur, self-love, deserving, reputation, worthiness are used in the good sense of the word.

The dignity of the human being is the inner feeling generated by reason and consciousness that gives it superiority over the animal world. Dignity is acquired by birth, as a sign of the equality of men before God and their fellows, without any discrimination. Human dignity is the very basis of fundamental rights, first and foremost the rights to life and integrity of the individual, as well as those concerning the prohibition of torture, inhuman or degrading treatment or punishment, slavery and forced labour.³¹

Private life is the life of the person unfolded in a setting "hidden" from the eyes of others. It differs from public life, conducted in public, accessible to all. The right to privacy presupposes the prohibition of any arbitrary interference in the personal life, in the family or in the domicile of the person or in his correspondence. No harm to a person's honour or reputation is permitted.³²

Some authors refer to the fact that the private life of a politician, as well as other professional categories (eg magistrates, civil servants) is by nature the function, more limited than the private life of a certain person. It is natural to be so if we consider the correlation that exists between the civil service, the law and the rule of law. The higher the public office, the greater the importance of respecting the law and the power of the rule of law (= the good as value), and in parallel it dissolves, the importance of that person who holds the position in question as an individual, as an individual. However, the political career involves everywhere and, in all cases, the disclosure of aspects of privacy that are inadmissible to be disclosed in other states.³³ As an example, the publication of assets is possible and mandatory in the case of dignitaries and civil servants, but is inadmissible in other cases.

Studying O.U.G. no. 57/2019 on the Administrative Code, we find the following values:

- Priority of public interest

This is an important principle according to which civil servants have the duty to consider the public interest above the personal interest, in the exercise of public office.

The public interest can be defined by the multitude of decisions that could be considered, reasonably speaking, as being in the interest of a community, taking into account the available information about its situation.³⁴ In other words, we can say that the public interest represents the general interest of the community. It is precisely this general interest that the civil servant must take into account in the performance of his duties. Every official must put, in any circumstance connected with the service, the public interest, of the community, and not his personal interest.

- Professionalism

It represents a principle according to which civil servants have the obligation to fulfil their duties with responsibility, competence, efficiency, fairness and conscientiousness.

The fundamental objective of public administration in general and public management in particular is to increase the satisfaction of the public interest, to provide professional public

³¹ CRĂCIUN, IONEL - The human dignity of the citizens of the European Union, Human Rights Monitor no. 5/2005

³² MAZILU, DUMITRU - Human rights. Concept, exigencies and contemporary realities - Lumina Lex Publishing House, Bucharest, 2008, p. 90

³³ RĂDULESCU, CORINA MIHAELA - op.cit.- p.39

³⁴ RUGHINIȘ, COSIMA - A concept of public interest, Institute for Public Policy - Public interest - current topic or old-fashioned rhetoric? - Bucharest, 2006, p.7

services to citizens, which can not be achieved without following certain basic requirements, and certain essential characteristics that must be met. to have them civil servants, incorporated in what means professional competence.³⁵

It should be mentioned that the professionalism of civil servants is the basis of the efficiency of public services, services that must satisfy the interests of citizens, but in accordance with the public interest. Those who must demonstrate professional competence are, first of all, civil servants holding management positions.

It was concluded that every leader of a public institution, in order to be effective, needs a "professional body" of civil servants, who have a complex training and certain professional skills necessary for an activity of fact identification and strategic analysis. It is recommended that this professional body of civil servants, with a complete and multidisciplinary training, have continuity in the activity, regardless of the political changes that take place, to be able to tell the head of the institution or department "the idea is good, but it was tried in the past and did not give the desired results... "

These professionals may also see the weaknesses of some programs that need to be tested or tested, so that the strategy as a whole can be improved in time, before incurring certain costs.

A leader, as well as a civil servant, must be competent, will be able to fulfil his own objectives and those of the field in which he operates and to enjoy for this a sufficient freedom of decision and action.³⁶

- Impartiality and independence

It is a principle according to which civil servants are obliged to have an objective, neutral attitude towards any political, economic, religious or other interest in the exercise of public office.

Basically, according to the law, civil servants should have the opportunity to have a politically neutral attitude. They are the ones who have to implement the governing policy, the administration having as objective the organization of the execution and the concrete execution of the law. The governing policy is implemented in the legislation, and the civil servants are the ones who, in turn, implement the legislation.

What is interesting, however, is that, although under the protection of the law, civil servants bear the political impact, which leads to the idea that the principle of impartiality and independence cannot be fully applied.

On the other hand, although the current regulation recognizes the right of political association of civil servants through art. 98 of Law no. 161/2003 which provides that "Civil servants may be members of legally constituted political parties" by O.U.G. no.57/2019 regarding the new Romanian administrative code establishes "the obligation of civil servants, in exercising their duties, to refrain from the public expression or manifestation of their political beliefs and preferences, not to favour any political party or to participate in political activities during the program For work". This obligation is analysed in the literature under the title of reserve obligation, and it imposes on the civil servant a certain moderation and reasonableness in behaviour.³⁷

- Moral integrity

³⁵ LATU, LAZĂR - "The professionalism of civil servants, an essential requirement for the creation in Romania of a modern public administration"- in "PUBLIC ADMINISTRATION AND MANAGEMENT" no. 2/2004, p. 120

³⁶ LATU, LAZĂR "The professionalism of civil servants, an essential requirement for the creation in Romania of a modern public administration"- in "PUBLIC ADMINISTRATION AND MANAGEMENT" no. 2/2004, p. 119

³⁷ TOMESCU, MĂDĂLINA, „ Ethics of the civil servant”, Prouniversitaria Publishing House, Bucharest, 2016, p.149

From a linguistic point of view, the phrase "morality" includes the set of individual behavioural norms towards one's own consciousness as well as towards the community, so that these relations do not cause distortions in the norms established by the society in which the individual lives. The written or unwritten laws of morality as a whole included honesty, honesty, devotion.

