Strategic imperatives of economic systems management in the context of global transformations

Scientific monograph
edited by Dr.oec. Prof. Maksym Bezpartochnyi,
Dr.oec. Prof. Viktoriia Riashchenko,
Dr.paed. Nina Linde

Institute of Economics of the Latvian Academy of Sciences (Riga, Latvia) 2021

Authors:

Sonja Bajramović Hajdarović
Viera Bartosova
Olesia Bezpartochna
Maksym Bezpartochnyi
Serhii Buhenko
Nendrė Černiauskienė
Diana Chernukh
Rolandas Drejeris
Bogdan Fleaca
Larysa Frolova
Lukasz Furman
Dino Giergia
Jasmina Gržinić
Anna Hanczyk
Margarita Išoraitė
Dusan Karpac
Bohdan Kotov
Veslav Kuranovic
Lilia Lesyk
Aleksandr Polusin
Victoriia Serzhantova
Vladimir Shedyakov
Mirela Sučić Čevra
Anastasiya Symak
Nataliia Trushkina
Olexandr Yemelyanov
Svitlana Yermak

Strategic imperatives of economic systems management in the context of global transformations: scientific monograph / edited by Dr.oec. Prof. Maksym Bezpartochnyi, Dr.oec. Prof. Viktoriia Riashchenko, Dr.paed. Nina Linde. – Riga: Institute of Economics of the Latvian Academy of Sciences, 2021. – 205 p.

The authors of the book have come to the conclusion that to improve the efficiency of managing economic systems in the context of global transformations it is necessary to use modern methods of strategic management and marketing, information technologies. Basic research focuses on assessment the economic results of enterprises, analyzing the financial stability of business, knowledge management and education, corporate culture of logistics companies, development of advertising, differentiation of state revenues, impact of investments in energy saving. The research results have been implemented in the different models of anti-crisis management, business risk management, supply chain management, digital transformation in tourism, and implementation of leadership entrepreneurship. The results of the study can be used in decision-making at the level of international business, ministries and departments that regulate the processes management and development of economic systems, the introduction of information technologies and digitalization of economic systems management. The results can also be used by students and young scientists in developing of strategies, models and technologies for economic systems management in the context of global transformations.

The scientific monograph is approved for publication at the meeting of the Scientific Board of the Institute of Economics of the Latvian Academy of Sciences of *08 December 2021*, *Minutes No. 2021/8-12*.

ISBN 978-9984-774-32-9 (print)
ISBN 978-9984-774-31-2 (PDF)

Contents

INTRODUCTION

Global transformations, which are accompanied by corresponding transformations in society, lead to changes in the external environment and adaptation to new conditions of economic systems management. These transformations can have an objective character independent of humanity, or they can be caused by the subjective, purposeful actions of certain participants in these transformations. If global transformations do not correspond to the objective laws of development, then the changes will be accompanied by contradictions and will be characterized by unexpected consequences and paradoxical manifestations. All this leads to the search for new strategies for economic systems management.

To ensure effective of economic systems management in the context of global transformations, it is necessary to form appropriate resource provision, use innovations in various spheres of activity, introduce mechanisms for the stable functioning of economic entities, search for ways to avoid threats from the external environment and overcome various types of risks, consolidation of intra-economic reserves, search for ways to ensure the competitiveness of economic entities on the markets.

The purpose of writing this scientific monograph is to justify the theoretical and methodological foundations for economic systems management in the conditions of global transformations.

The object of the authors' research was the process of strategic management of economic systems, the implementation of anti-crisis management models for economic processes, the use of information technologies to ensure the effective functioning of economic entities in conditions of permanent changes in the external environment, fluctuations in the market situation, a decrease in the level of business activity and solvent consumer demand, consequences of the covid-19 pandemic.

The subject of the study was the mechanisms of strategic management and development of economic systems, the formation of a modern methodology of financial and investment management, the introduction of information technologies and digitalization of economic systems management, development models of entrepreneurship in the context of global transformations.

Chapter 1

MODERN PARADIGMS OF STRATEGIC MANAGEMENT AND DEVELOPMENT OF ECONOMIC SYSTEMS

Dino Giergia
PhD in Economics
Dea Flores d.o.o.
(Rijeka, Croatia)
ORCID: https://orcid.org/0000-0002-9365-4868

SPIRITUAL LEADERSHIP IN BUSINESS MANAGEMENT – LITERATURE REVIEW

Abstract
Background: *Given the challenges in leadership and the current health and economic uncertainties with COVID-19 that many countries are facing for the first time, modern societies require a new type of manager; the one who will know how to manage the company's social capital, primarily in the direction of reduced stress and uncertainty at work; but also, the use of social capital in achieving better economic results. For this purpose, we used spiritual leadership theory Fry (2003).* ***Objective:*** *state of the art literature review of key topic spiritual leadership in order to determine the direction in which the theory is moving and its possible limitations.* ***Methods/Approach:*** *We made a bibliometric analysis of the research area using keywords in the Web of Science database identifying key authors, articles, topics. Using quantitative analysis of articles (e.g., bibliographic coupling, co-word analysis) between 1955 and 2021 we managed to differentiate several article clusters.* ***Results:*** *As a result of bibliometric analysis, we found that the field of research is defined by 164 articles published in 116 scientific journals written by 325 authors. We also find that field of research can be divided into eight key clusters.* ***Conclusion:*** *since its inception the research area is distinctly defined by a couple of authors. We can conclude that it is necessary to increase the body of literature and the number of research related to empirical articles.*

Keywords: *leadership; spirituality; spiritual leadership.*

1. INTRODUCTION

Driven by the COVID-19 pandemic and the uncertainty it has brought with it, we believe it is time to explore new business models and people management. Therefore, we think it is the right time to introduce spirituality to the business leadership arena. Like Fairholm (1996, p. 15) states: "*Humankind cannot evolve beyond its current state of crisis by using the same thinking that created the situation. Conducting business as usual is to conduct business into decline*".