Moral integrity presupposes a character trait that constantly pursues the ethical ideal and the good. That is why we think it is very important for civil servants to show this quality, as this value reminds that civil servants are forbidden to ask or accept, directly or indirectly, for themselves or for others, any advantage or benefit in consideration of the public office they hold or to abuse in any way that office. The fact that every civil servant holds a "particle" of public power should not have any impact on the way he exercises his duties (Rata, Runcan and Arslan, 2013)

On the other hand, criminal law punishes "the act of the official who, directly or indirectly, claims or receives money or other benefits that are not due to him, or accepts the promise of such benefits or does not reject it, in order to fulfil, not perform or delay the performance of an act regarding his duties or in order to make an act contrary to these duties, shall be punished by imprisonment from 3 to 12 years and the prohibition of certain rights. ". This deed is qualified by art. 254 of the Criminal Code as bribery.³⁸

Article 256 of the Criminal Code penalizes the act of receiving undue benefits defined as "the receipt by an official, directly or indirectly, of money or other benefits, after having performed an act by virtue of his function and to which he is obliged under ", which is punishable by imprisonment from 6 months to 5 years. (2) The money, values or any other received goods are confiscated, and if they are not found, the convict is obliged to pay their cash equivalent".

Also, in the Criminal Code we find in the article 257 consecrated the crime of influence peddling. It is defined as "Receiving or claiming money or other benefits or accepting promises, gifts, directly or indirectly, for oneself or for another committed by a person who has influence or is believed to have influence over an official for determine him to do or not to do an act that falls within his duties" and "shall be punished by imprisonment from 2 to 10 years ".³⁹

- Honesty and fairness

It represents the principle according to which in the exercise of the public function and in the fulfilment of the service attributions the civil servants must be in good faith.

Good faith is the intimate conviction of a person that what he does is right, according to the law; it also represents an obligation to behave in accordance with the rules of coexistence, in compliance with the letter and spirit of the Constitution and the laws, a fair behaviour towards compatriots, respectively towards citizens, by exercising their own rights and freedoms, without prejudice to their rights and the freedoms of others⁴⁰.

Good faith involves knowing the other's interests. Moreover, good faith must be the common thread that runs through the entire activity of civil servants, as they are at the service of citizens and must contribute to satisfying their interests, in compliance with the law.

- Openness and transparency

It is a principle according to which the activities carried out by civil servants in the exercise of their function are public and may be subject to monitoring by citizens.

³⁸ See Penal Code, <http://legislatie.just.ro/Public/DetaliuDocument/109855>

³⁹ TOMESCU, MĂDĂLINA, „ Ethics of the civil servant”, Prouniversitaria Publishing House, Bucharest, 2016, p.149

⁴⁰ Idem

This also implies compliance with the legal regime of incompatibilities and conflicts of interest.⁴¹

- Responsibility and accountability.

From international documents⁴² also result other values that we find declared at the level of various public organizations in Romania and in the world:

- Trust
- Democracy
- Respect for the citizen
- Citizen orientation
- Performance
- Social responsibility

4. The role of values in public management

Values are an important tool that influences the management system whether it is public or private. They are the standards that each organization defines in order to be in line with them and often influence its behaviour in the market. Values also shape the uniqueness and define the authenticity of an organization.

Moreover, the role of the existence of values is to gain the trust of citizens, by providing prompt services and by ensuring a constant attitude in the quality of service delivery. At the same time, a set of values that citizens can acquire can make them more involved, come up with systematically grounded solutions. "The relationship between public administration and beneficiaries means dedication, correlation and orientation on solutions that harmonize with the reforms in the social, cultural-educational, economic-financial, justice and democracy fields."⁴³

Last but not least, respect for fundamental values is the basis for respect for human rights. "Accepting fundamental values is an important social consensus. (...) As moral representations, fundamental values are deeply rooted in our culture and - beyond any abstract rights - have an immediate individual effect on many people. Thus, freedom, equity and the feeling of belonging are not simply abstract parameters, but embody emotionally anchored individual needs and representations, no matter how different they might be formulated and interpreted concretely by each individual. Therefore, the "fundamental values" and the needs represented by them have the essential function of facilitating the consent of citizens to the implementation of fundamental rights, even if they cannot and do not impose it.

Fundamental values are thus an indispensable source and a starting point for the negotiation of fundamental rights, on the one hand, and a system for securing coexistence in society, on the other."⁴⁴

⁴¹ TOMESCU, MĂDĂLINA, „Ethics of the civil servant”, Prouniversitaria Publishing House, Bucharest., 2016, p.149

⁴² See: Code of Conduct for Law Enforcement Officials, <http://www2.ohchr.org/english/law/codeofconduct.htm>; Recommendation No. R (2000) 10 on codes of conduct for civil servants [http://www.coe.int/t/dghl/monitoring/greco/documents/Rec\(2000\)10_EN.pdf](http://www.coe.int/t/dghl/monitoring/greco/documents/Rec(2000)10_EN.pdf); European Code of Good Administrative Behaviour, Office for Official Publications of the European Commission, Luxembourg, 2005

⁴³ ***, Strategy for strengthening public administration 2014-2020, <https://www.mlpda.ro/uploads/articole/attachments/5daeafc50b2a3994189262.pdf>

⁴⁴ <https://library.fes.de/pdf-files/bueros/bukarest/12415.pdf>

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Investigation of the Effects of Organizations' Dynamic and Innovation Capabilities on their Competitiveness and Product Performance