Spirituality can be found in the management literature (e.g., Mitroff & Denton, 1999; Rego & Cunha, 2008; Dent et al., 2005; Cavanagh, 1999); however, it is not widely represented. Part of the reason lies in the fact that it is the intangible asset of every human being, therefore, difficult to quantify. Spirituality can be understood and articulated through several dimensions; "transcendence, self-engagement, self-efficacy, self-awareness, service towards others" (Makkar and Singh, 2018, p. 6). Based on their research, we can define spirituality as: "*Spirituality is defined as a transcendental relationship with the higher being, leading us to the path of self-awareness and self-engagement, which enables us to serve others for the benefit of society at large*"(Makkar and Singh, 2018, p. 6).

Using this definition, we can get a good sense of what leadership is all about, serving other for greater good. We believe this should be the key goal of effective leadership. With that being said, we believe that the critical mission of spiritual leadership is to enable employees to develop self-awareness and self-engagement through meaningful work to expand on the used definition. Following this logic, spirituality at work suddenly plays a vital role in employee development and benefiting society. Therefore, we consider that spiritual leadership is an essential part of spirituality at work, which, in addition, is a smaller part of spirituality in general.

2. Theory development

2.1. Spiritual leadership

In a special issue of The Leadership Quarterly in 2005, spiritual leadership came into focus. Spiritual values have been linked to leadership practices and effectiveness (Dent, Higgins, and Wharff, 2005). Some other like integrity, honesty, and humility had proven influence on leadership (Reave, 2005) which sparked a debate about the spiritual leadership theory by Fry (2003). Markow and Klene's (2005) research supports emphirically Fry's (2003) spiritual leadership theory. They state a relationship between meaning, calling, and organizational commitment is apparent. Meaning derived from self-transcendence was highly corelated with calling, while it can't be said for meaning derived from religion, making this first empirical study directly supporting Fry's (2003) spiritual leadership.

Spiritual leadership theory tires to find an answer to how an individual can transcend himself within a community or workplace. A prerequisite for this is to create an environment based on altruistic love (Fry el al., 2011). Like Fry and Cohen (2009, p. 272) states: *"Meeting spiritual needs in the workplace has an extremely positive effect on human health and mental well-being and forms the basis for spiritual leadership".* Positive characteristics such as trust, motivation, well-being, social responsibility are the main benefits that spiritual leadership can improve by touching on these basic needs.

Unlike previous leadership models that are based on cost-benefit assumptions (Bass, 1985) the base of spiritual leadership is focused on transformational leadership that emphasizes the symbolic behaviour of the leader (Avolio, Walumbwa & Weber, 2009; Chen and Li, 2012). Therefore, according to Fry (2003) and Claus and Fernando (2016) key part of spiritual leadership theory is how to become a spiritual leader.

We can therefore conclude that the main goal of spiritual leadership is to meet the basic needs of leaders for spiritual well-being through vocation and membership. This can be achieved by creating a vision at the organizational, team and individual level that will encourage not only physical well-being but also mental well-being while at the same time increasing the productivity of the organization (Fry, 2003, 2005). This becomes extremely important if we take the economic uncertainties that carry great pressure which adversely affects employees by increasing their anxiety and performance at work (Chen and Yang, 2012). Therefore, the main task of spiritual leadership is to alleviate the harmful consequences that employees may feel at work.

In spiritual leadership, each, leader, and follower have different characteristics. According to Altman (2010), the main characteristics a leader must display are understanding themselves and others, compassion, altruism, employee-business relationships, and crucially, clearly communicating a vision that everyone will strive for together.

The essential qualities of spiritual leaders are understanding themselves and others, strong intuition; action based on care; interrelated views of tasks, staff, and processes; and a clear vision of the future (Altman, 2010). There are three factors that spiritual leaders must have:

1. Vision: according to Kotter (1996), it refers to a distant future with some context of why people should aspire to it.
2. Hope/faith refers to the: "*Source of the belief that the vision/purpose/mission of the organization will be fulfilled*" (Fry, 2003) and therefore "adds faith, belief, trust and action to do the job of achieving the vision" (Fry, 2003).
3. Altruistic love: refers to: "*A sense of wholeness, harmony, and well-being produced by the attention, care, and respect of themselves and others*" (Fry el al., 2017, p. 3).

Characteristics of followers are: (1) meaning/vocation, defined as: "*How one makes a difference through serving others and thus gaining meaning and purpose in life*"; and (2) membership: *"A sense that you are understood and appreciated"*. (Hannah, Walumba, and Fry, 2011).

In order to portray spiritual effectual leader, spiritual leadership model combines "vision", "hope/faith" and "altruistic love" (Chen and Li, 2012; Fry, 2003). To motivate oneself and others in spiritual well-being, to enhance calling and membership, and to induce employees to find meaning in their lives, be understood and respected, spiritual leadership encompasses the values, attitudes, and behaviours of a leader. (Fry et al., 2005).

Fry (2003, p. 694) defines spiritual leadership as: "*Comprising the values, attitudes, and behaviours that are necessary to intrinsically motivate oneself and others so that they have a sense of spiritual survival through calling and membership*".

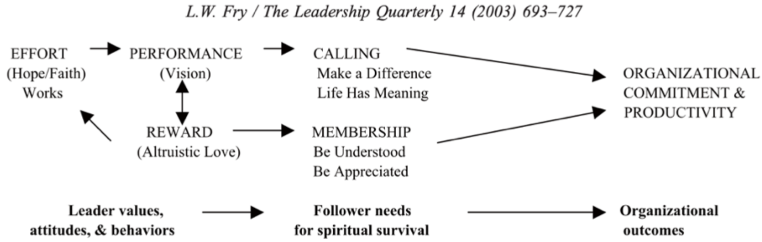

Figure 1.1 Causal model of spiritual leadership

According to Fry (2003), this definition implies:

1. Creating an inclusive vision that enriches employees' lives and makes them feel like they are making a difference.
2. Creating an organizational culture based on altruism. Such an organizational culture contributes to mutual respect, creates a sense of community, resulting in employees feeling understood and valued.