Kudret Çelteklil

Introduction

In accordance with the knowledge-based view, previous research has established a strong and positive relationship between knowledge acquisition and firm performance (Van Wijk et al., 2008). However, the absorptive capacity perspective shows whether the acquired knowledge can be based on improved performance based on the absorptive capacity of a company to absorb and integrate external knowledge based on existing knowledge. (Cohen & Levinthal, 1990). In Alliance learning, the similarity or redundancy of knowledge bases between partners is a key determinant of absorption capacity (Lane & Lubatkin, 1998). When partners' knowledge bases coincide with a sufficient level, it is relatively easy to absorb and integrate new knowledge created by colleagues, whereas remote knowledge limits the absorbing capacity (Fang, 2011). As stated earlier, partner firms compete in the same product markets in competitive alliances and thus have similar knowledge about the characteristics of the customers and the products preferred by different market segments. Because they occupy structurally equivalent positions in a market, they have access to common technology and work on similar production routines. (Rindfleisch & Moorman, 2001). Redundant knowledge provides a common understanding and common beliefs that facilitate the absorption and integration of new knowledge gained from alliance partners and form the building blocks of absorbent capacity (Rindfleisch & Moorman, 2001). However, knowledge redundancy also reveals limitations on a firm's capability to absorb different knowledge (Vasudeva & Anand, 2011). Just as access to extensive, insufficient knowledge bases underlies firm competitiveness, such as the capability to develop radical innovation, excessive knowledge can reduce the marginal utility of knowledge acquisition to increase firm competitive advantage. (Zhou & Li, 2012)

For example, the alliance between Coca-Cola and Nestle combined Nestle's capability to produce soluble coffee and Coca-Cola's strong international distribution network; this created advantages for both companies over their Japanese competitors. (Dyer & Singh, 1998). Furthermore, the alliance between Microsoft and Apple, two dominant competitors in operating systems, has benefited both companies and increased Microsoft's market position due to the GUI technology leaking from Apple. (Li vd., 2008). Both theoretical calculations and anecdotal evidence show that a strategic alliance at the bilateral level can have significant consequences for a focus firm's market competitiveness. Since an alliance with a major partner or strategically most important partner allows a focus firm to acquire critical resources, such an alliance can be expected to have more pronounced effects on the firm's competitive advantages than a regular bilateral alliance.

By comparison, partner firms in non-competitive alliances are likely to be complementary but have different knowledge and skills. (Fang, 2011; Rindfleisch & Moorman, 2001; Rothaermel, 2001). By integrating non-redundant knowledge with its internal stock of knowledge, a firm can increase its market competitiveness through its complementary marketing capabilities, sensitivity to market changes, and innovative product offerings. (Fang ve Zou, 2009; Teece, 1986; Zhou ve Li, 2012). However, differences in knowledge sets also create cognitive barriers to absorbing and integrating external knowledge (Fang, 2011) Although the knowledge recipient company can receive support from the resource company for the knowledge covered by the alliance agreements, the limited absorption capacity puts a

limit on the value of the obtained knowledge to the extent that an excessive acquisition of distant knowledge causes knowledge overload (Phene vd., 2006). Therefore, in general, acquiring knowledge has a positive effect on the competitiveness of the firm; However, in competitive alliances, the acquisition of knowledge increases firm competitiveness at a decreasing rate due to the decrease in the use of knowledge, while non-competitive alliances increase firm competitiveness at a decreasing rate due to the limited absorption capacity of knowledge.

Literature

Dynamic Capabilities

The dynamic capabilities theory has emerged due to changes in the environment and the market. The researchers stated that in order to maintain competitive advantage in a rapidly changing environment, organizations must develop dynamic capabilities to develop core competencies and increase organizational effectiveness. This study argues that dynamic capabilities have an important potential on organizational effectiveness. However, the relationship between dynamic capabilities and organizational effectiveness and performance is still unclear. (Zhou& Zhou, 2017). However, some researchers argue that dynamic capabilities enable organizations to connect their resource base with environmental change, create market change, and facilitate resource access. and resource development also increases organizational effectiveness. It is argued that dynamic capabilities enable an organization to gain competitive advantage in a changing business environment by developing specific capabilities and competencies that support organizational effectiveness and performance. (Teece vd., 1997; Eisenhardt ve Martin, 2000; López, 2005 & Wilden vd., 2013), Teece (2007), Scholars (Rehman & Saeed, 2015; Takahashi et al., 2016 and Zhou & Zhou, 2017) emphasize that dynamic capacities have an indirect effect on organizational efficiency mediated by the development of operational capabilities. In the given theoretical context, the following hypotheses have been developed;

Organizational Innovativeness

Zaltman and his colleagues who state innovation as "an idea, practice or material work perceived as new by the relevant adoption unit" have been the most described definition of innovation in the literature (Zaltman vd., 1973). While approaching innovation as an output, in some other studies, it has been considered as a process in which new or significantly improved products are introduced and new or significantly improved systems are applied (Kalmuk& Acar, 2015). The development of newly developed products and the implementation of newly developed processes and systems enable organizations to respond effectively to changing markets, technologies and competition as a result of the innovation mechanism. (Utterback, 1994; Dougherty ve Hardy,1996). Another process-based perspective shows innovation as the process of generating new ideas, technology development, production and marketing of a newly developed product or process, or the management of activities consisting of these new improved products or processes. (Trott, 2008; Reulink, 2012). From another point of view, innovation is also defined as a strategic asset that helps to improve competitive advantage and firm performance by generating value (Rust vd., 2004). Organizations must respond to rapid changes and cope with increasing complexity to survive in today's aggressive market competition. Innovative organizations can solve this problem by developing new products faster than their competitors. In other words, innovation helps organizations deal with their complex external environment as one of the key elements of long-term success to thrive in dynamic markets and develop the business. (Baker & Sinkula, 2002; Darroch &McNaughton, 2002; Lyon & Ferrier, 2002; Scherer, 1992). Furthermore, these innovative organizations can take the lead in taking advantage of market opportunities