There are several dimensions of spiritual leadership (Fry et al., 2011):

- “Vision” – According to Daft and Lengel (1998), strong vision enables the maintenance of high ideals and gives meaning to work. To achieve a highly motivated workforce, the basic task of spiritual leadership is to create a strong vision based on altruistic values. When such a vision is defined, employees become committed and more productive (Fry and Slocum, 2008).
- “Altruistic love” – Altruistic love is defined as: “*Whereby leaders and followers have genuine care, concern, and appreciation for both self and others, thereby producing a sense of membership and feel understood and appreciated“* (Fry, 2003., p. 695).
- “Hope / Faith” – Deriving hope from a strong vision provides employees with security. It enables them to face problems and difficulties to achieve their goals. Therefore, faith is an extremely important factor in the realization of vision (MacArthur, 1998).

- Spiritual well-being – the manifestation of spiritual leadership is the spiritual well-being of higher groups, especially group calling and membership. According to Fleischman (1994) there are two key aspects of spiritual well-being regarding workplace: 1) transcendence and calling and 2) membership.
- Calling – *“Experience of transcendence or how one makes a difference by serving others and gaining meaning and purpose in life.”* Fry (2003, p. 703).
- Membership – Membership is one of the most basic human needs that is realized through various social, business, and cultural structures (Fry et al., 2011).
- The mediating role of spiritual well-being – According to Fry (2003) a sense of connectedness and experience of group members leads to an increase in spiritual well-being which ultimately leads to positive organizational outcomes and increased organizational commitment.

Tapping into concepts such as human health, character ethics, and positive psychology, Fry (2005, 2008) expands his theory of spiritual leadership with inner life and life satisfaction. According to Duchon and Plowman (2005) and Vail (1998), the inner life speaks to who they are, what they do and what their contribution to life is. This represents the basic feelings of the individual. Inner life, as part of the spiritual leadership theory, is a quest. The search for different sources of motivation that, through altruistic love and service, fosters faith in what a person is doing. It consists of several practices. Some may be yoga, prayer, diary-keeping, walking in nature, etc. These practices help individuals become more aware of the moment and draw strength from their beliefs, and teachings. (Fry 2003; Fry and Kriger 2009).

In addition to inner life, life satisfaction is highly regarded in expanded theory. It is defined as: “*Global evaluation by a person of his or her life and is considered to be an important component of subjective well-being“ (Fry et al., 2017, p. 3).* According to Ryff and Singer (2001) people with higher levels of life satisfaction will, usually, lead more abundant life, including a healthy level of psychological well-being. Additionally, the ones who practice spiritual guidance on a personal level would achieve a high level of contentment, joy, peace, and serenity (Ryff and Singer, 2001). Such individuals will: 1) be capable of higher psychological well-being and 2) feel lower allostatic load (e.g., mortality, cognitive diminishing) and with that related physical problems.

Given the theoretic framework, our key aim of this study is to make a state-of-the-art bibliometric analysis. We will incorporate all the articles from the Web of Science database. We believe that this is the right time for this kind of research because future management and leadership models should be based on alternative models of management, which certainly include spiritual leadership. Also, as stated in the introduction, the COVID-19 pandemic is associated with an increased risk of anxiety and depression (Hyland et al., 2020); therefore, we believe that spiritual leadership can, at least in a business environment, alleviate unwanted consequences. Based on theoretical framework and theory development we have five key research questions:

Q1 – What are the trends of published articles on spiritual leadership theory?

Q2 – Which authors have published the most articles? Who contributed the most to the development of the field of research?

Q3 – How are key articles divided by top journals, countries, and institutions? What is the impact factor of these journals?

Q4 – Advanced bibliometric analysis (e.g., co-citation, co-words, co-authorship, bibliographic coupling) of the field of research.

Q5 – What are the field of research main topics?

3. Materials and Methods

3.1. Data collection

Bibliometric analysis is a method often used to study large amounts of data. It allows us to delve deep into the details of specific fields of research while at the same time being able to obtain valuable data on the areas that emerge in it[1].

Continuing the above, in our research we used exclusively the Web of Science database. Through is we searched for the term spiritual leadership. In the search, we used the Core Collection of

[1] https://www.sciencedirect.com/science/article/pii/S0148296321003155?dgcid=rss_sd_all

Web of Science, which includes SSCI, CPCI-SSH, ESCI database amongst others. Since it is the most acceptable in the scientific community Web of Science was our key source of information. An advanced search on the key word “spiritual leadership” was performed in the search field of the title. This term was searched only in the title to avoid repetition with other similar topics like “spirituality in management” or “workplace spirituality”. This approach is well known in the literature (e.g., Fahimnia, 2015; Rey-Martin et al., 2016; Mora, Bolici & Deakin, 2017). Given that the database is constantly changing and updated, our data collection was done on October 7, 2021. Key goal of bibliometric analysis is to find impacting journals to define spiritual leadership. For that purpose, we used terms related to spirituality and leadership (Gonzalez-Serano et al., 2020).

In our search of the Web of Science database, we had to exclude some documents to focus exclusively on articles. Some of these documents include, letters, bibliographic articles, editorials, abstracts, conference abstracts, book reviews. The final date by which we included the articles in the analysis is 2021. Also, we did not put any limits on the language. The initial search retrieved 233 documents until 2021. In the second step, we exclude categories such as “music”, “psychiatry”, and “sport science” topics. This led us to 164 documents. Final step included the eligibility checking process. In this step, we checked the relevance of the 164 articles obtained. We did this by reading the abstract, titles and keywords of all the articles. After reading, we came to the final number of 164 articles that we included in further analysis.

3.2. Bibliometric Analysis

We started the bibliometric analysis by identifying and homogenizing plain text duplicate and unrecognized records. Then, we took two main steps – first, classic bibliometric indexing. The number of articles published by year, by country, by author, by the journal, and the institution, was done using the Web of Science and the author’s work. We made quantitate analysis using VOS viewer (version 1.6.18). Through this program, we managed to perform co-keyword analysis, as well as co-authoring and co-country collaborations (Gonzalez-Serano et al., 2020).

In the Web of Science, firstly, we sorted the collected data. We have done so by authors, countries, journals, years, and citation. It is done so to present the information in an orderly and detailed way. The result was graphs and tables containing information about the number of articles per year, the number of articles per journal, and the number of articles per country.

We made a co-word analysis and the bibliographic coupling using VOS viewer (version 1.6.18). That is to find out which are the most predominant topics within the spiritual leadership field of research. We also examined whether there are clusters within the field of research. For that reason, we made a bibliographic coupling analysis. It is said that*: "Bibliographic coupling links documents that reference the same set of cited documents"* (Boyack and Klavans, 2010, p. 2391).

When comparing bibliographic coupling with co-occurrence, time variable is not relevant as articles does not change along time as they do with co-occurrence. This notion offers us auspicious way to perform systematic literature reviews (Gonzalez-Serano et al., 2020). For better understanding of co-word analysis and bibliographic maps, VOS viewer program assigned one colour to each cluster. The darker the colour the denser the cluster. The lighter the colour the least dense cluster, etc. According to Gonzalez-Serano et al. (2020): "The distance of the authors' keywords must be considered as an indication of the relationship between the other keywords, or between the other references cited, respectively".

4. Results and discussion

After we set the parameter and reviewed in detail all the articles in the Web of Science database, we got the following results. We found 164 articles published from 1955 to 2021. These articles were written by 325 authors who came from 41 different countries and were published by 116 different journals. The citation is as follows. We found that the average citation per article is 17.80 while an average of 4.03 articles are published annually. Furthermore, the average citation per article per year is 56.5. in addition, we found 261 keywords plus and 388 authors' keywords.

4.1. Basic indicators

We divided the basic indicators into several points to present the bibliometric analysis as concisely as possible. Firstly, the evolution of the papers, years and authors were presented in the form of number of articles, citations per author, and journals. After which co-occurrence of keywords is presented.

4.1.1. Years

As can be seen from Figure 1.2, the number of articles in the field of research has increased significantly, although it is still a small body of literature by count. From Figure 1.2 the first article was published in 1969 and by 2020 that number had grown to 32 articles. From the above, it is obvious that the number of articles has increased. The reasons for this can be various. We presume that alternative leadership models have come under the spotlight following Fry's (2005, 2008) updated theory which included life satisfaction, inner life and other intangibles important for leadership models. From 2005 to 2020 this area of research experienced its biggest leap. From Figure 1.2, we can see that four years were essential for the field of research, and those were 2017, 2019, 2021, and 2020 which was characterized with the highest number of citations. Figure 1.2 below shows its evolution.

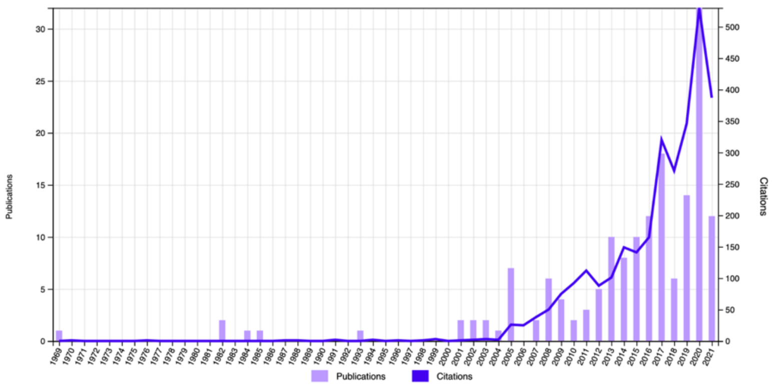

Figure 1.2 Evolution of the number of articles and reviews published over the years and the number of citations (1969-2021)

Source: Web of Science (consulted on 7 October 2021)

4.1.2. Authors

The results of the research showed a great divergence between the authors and the number of published articles. Namely, out of 325 authors who wrote on this topic, only eight of them published more than three papers. Nine of them published two articles, while the remaining 303 published only one paper. From these data it is evident that most authors have dealt with this topic only once in the last twenty years and that there are only a few who have had a significant impact on the field of research.

Table 1.1

Authors with the Highest Number of Publications

Authors	Record count	% of 164
Fry LW	10	6.098
Ali M	5	3.049
Chen CY	4	2.439
Hunsaker WD	4	2.439
Usman M	4	2.439

Source: Web of Science (consulted on 7 October 2021)

As it can be seen from Table 1.1, the author with highest number of publications is LW Fry (10 papers, 6,1% of total publications), Ali M (5 papers, 3,05% of total publications), and CY Chen (4 papers, 2,44% of total publications). From the results, we can conclude that LW Fry holds the most publications and that his papers were the ones that influenced this field of research the most.

Table 1.2

Top 5 Most Cited Authors

Author	Frequency of author citations	Frequency of author citations (n=2938)	Average citations per paper	No. of author's papers	% of author's papers (n=164)
FRY LW	1247	42.44%	124.70	10	6.09%
Reave L	254	8.64%	254.00	1	0.6%
Chen CY	157	5.34%	39.25	4	2.43%
Benefiel M	89	3.02%	89	1	0.6%
Hicks DA	70	2.38%	70	1	0.6%

Source: Web of Science (consulted on 7 October 2021)

Table 1.2 shows us the most cited authors. As with Table 1.2, the most cited and at the same time most prolific author is LW Fry, with ten papers. His ten papers have been cited 1247 times and account for 42.44% of the total citations of all articles. Given the data, we can conclude that he is a pioneer in this field of research. The next author with the highest citation is Reave L, who wrote only one article. He accounts for 0.6% of the total number of studies; however, this paper is significant for research and accounts for 8.6% of the total citations. Other most-cited authors are Chen Cy and Benefiel M, respectively.

Table 1.3

Most Cited Papers in the Period 1955 - 2021

Author	Total citation 1955 - 2021	Average citation per year	2017	2018	2019	2020	2021
	2.938	56.6	80	63	73	79	52
Fry (2003)	708	37.26	50	80	63	71	59
Reave (2005)	254	14.94	36	23	27	29	17
Fry et al (2005)	219	12.88	26	14	20	32	18
Fry, Slocum (2008)	116	8.29	10	15	15	17	10
Asfar et al. (2016)	10	18.33	5	13	19	31	41

Source: Web of Science (consulted on 7 October 2021)

Table 1.3 shows the most cited articles from the starting date, which is available on the Web of Science, to the last date when the data were collected. However, we will only analyse data from 2017 to 2021. Within this interval, the field of research has grown significantly, which gives merit to this logic. The table shows that the average number of citations per year was 56.6 citations. Also, according to the number of citations, the field is led by Fry (2003), who is the originator of the theory. He is followed by Reave (2005) and Fry and Slocum (2008).