that can lead to increased organizational performance. (Brown & Eisenhardt, 1995; Srivasan vd., 2009). The literature describes the role of the firm's organizational innovativeness in an increasingly competitive environment. In the 1990s, Porter (1990) found that innovation is the basis for long-term sustainable competitive advantage. Thenceafter, numerous studies provide evidence for the positive relationship between organizational innovativeness and job performance. (Zhou et al., 2005; Lee & Tsai, 2005; Lin et al., 2008; Lichtenthaler, 2009; Cheng & Huizingh, 2014). Innovation can lead to higher production efficiency with increased market share, higher productivity growth and increased revenue. (Shefer & Frenkel, 2005). Zahra, Ireland & Hitt (2000) and Srinivasan et al. (2009) state that innovation can improve financial performance as a result of the creation of a wide variety of different products. Today, innovation is considered the main determinant of outstanding company performance. (Lyon & Ferrier, 2002; Bueno & Ordoñez, 2004). Innovative organizations can use new technologies and processes to increase their marketing effectiveness. (Gerni, 2013). In the given theoretical context, the following hypotheses have been developed;

Internal-to-Firm Transaction Costs

Before explaining the transaction costs approach, it is necessary to explain the concept of transaction and how such costs arise. Transaction is the exchange of products or services between different departments or organizations. Transaction can also be defined as an exchange between buyer and seller. Some transactions take place between health services, health institutions, employees, patients and institutions. Due to the uncertainty of some of these transactions, some costs such as brokerage fees and service fees arise during transactions. Transaction costs theoretically emerged by Coase in the late 1930s to estimate economic activity (Ivanaj & Franzil, 2006). Transaction costs can be expressed by organizations as the cost to make a commercial transaction and to compensate for any market defects. The transaction costs view differs from other approaches in that it is based on the analysis of transactions between the organization and the parties outside the organization. Transaction costs, also known as coordination costs, argue that an organization must meet the production and coordination costs in order to perform its operations. While production costs are directly related to production, coordination costs are costs arising from the management of transactions between production costs. The transaction cost perspective emphasizes that organizations should organize the lowest cost in the process of exchanging goods or services with individuals or organizations. Furthermore, the transaction cost approach is based on rationality and efficiency. In the given theoretical context, the following hypotheses have been developed;

Firm Competitiveness

The knowledge-based view emphasizes knowledge as a critical resource that determines the competitive advantages of companies. (Grant, 1996; Liebeskind, 1996). To create competitive advantages, a firm must develop its capability to integrate knowledge across its areas of expertise. (Grant, 1996); In order to maintain its competitive advantages, a firm must learn to protect its proprietary knowledge from expropriation and imitation of competitors. (Liebeskind, 1996). Successful knowledge integration is based on knowledge acquisition and requires the capability to absorb the acquired knowledge for effective use. (Cohen & Levinthal, 1990). Although knowledge leakage is considered a threat to decisive competitive advantages, the lack of empirical verification presents a significant research gap, and filling this gap confirms the informed view about the importance of protecting knowledge. We examine the consequences of competitive regimes on the moderate role. Following previous studies, we defined firm competitiveness as a firm's degree of performance in the market, compared to its main rivals. (Wu, 2008; Wu vd., 2008). We consider the effects of knowledge

exchange on firm competitiveness at a two-pronged level - that is, between a focus company and a main alliance partner. While a firm's market performance may be more prominently affected by its portfolio of alliances with multiple partners, alliance with a major partner can also have a significant impact. The resource-based view of strategic alliances accepts this form of inter-company exchange arrangement, in particular bilateral or bilateral alliances, as "strategies used to access other firms' resources in order to achieve competitive advantages that otherwise cannot be achieved (Das & Teng, 2000). The knowledge-based view shows that proprietary knowledge forms the basis of firm competitive advantages and leakage of such knowledge will disrupt firms' long-term performance and competitive advantages (Grant, 1996; Liebeskind, 1996). Competitive partners guided by different special interests and conflicting goals,, competitive partners are encouraged to learn from their peers by replicating or imitating the core knowledge and competencies of their competitors. (Hamel, 1991). Since partners serve common product markets, appropriate knowledge can be efficiently transferred to similar conditions of use, enabling buyers to leverage the competitiveness of resource firms. In the given theoretical context, the following hypotheses have been developed;

New Product Performance

Innovation is a process that includes the transformation, adaptation, implementation and integration of new ideas, new markets and applications in the business into new products and services. Innovation unlike discovery or invention, innovation refers to the management of all activities from the formation of an idea to its arrival to the market, an economic and social system that depends on differentiating and changing its result rather than innovation itself. Creativity is different from innovation; Creativity is seen as the starting point for innovation, although it includes the activation of creative ideas in the business. While closely related to the concepts of product innovation, technological product innovation and technological process innovation, the types of marketing and organizational innovation were later included in the Oslo Guide. Product innovation is defined as "The introduction of a new or significantly improved product or service according to its existing characteristics or foreseen uses". Product innovation has been defined by some researchers (Dibrell et al., 2008) as innovations and changes made in the goods produced by a company and an institution. Furthermore, Product Innovation is the expression of a significantly improved product or service. It includes significant improvements in technical specifications, components, materials, embedded software, or other functional features. Providing the innovation conditions of the actors such as the state, sector, research institutions that affect the innovation; facilitating the flow and exchange of technical knowledge; developing the best technology transfer; focusing on competition, seeing opportunities and increasing communication; It has contributions such as facilitating the production capabilities of enterprises. In today's competitive environment, businesses need to compete with their competitors and apply competitive priorities more successfully than their competitors in order to gain an advantage over them. On the other hand, it is of great importance for businesses to be innovative so that they are not easily targeted to their competitors as a dynamic organization. While innovation is an important factor in all periods of economic life, in today's competitive environment, companies' continuous renewal of their products, processes and organizational structures has become the main element of their survival (Aloulou, 2018). In the given theoretical context, the following hypotheses have been developed;