4.1.3. Countries

From 41 countries with at least one published article, the USA leads the way with a total of published papers, more specifically 51 papers. After them we have several countries like China (18 papers), Indonesia (11 papers) and England (10 papers). Countries like South Africa, Australia, and South Korea have published seven papers, followed by Taiwan with six papers and India and the Netherlands with five papers. Moreover, we have great diversity because two countries have published four articles, three countries with three articles, four countries with two articles, and only four countries with one article.

USA stands out in the first place with the highest number of citations in the entire Web of Science (GCS = 2194), followed by China (GCS = 423) and in third place Indonesia (GCS = 297). The result is the same when it comes to number of citations. USA is first with 43.01 citations per article, following by China (23.5 citations) and Indonesia (27 citations).

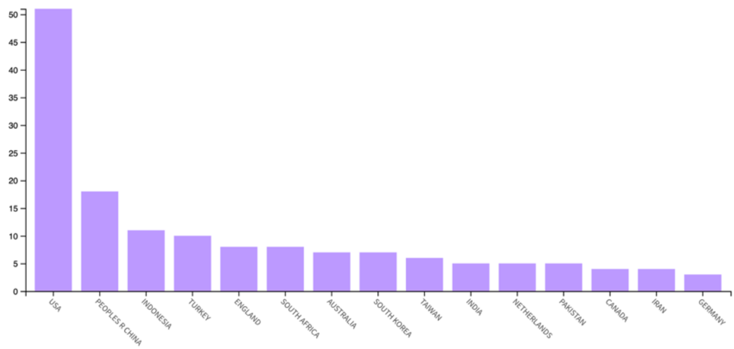

Figure 1.3 Number of articles published by country.

Source: Web of Science (consulted on 7 October 2021)

4.1.4. Journals

Given that we found 116 different journals, we can conclude that the diversification is great. Namely, 21 journals published more than one article on this topic while 95 of them published one article.

Out of all the journals, Leadership Quarterly has the highest citation count with 1489 citations, followed by the Journal of business ethics with 451 citations and Journal of management spirituality religion with 217 citations.

Table 1.4

Top 5 Journals Publishing Papers Related to Spiritual Leadership

Source: Titles	Records	% of 116
JOURNAL OF MANAGEMENT SPIRITUALITY RELIGION	14	12.06%
JOURNAL OF BUSINESS ETHICS	11	9.48%
LEADERSHIP QUARTERLY	8	6.89%
LEADERSHIP ORGANIZATION DEVELOPMENT JOURNAL	5	4.31%
FRONTIERS IN PSYCHOLOGY	4	3.44%

Source: Web of Science (consulted on 7 October 2021)

Journal of management spirituality religion has the highest count of articles written on the subject with 14 articles followed by Journal of business ethics with 11 articles and Journal of Leadership Quarterly with eight articles. Leadership organization development journal and Frontiers in psychology are also amongst the highest publishing journals with five and four articles respectively.

When we look at the impact factor of the journals that have published articles on this topic, we can conclude that the Leadership quarterly journal leads the field with a impact factor of 10.51. Journal of business ethics has impact factor of 6.43 and the Leadership organization development journals has impact factor of 3.23.

4.1.5. Most Common Keywords

The most important keywords are spiritual leadership, workplace spirituality, work, and job satisfaction. Also, workplace, performance, impact, climate, management, and ethical leadership are of highest importance for this field of research.

4.2. Co-Citation Analysis

The second part of the bibliometric analysis is presented as follows. We will first present a co-citation analysis followed by a co-authorship network. After that we will present a visual map of the collaboration between the countries and finally a keyword analysis. As stated, all analyses will be presented in the form of maps.

4.2.1. Co-Authorship

Co-authorship started with the screening process that involved all the authors with one or more articles published on this topic. Such a way of conducing has spawned 335 researchers that have published at least one article on this topic. The conducted analysis found 14 co-authoring networks. It should be noted that these 14 networks came about because authors who are not related to others, and most of them are, were removed from the analysis to facilitate interpretation of the results.

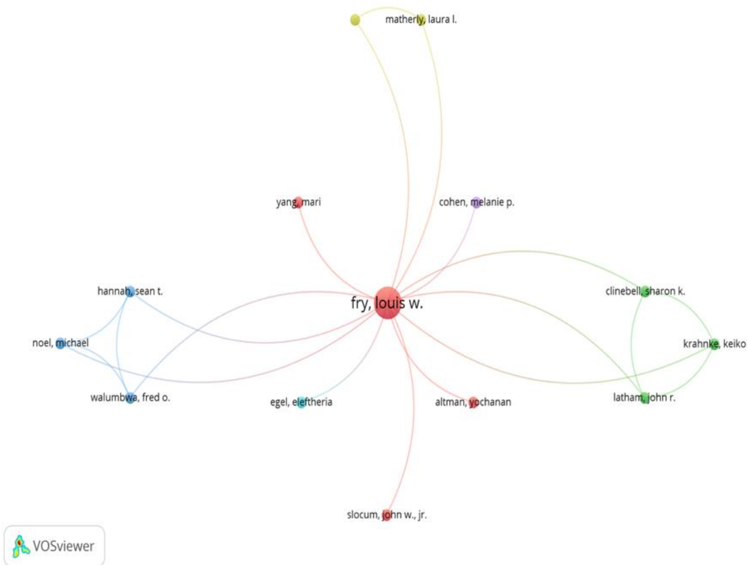

Figure 1.4 Co-authorship networks

4.2.2. Collaborations between Countries

When referring to collaborations between countries USA is the most collaborative country. It has collaborations with Canada, China, and South Korea counting 48 documents (cluster 3). England, Pakistan, UAE, and Vietnam (Cluster 2) with 8 documents and Belgium, Germany, Netherlands, and South Africa (Cluster 1) with 5 documents. In Figure 1.5, collaborations between countries can be observed.