Methodology

Within the scope of the research, a survey was conducted with 346 employees. The data obtained by using SPSS 25 Statistical Package Program were evaluated and "descriptive" analysis was used in demographic information. Factor analysis and reliability analysis were performed in the questions using the Likert scale. Correlation analysis in examining the relationships between variables; Regression analysis was used to test the hypotheses and the sobel test to measure the effect of the moderator. In the first part of the questionnaire, which consists of two parts, there are questions about the demographic information and jobs of the participants. The second part of the questionnaire consists of scales related to Dynamic Capabilities, Organizational Innovativeness, Internal-to-Firm Transaction Costs, Firm Competitiveness and New Product Performance.

Research Goal

In this research, we aim to determine the effects of the relationships between Internal-to-Firm Transaction Costs Intermediate Variable Effect of Dynamic Capabilities and Organizational Innovation and Firm Competitiveness and New Product Performance on white collar employees working in companies operating in the production sector. Choosing the production sector is the active realization of Internal-to-Firm Transaction Costs activities within this sector. The reason for the selection of white-collar engineers in the sample population is that they constitute our sample population because they play a role in both Internal-to-Firm Transaction Costs and New Product Performance. Therefore, our research aim is to evaluate and analyze production companies in terms of Dynamic Capabilities and Organizational Innovativeness as well as Firm Competitiveness and New Product performance. To test the propositions, a field survey was conducted using a questionnaire.

Analyses

Survey questions consist of questions representing 5 variables. The first part of the questionnaire includes the demographic information of the individuals and information about the job. In the second part of the questionnaire, there are questions representing 5 variables. In the scale of Dynamic Capabilities, important studies referenced in many studies were taken into consideration in the literature research; In 1999, Avolio et al. (The study by Kark, R., Shamir, B., Chen, G., and the studies by Wang, P., Rode, J.C., contributed to our literature study). The scale developed by Bass and Avolio in 2000 was used to measure Organizational Innovativeness in the sample population. Internal-to-Firm Transaction Costs was measured with a 5-question scale prepared by Nakata in 2011; Scale; A 5-point Likert scale ranging from "strongly disagree" to "strongly agree" was used. Tiwana's (2004) scale was used to measure Firm Competitiveness. Scales that measure new product technical performance according to the company's stated targets were developed by Atuahene-Gima and Ko (2001) and Moorman (1995). In the scale, a scale based especially on perceptual performance indicators was used. In our New Product Performance scale, it was stated that the performance criteria of the last three years should be taken into account and it was asked to be evaluated between "Very Good-Very Bad" in a 5-Likert scale. (Homburg ve Pflesser, 2000).

Findings

All 346 white-collar employees (engineers) working in different departments of 26 companies answered our survey in accordance with the criteria. 188 men and 158 women responded with white-collar to our survey. While 36.7% of the participants are between the age group of 17-27; 49.7% of them are in the 28-40 age group. The number of managers over the age of 41 is 13.1%. While 6.8% of the employees who answered the questionnaire are high school graduates, 16% are college graduates, 63.9% are university graduates; 12% have a master's

degree and 1.1% have a doctorate degree. Descriptive analysis results for individual factors are shown in the table below. The level of achieving the goals set by the employees individually; 29 participants stated the level of achieving their goals as "Very Low", 52 participants as "Low", 107 participants as "Moderate", 116 participants as "High", and 42 participants as "Very High".

Research Framework

In the research, a quantitative approach has been adopted as the data are analyzed to determine the relationship between statistical concepts. In a quantitative research test, we use the independent variable or independent variables to evaluate the effect on the dependent variable. (Thomas et al., 2015).