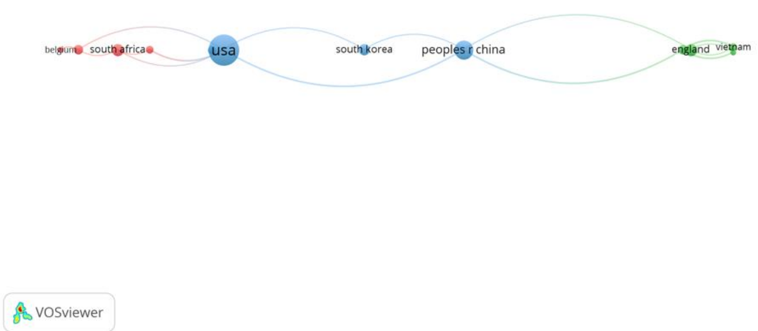

Figure 1.5 Collaborations between Countries

4.2.3. Co-Word Analysis

In VOS viewer (version 1.6.17.) five clusters of keywords were found. Therefore, a cut-off point was established in five or more occurrences of these keywords.

Figure 1.6 shows the colours of different clusters. First of them (colour red) comprises 49 occurrences, referring to work, values, paradigm, and transformation. The most crucial word in this cluster is work. The second network comprises 92 occurrences (green cluster), which refers to spiritual leadership, workplace spirituality, perspective, and commitment. The most important word in this cluster is spiritual leadership.

The third cluster comprises 26 occurrences (blue cluster), with spirituality, leadership, and religion as the central term. The fourth cluster comprises 23 occurrences (yellow cluster), which refers to performance, impact, spiritual well-being, and climate. The most important term in this network is performance.

The fifth cluster comprises eight occurrences (dark blue cluster), and the main word here is job satisfaction. Figure 1.6 show cluster colours.

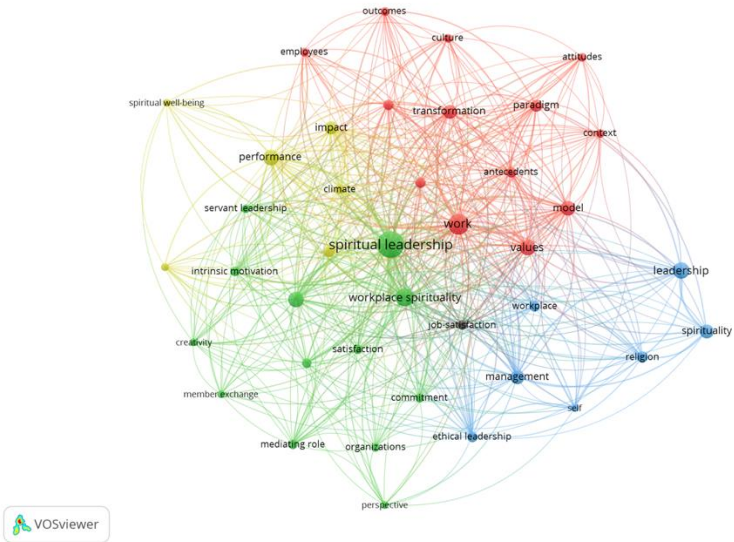

Figure 1.6 Co-word networks

4.3. Thematic Analysis

In the last section of bibliometric analysis, we presented the thematic analysis results. This section presents bibliographic coupling within which we can see the density of the cluster (number of citations, number of articles). In addition, the topics that dominate the cluster are presented, as well as the main authors.

4.3.1. Bibliographic Coupling

When two articles reference a common third article in their bibliographies, bibliographic coupling occurs. When selecting filters in VOS viewer (version 1.6.18) no cut off on the number of citations per document was placed. The next step was to select those articles that were connected. This gave us the final 135 articles which were divided into eight distinct clusters. Each cluster has its own colour. Figure 1.7 shows bibliographic coupling analysis.

Spiritual leadership theory formative years – red cluster consisted of thirty-eight papers and 1699 citations:

The red cluster refers to the formative period of spiritual leadership theory. It contains the most important articles, such as the one by Fry (2003) who started the field of research and Reave (2005) who first confirmed the theory. This cluster is defined by 38 articles and contains a total of 1699 citations, which is convincingly the most of all clusters.

Fry (2003) coined the theory of spiritual leadership. Due to its originality, this article is the most cited with 708 citations. Fry (2003) formed spiritual leadership as a topic and presented his spiritual leadership model as a process. The process signifies the development of a leader who, to become a spiritual leader, must possess and develop attributes such as altruistic love, hope, and vision. If a leader possesses and develops these three attributes, he can enable calling and membership amongst employees. Furthermore, through calling and membership of the employees, the organization will thrive.

The second most cited article was Reave (2005), with 254 citations. Reave (2005) based his research on values such as honesty, integrity, and humility. He considered them as a spiritual value. Reave (2005, p. 654) pointed that "there is a clear consistency between spiritual values and practices and effective leadership". He was thus the first to directly confirm spiritual leadership theory (Fry, 2003).

With 219 citations, the third most cited article is from Fry (2005). In upgrading his 2003 work, Fry in the new model (2005, 2008) incorporates and explores the positive relationships between the quality of spiritual leadership and organizational productivity. Fry (2005) is investigating this relation using longitudinal data from the Texas attacking squadron. His research has several contributions to his and other theories. According to Fry (2005) spiritual leadership theory incorporates and complements charismatic theories as well as value-based theories such as servant leadership.

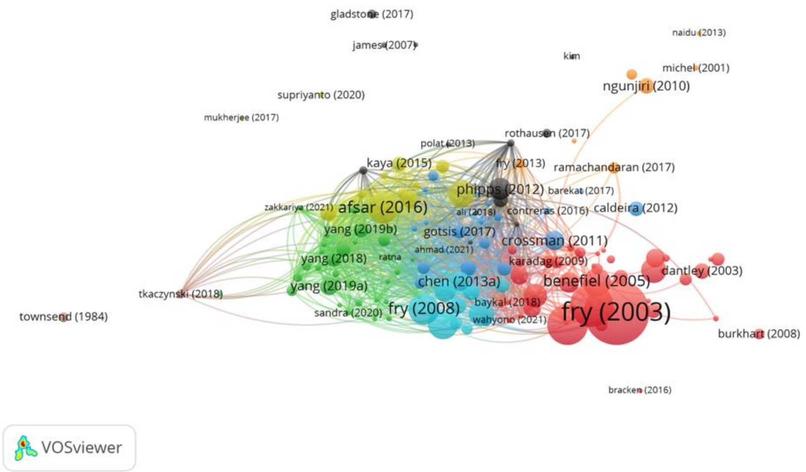

Figure 1.7 Bibliographic coupling analysis

Spiritual leadership and team effectiveness – green cluster (138 Citations, thirty-two papers):

Green cluster is comprised of thirty-two documents. If we consider the number of documents in this cluster, we can conclude that with 138 citations green cluster has relatively low number of citations. This point can be attributed to the novelty of these documents. The "oldest" is from 2017. The themes of these articles are related to the different aspects of spiritual leadership in team effectiveness, job performance, and healthcare.