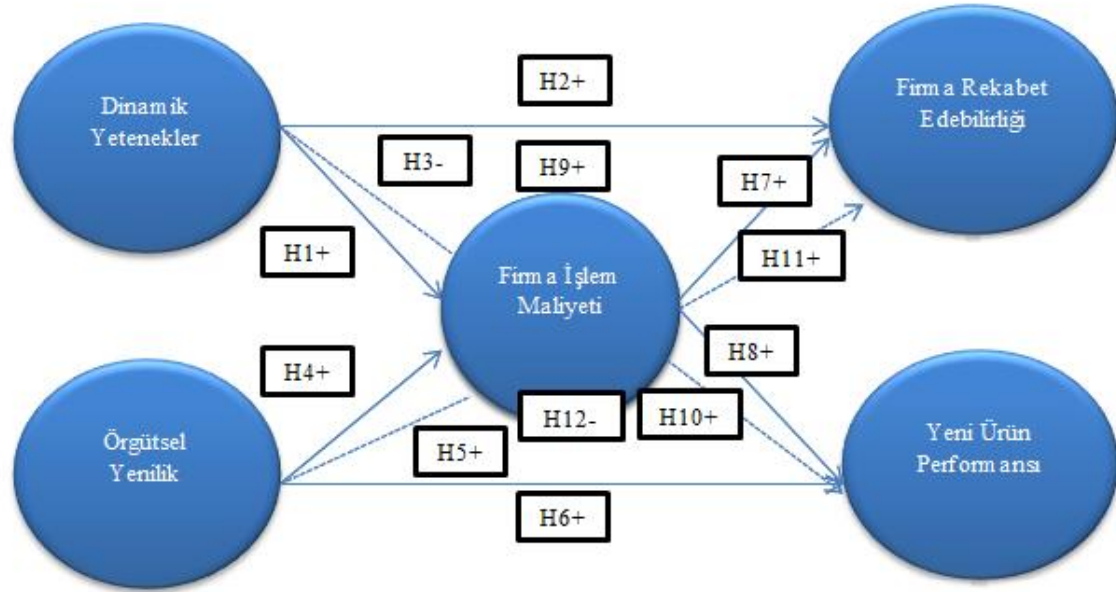


Figure 1. Research Model

Factor Analysis

Factor analysis was conducted to investigate the construct validity of the scale. Büyüköztürk (2005) does not recognize factor analysis as a multivariate statistical method that aims to discover a small number of unrelated conceptually meaningful variables (factors, dimensions) by bringing together related variables. In order to determine whether the data obtained from the pre-application are suitable for factor analysis, Kaiser-Meyer Olkin (KMO) sample fit test and Bartlett's sphericity test were performed and the diagonal values of the anti-image correlation matrix were examined.

The fact that the Kaiser-Meyer-Olkin sample fit value is 0.947 and the significance level of Bartlett's test of sphericity is 0.000 (for $p \leq 0.05$) indicates that the data are suitable for factor analysis. As a result of the principal component analysis applied in order to bring the data set to a form that can be analyzed by factor analysis, 5 factors were formed.

In our study, the variables prepared according to the 5-point Likert scale were measured with a 39-question questionnaire. As a result of the factor analysis, 13 questions were excluded from the scale since they did not show a factor distribution and fell into different factors by reducing the reliability. The remaining 26 questions are divided into 5 factors. Our variables subjected to factor analysis together with their factor loadings are shown in the table below:

Tablo 2. Rotated Component Matrix

Rotated Component Matrix^a					
	Component				
	1	2	3	4	5
DC12. The firm uses its own networks to influence its competitors.	0.841				
DC10. The company uses personal networks to be successful in the competition.	0.836				
DC15. The company attaches importance to the experience of the employees to be successful in the competition.	0.831				
DC16. Employees are always willing to adopt new ways of working.	0.817				
DC9. The company uses its networks as a resource of knowledge.	0.810				
DC13. Employees actively participate in generating ideas for new products.	0.804				
DC11. Networks owned by employees are important resources of knowledge for the company.	0.803				
DC8. The company constantly invests in technology for its R&D Department.	0.795				
DC17. Employees have enough room to take advantage of new opportunities as long as it does not affect existing activities.	0.792				
DC7. Management supports R&D processes.	0.780				
DC14. Employees actively participate in generating ideas for new organizational procedures.	0.775				
DC6. Our company has proper plans for R&D activities.	0.726				
OI5. In the introduction of a new product, the firm is at the forefront of Technological innovation.		0.815			
OI4. In a new product offering, the firm is looking for new markets.		0.763			
OI3. In the introduction of a new product, the company gains a significant advantage in the market.		0.724			
OI2. The company is acting faster than competitors in a new product presentation.		0.710			
IFTC3. Coordination and management of employees is very costly.			0.749		
IFTC2. Specifications and procedures for activities can be time consuming.			0.735		
IFTC1. It takes a lot of time to check and monitor as they run their activities.			0.709		
NPP3. The return on assets is very good compared to the stated target.				0.870	
NPP2. Returns are very good compared to the sales target.				0.832	
NPP4. The profit margin is very good compared to the stated target.				0.792	
NPP1. The market share is very good according to the				0.749	

stated target.					
FC1. After joining the alliance, the firm gets ahead of the competitors in the market.					0.812
FC3. After entering the alliance, the firm can recognize changes in the market (ie competition, market conditions) faster compared to the main competitors.					0.771
FC2. After entering the alliance, the firm can offer customers higher quality products and services compared to the main competitors.					0.736
Extraction Method: Principal Component Analysis.					
Rotation Method: Varimax with Kaiser Normalization.					
a. Rotation converged in 5 iterations.					

DC: Dynamic Capabilities, OI: Organizational innovation IFTC: Firm Transaction Costs, FC: Firm Competitiveness, NPP: New Product Performance

Reliability analysis is defined as the internal consistency of the measurement that takes into account the average relationship between the questions. In the literature, measurements with Cronbach Alpha coefficient of 0.70 and above stated by Nunnally (1978) are considered sufficient. (Nunnally, J. C., 1978; Hair et al., 2000; Büyüköztürk, 2007).

Tablo 4. Güvenirlilik Analizi

VARIABLES	Number of Questions	Cronbach Alfa (α) Values
Dynamic Capabilities	12	.963
Organizational innovativeness	4	.880
Internal-to-Firm Transaction Cost	3	.879
New Product Performance	4	.833
Firm Competitiveness	3	.856

Validity is the degree to which a measurement tool can accurately measure a variable. Factor analysis was used to determine the construct validity. KMO and Bartlett test values; It was conducted to determine the suitability of the scales for factor analysis, the adequacy of the sample size, and whether the data were normally distributed.

Correlation analysis; One-to-one relationships between Dynamic Capabilities, Organizational Innovativeness, Internal-to-Firm Transaction Costs, Firm Competitiveness and New Product Performance are discussed. As we mentioned before, the analyzes (factor analysis, reliability analysis, descriptive analysis) have been conducted on 346 questionnaires obtained from institutions so far.

Statistics is a branch of science that deals with the collection, classification, presentation and interpretation of numerical data (Johnson, 1987). It is a technique used to make the data collected by scientific methods meaningful (Linguist, 1989). Descriptive statistics include methods and techniques for collecting, describing and presenting numerical data.

Descriptive statistics are used to summarize the large amount of numerical data obtained in research with a few simple expressions. Descriptive statistics include summary information such as the number of times each value or set of values repeats in a variable, how the values are distributed around a point chosen as the center, how far they are relative to the midpoint or each other.

Tablo 6. Correlations

Correlations						
		dynamic capabilities	Organizational Innovativeness	Firm Transaction Costs	Firm competitiveness	New Product Performance
Dynamic capabilities	Pearson Correlation	1				
	Sig. (2-tailed)					
	N	346				
Organizational Innovativeness	Pearson Correlation	.550**	1			
	Sig. (2-tailed)	0.000				
	N	346	346			
Firm Transaction Costs	Pearson Correlation	.474**	.677**	1		
	Sig. (2-tailed)	0.000	0.000			
	N	346	346	346		
Firm competitiveness	Pearson Correlation	.548**	.500**	.523**	1	
	Sig. (2-tailed)	0.000	0.000	0.000		
	N	346	346	346	346	
New Product Performance	Pearson Correlation	.102*	.171**	.176**	.100*	1
	Sig. (2-tailed)	0.026	0.000	0.000	0.030	
	N	346	346	346	346	346
**. Correlation is significant at the 0.01 level (2-tailed).						
*. Correlation is significant at the 0.05 level (2-tailed).						

Supported and Unsupported Hypotheses According to Regression Analysis Results

Regression analysis was used to test the predicted research hypotheses and according to the results of these regression analyzes, 8 hypotheses analyzed except for the moderator effect are shown in Table 7.

Table 7.Regression Analysis Results

IV	DV	Standard β	Sig.	Adjusted R Square	F Value
Dynamic capabilities	Firm Transaction Costs	.474***	.000	.223	136.391
Dynamic capabilities	Firm Competitiveness	.548***	.000	.299	202.668
Dynamic capabilities	New Product Performance	.102	.026	.008	4.991
Organizational Innovativeness	Firm Transaction Costs	.677***	.000	.457	398.510
Organizational Innovativeness	Firm Competitiveness	.500***	.000	.248	156.896
Organizational Innovativeness	New Product Performance	.171***	.000	.027	14.143
Firm Transaction Costs	Firm Competitiveness	.339***	.000	.388	150.308
Firm Transaction Costs	New Product Performance	.176***	.000	.029	14.994

*: p<0.05

**:p<0.01

***:p<0.001

Tablo 8.

Hypothesis	Supported / Unsupported	Anlamlilik Düzeyi(Sig.)
<i>H1: Dynamic capabilities of organizations have a positive effect on firm transaction costs.</i>	Supported	<i>P<0.001</i>
<i>H2: The dynamic capabilities of organizations affect the competitiveness of the firm positively.</i>	Supported	<i>P<0.001</i>
<i>H3: The dynamic capabilities of organizations positively affect the new product performance.</i>	Supported	
<i>H4: Organizational innovativeness of organizations positively affects firm transaction costs.</i>	Supported	<i>P<0.001</i>
<i>H5: Organizational innovation of organizations positively affects the competitiveness of the firm.</i>	Supported	<i>P<0.001</i>
<i>H6: Organizational innovativeness of organizations positively affects new product performance.</i>	Supported	<i>P<0.001</i>
<i>H7: The firm transaction cost of organizations positively affects the firm's competitiveness.</i>	Supported	<i>P<0.001</i>
<i>H8: The firm transaction cost of organizations positively affects new product performance.</i>	Supported	<i>P<0.001</i>

Determination of Mediator Variable Effect in Our Research Model; Firm transaction costs in determining the effect of intermediate variable in our research model; The effect of the hypotheses established as a result of the analysis of the role of the intermediate variable in

the relationship between dynamic capabilities and organizational innovation arguments and firm competitiveness and new product performance dependent variables was stated;

Table 9.Araci değişken Etkisinin Regresyon Analizi Sonuçları

	Independent Variables	Dependent Variables	Standard β	Sig .	Adjusted R Square	F Value
Regression	Dynamic capabilities	Firm competitiveness	.025	.632	.008	4.991
	Firm transaction costs		.164*	.002	.027	7.600
Regression	Dynamic capabilities	New product performance	.388***	.000	.299	202.668
	Firm transaction costs		.339***	.000	.388	150.308
Regression	Organizational innovativeness	Firm competitiveness	.269***	.000	.248	156.896
	Firm transaction costs		.341***	.000	.310	106.955
Regression	Organizational innovativeness	New product performance	.096	.121	.027	14.143
	Firm transaction costs		.111	.072	.032	8.728

*: $p < 0.05$

**: $p < 0.01$

***: $p < 0.001$

Measuring the effect of the intermediate variable with the sobel test; it is necessary to determine whether the indirect effect of the independent variable (through the mediator) on the dependent variable is significant in 1986 by Baron and Kenny to be able to talk about the mediation effect in order to explain transient effect. Various tests have been developed to achieve this, one of which is the Sobel test (Sobel, 1982). This test is calculated using the uncorrected regression coefficients and standard error values of the relevant variables. These criteria are used informally to assess whether mediation exists, but MacKinnon, Warsi, and Dwyer (1995) popularized statistically-based methods by which mediation can be formally assessed. There are two main versions of the "Sobel test". These; 1944/1947 by Aroian (popularized as Sobel test by Baron & Kenny) and Goodman in 1960.