The first, also the most cited article from this cluster is Yang et al., (2019) with 29 citations. Yang et al., studies the positive relationship between spiritual leadership and employee job performance. They want to know how and when this relationship happens. They reveal that there is a positive relationship between job performance and spiritual leadership and that relational energy is a mediator. Through the relational energy, the integrity of the leader strengthened the relationship between spiritual leadership and employee performance.

The second most cited article was Yang and Fry (2018), with 19 citations. In this article, the direct and mediating effects of spiritual leadership on burnout of healthcare workers is under investigation. According to Yang and Fry (2018) burnout has many negative effects on employee health that ultimately have a negative impact on personal and organizational outcome. Some of the undesirable consequences of burnout are poor health, negative attitude towards work, conflicts at work, psychological distress, etc. Fortunately, their research proves that spiritual leadership has a positive direct and mediating effect on burnouts.

The third most cited article was Yang et al., (2019), with 18 citations. Yang et al., (2019) seek to understand how spiritual leadership affects meaningfulness within a group of people working on a task and how it ultimately affects group effectiveness. They found that through a meaningfulness climate, spiritual leadership has a positive effect on team performance. Moreover, they found that the connection between spiritual leadership and meaningfulness climate is stronger in teams with higher levels of task uncertainty than in those with lower levels of task uncertainty.

Blue Cluster (160 Citations, twenty papers): Spiritual leadership different themes

Next in line is a blue cluster consisting of twenty articles and decked with 160 citations. The relationship of spiritual leadership and organizational performance, sustainable workplace, different organizational context, etc. are the main topics this cluster of articles deals with.

According to Crossman (2011), there is a certain synergy between spiritual and environmental leadership primarily in conceptualizing terms. This is especially evident in the core values of these two leadership models. Crossman (201) states that both theories are closely related to discourse in the literature. His paper is most cited in blue cluster with 36 citations.

Through structural equation modelling (SEM) Jeon et al., (2013) sought to examine the relationship between the revised and new model of spiritual leadership (life satisfaction and inner life Fry (2005, 2008)) and the organizational context in Korean companies. The results of their modelling indicate that there are merits in this relationship. Moreover, they conclude that inner life is crucial in connecting with the three main factors of spiritual leadership: hope / faith, altruistic love, and vision. As a result, membership is significantly more associated with team productivity and life satisfaction than calling. Their work accounts to twenty citations and is second most cited article in blue cluster of articles.

Yellow Cluster (285 Citations, thirteen papers): Organizational citizenship behaviour

Yellow cluster is composed of thirteen documents with a total of 285 citations. Workplace spirituality, organizational citizenship behaviour and environmental behaviour are the key themes of this cluster.

Asfar et al., (2016) is the most cited author in yellow cluster with 110 citations. His research addresses the relationship between spiritual leadership and pro-environmental behaviour. The author built and tested this model by putting in a relationship spiritual leadership and workplace spiritually which is well addressed in literature. Those two further inspired intrinsic motivation and environmental passion. Ultimately, intrinsic motivation and environmental passion influenced pro-environmental behaviour. The moderating variable was the perceived organizational support between spiritual leadership and workplace spirituality.

The second most cited article in this cluster is by Chen and Yang (2012) with 72 citations. Key aim of this study is possible generalization of spiritual leadership theory to other industries. The authors researched impact of spiritual leadership on citizenship behaviour in finance and retail service industries. Chen and Yang (2012) further confirmed that leaders' values, behaviours, and attitudes have significant effect on calling/membership among employees. It also facilitates them to perform above average organizational behaviour, including altruism and responsible conscientiousness in organization.

Black Cluster (90 Citations, thirteen papers): spiritual leadership concepts

Black cluster is composed of thirteen documents like yellow cluster, and it has received a total of 90 citations. Some of the most prominent themes of black cluster are related to the spiritual leadership characteristics, strategic leadership, leadership concepts.

Phipps (2012) expands the scope of spiritual leadership to the strategic leadership area. Namely, she makes a distinction between private and collective spirituality and believes that this is a critical factor for the further development of the theory. She proposes a new framework that describes how a top manager makes strategic decisions based on his spiritual beliefs. Phipps (2012, p. 177) believes that this function is mediated with “leader development and meta-belief and moderated with organizational context and leadership style”. This article has 48 citations and is the most cited in black cluster group of articles.

Krishnakumar (2015) present a spiritual contingency model of spiritual leadership. It is based on follower’s interconnectedness, existential faith, and leader charisma mainly. He also includes such moderators as pro-social motivation to lead, narcissism, perceived organizational support, and follower perceptions of leader integrity. They also examine the potential “dark side” of spiritual leadership. His paper is the second most cited article in this cluster with 18 citations.

Light blue Cluster (463 Citations, ten papers): Fry’s development of the theory

Light blue cluster has ten documents with a total of 463 citations - the densest citation per article of all the clusters. The themes of these articles are related to the spiritual leadership and its impact on unit performance, working hours etc.

Fry (2008) once again leads the filed with 116 citations. Continuing his 2003 work, he is trying to minimize trade-off between financial indicators (e.g., profitability, revenue) and spiritual leadership values such as employee’s well-being, social responsibility, sustainability. To mitigate managers responsibility to manage profit, people, planet he is drawing from fields such are spiritual leadership, conscious capitalism, and workplace spirituality.