Analysis of Mediator Variable Effect Using Sobel Test

In the relationship between dynamic capabilities and firm competitiveness, analyzing the intermediary variable effect of firm transaction cost by using Sobel test;							
Independent Variable	Dynamic capabilities		Input:		Test statistic:	Std. Error:	p-value:
		a	0.418	Sobel test:	6.76201934	0.0226246	0

Mediation	Firm transaction costs	b	0.366	Aroian test:	6.74550726	0.02267998	0
Dependent Variable	Firm competitiveness	Sa	0.036	Goodman test:	6.77865328	0.02256908	0
		Sb	0.044				
Analyzing the intermediary variable effect of firm transaction cost in the relationship between dynamic capabilities and new product performance with the Sobel test;							
Independent Variable	Dynamic capabilities		Input:		Test statistic:	Std. Error:	p-value:
		a	0.418	Sobel test:	3.04206516	0.01992397	0.00234961
Mediation	Firm transaction costs	b	0.145	Aroian test:	3.03161159	0.01999267	0.00243252
Dependent Variable	New product performance	Sa	0.036	Goodman test:	3.05262762	0.01985503	0.00226847
		Sb	0.046				
In the relationship between organizational innovation and firm competitiveness, the analysis of the mediator effect of firm transaction cost by Sobel test;							
Independent Variable	Organizational innovativeness		Input:		Test statistic:	Std. Error:	p-value:
		a	0.738	Sobel test:	6.22610986	0.04350164	0
Mediation	Firm transaction costs	b	0.367	Aroian test:	6.21905941	0.04355096	0
Dependent Variable	Firm competitiveness	Sa	0.037	Goodman test:	6.23318435	0.04345227	0
		Sb	0.056				
Analysis of Mediator Variable Effect of Firm Transaction Cost Between Organizational Innovation and New Product Performance;							
Independent Variable	Organizational innovativeness		Input:		Test statistic:	Std. Error:	p-value:
		a	0.738	Sobel test:	1.8073491	0.04001662	0.07070786
Mediation	Firm transaction costs	b	0.098	Aroian test:	1.80510051	0.04006647	0.07105896
Dependent Variable	New product performance	Sa	0.037	Goodman test:	1.80960612	0.03996671	0.07035689
		Sb	0.054				
If the p value is less than <0.05, we explain with the sobel test that there is a mediator variable effect.							

Hypothesis results;

Table 10. Research Hypotheses Supported / Not Supported

Hypothesis	Supported / Unsupported	Significance Level (Sig.)
<i>H9: There is a variable effect of firm transaction cost mediation between dynamic capabilities and firm competitiveness.</i>	Supported	<i>P<0.001</i>
<i>H10: There is a variable effect of firm transaction costs intermediary between dynamic capabilities and new product performance.</i>	Supported	<i>P<0.001</i>
<i>H11: There is mediate variable effect of firm transaction costs in the relationship between organizational innovation and firm competitiveness.</i>	Supported	<i>P<0.001</i>
<i>H12: There is mediate variable effect of firm transaction costs in the relationship between organizational innovation and new product performance.</i>	Unsupported	

In our research model, in which the effect of Firm Transaction Costs moderator was measured, it was supported by SPSS regression and Sobel Test, which has no effect on the relationship between Organizational Innovation and New Product Performance under the effect of Firm Transaction Costs moderator. At the same time, it was supported by SPSS Regression and Sobel Test with other moderator effects. As a result of the analysis, the H9, H10 and H11 hypotheses were supported. H12 Hypothesis is not supported.

Conclusion and Discussion

Despite most empirical studies that prove the positive relationship between innovation and performance, there is no consensus on how it affects performance. (Brown ve Eisenhardt, 1995; Damanpour, 1991; Damanpour vd., 1989; Hansen vd., 1999; Thornhill, 2006; Weerawardena vd., 2006). In the literature, some studies emphasize the relationship between strategic orientation, innovativeness, and business performance. Han et al. (1998) and Hurley and Hult (1998) stated that the innovation and success of the new product is the influence of the market. Deshpande et al. (1993) demonstrated the impact of market orientation on company innovation. Slater and Narver (1994) saw innovation as one of the core value-creating capabilities in supporting market orientation and company performance. In this context, one of the aims of this study is to analyze the joint impact of strategic orientations and innovation on business performance in order to determine the possible moderate impact of innovation on organizational performance.

It is the natural competitive forces and changing consumption patterns that provide competitive advantage and superior performance. (Sharma & Lacey, 2004). While these evidence provide insight into the positive impact of innovation on superior business performance, the path of innovation to business performance has been blurred by individual findings. Recent research has indicated the possibility of moderating the role of innovation depending on certain circumstances. (Rubera& Kirca, 2012). By following the Rubera and Kirca (2012) approach, we also acknowledged that the process perspective can better explain the relationship between innovation and business performance. Therefore, innovation is considered an input as well as an output. In contrast, firms in noncompetitive alliances serve different product markets and have different knowledge bases. As mentioned earlier, the excess of knowledge bases prevents the formation of strong absorption capacity and makes it difficult to integrate private knowledge from partners. When knowledge leakage occurs in non-competitive alliances, provided that knowledge is outside the scope of alliance agreements, it is difficult for the acquiring firm to assimilate and exploit the knowledge as it does not support restricted absorptive capacity and exploitation of knowledge. Consequently,

the leaked knowledge cannot be used effectively for its intended purpose. Thus, knowledge leakage harms certain competitiveness in competitive alliances, but can have a harmless effect on noncompetitive alliances.

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