Fry and Cohen (2009) are using beneficial spiritual leadership effects on increasing working hours problem. Their work is second most cited in this cluster with 108 citations. Based on previous literature (e.g., Fry 2003, 2005, 2008) they are implementing spiritual leadership theory to alleviate negative aspects of extended working hours problem by enhancing employee well-being and spirituality at work. Such implementation should minimize sacrifice of financial performance indicators.

Orange Cluster (47 Citations, seven papers): Women in spiritual leadership

This cluster is constituted of ten articles with a total of 47 citations. Key themes of these articles are associated to the spiritual leadership and woman from different region.

Ngunjiri (2010) search how women leaders from Kenya experience spiritual leadership. Based on the available literature, the paper seeks to show the similarities and differences of African spiritual leadership with the Western conceptualization of this concept. Courage, hope, altruism is comparable to the Western concept of spiritual leadership while ubuntu is unique to the African context. Ngunjiri (2010) is most cited author with 21 citations.

Ramachandaran et al., (2017) have second most cited article in orange cluster with 10 citations. This study explores how spiritual intelligence affects women in academia. Understanding the attributes of spiritual intelligence, the authors believe, will increase their confidence to take leading roles in the future. They point out that this research will increase clarity on how spiritual intelligence affects a balanced and congruent work environment. The integration of spiritual intelligence into spiritual leadership has outlined several major effects such as increased credibility, increased moral principles, and reduced ethical issues in institutions.

Brown Cluster (12 Citations, two papers): Religion and spiritual leadership

Brown cluster has two documents with a total of 12 citations. The first one is from Townsend (1984) who has the most cited article with 7 citations. The second most cited article in this cluster is by Tkaczynski and Ari (2018) with 5 citations.

Tkaczynski and Ari (2018) seek to understand what motivates service leaders to attend Christian leadership conferences. They try to understand whether these motives are homogeneous or heterogeneous. With the help of spiritual leadership and core competencies, they defined five key segments. Some of which are event theme, internal reward, and place of residence.

5. Conclusions

According to the data presented in this research, we can conclude that we have found answers to all five research questions.

Q1 – What are the trends of published articles on spiritual leadership theory?

According to available data from Web of Science, we collected 164 published articles and found 325 authors in this area of research. We conclude that the field of research is young and does not abound in a significant number of studies, with an apparent lack of empirical studies. From Figure 1.2 – the evolution of the number of articles and reviews published over the years and the number of citations, we see that the turning point for this area of research originated in 2015. After that, there is a strong growth until 2020, which is defined by the most significant number of studies. The reasons for this can be various, but we can draw a comparison between the COVID19 crisis and new, alternative leadership models.

Q2 – Which authors have published the most articles? Who contributed the most to the development of the field of research?

When we look at the most prolific authors, we have a few who stand out with their work. In the first line, LW Fry can be taken as the originator of the field of research both in terms of the number of studies (10) and the number of citations (1247), but also in terms of the most cited article (708). We also have several other authors with more articles (n > 4), including Ali, Chen, Hunsaker, and Usman. Although their contribution to the number of articles is significant and commendable, they are not included in the most cited authors or articles. That position was taken by Reave (2005), with the second-highest citation just behind LW Fry (2003). Only Chen CY is among the most cited authors. Along with LW Fry and Reave, Benefield stands out with one article but the third most cited. Furthermore, among the top five most cited articles are as many as three from LW Fry. From the above data, we can conclude that the two authors are highly dominant in their impact in this area of research. The expectation of other authors is expected to increase the frequency of citations in spiritual leadership.

Q3 – How are key articles divided by top journals, countries, and institutions? What is the impact factor of these journals?

From Figure 1.3 and Table 1.4, it can be read that the USA is the most represented country in the field of research. Namely, they have more than three times as many articles published than China as an accompanying country. However, what is encouraging is the divergence of the countries involved in this area of research. Namely, researchers from as many as 41 countries participated, and we can conclude that spiritual leadership has captured the global attention of the research audience.

As many as 116 different journals have written one or more articles on spiritual leadership. The leading proponents among these journals are Journal of management spirituality (n = 14), Journal of business ethics (n = 11), and Leadership quarterly (n = 8), with Leadership quarterly standing out with the highest impact factor (JCR = 10.51) and Journal of business ethics (JCR = 6.43).

Q4 – Advanced bibliometric analysis (e.g., co-citation, co-words, co-authorship, bibliographic coupling) of the field of research.

Among 335 researchers, we found a total of 14 co-authoring networks. The USA stands out as the country that cooperates the most with other countries, which is expected given the 51 articles published. In collaborations between countries, we found three primary casters. The USA enters cluster three while the other countries are deployed in the remaining two clusters.

Co-word analysis showed that the research areas were defined with five main clusters. All clusters are associated with different keywords. The most important are work, spiritual leadership, performance, and job satisfaction.

Q5 – Does the field of research have main topics? What is the direction of development of the field of research?

We found eight main thematic clusters. Each cluster has a defined number of published articles as well as citations. The first most cited cluster is a red one with thirty-eighth papers and 1699 citations. This cluster includes the most important research of spiritual leadership and refers to the formative period of the research area. The second most cited cluster is the blue cluster which has ten articles and 463 citations. This cluster refers to Fry (2003)'s work with which he began research in spiritual leadership. The third most cited cluster is the yellow cluster, with 285 citations and thirteen papers. The main topic of this cluster is organizational citizenship behaviour.

Other clusters are defined with a large number of articles; however, their citations are minimal and do not have much impact on the field of research. The main topics they deal with are spiritual leadership and team effectiveness, spiritual leadership concepts, women in spiritual leadership.

References:

1. *Afsar, B., Badir, Y. and Kiani, U.S., 2016. Linking spiritual leadership and employee pro environmental behavior: The influence of workplace spirituality, intrinsic motivation, and environmental passion. Journal of Environmental Psychology, 45, pp.79-88.*
2. *Avolio, B.J., Walumbwa, F.O. and Weber, T.J., 2009. Leadership: Current theories, research, and future directions. Annual review of psychology, 60, pp.421-449.*
3. *Aydin, B. and Ceylan, A., 2009. The effect of spiritual leadership on organizational learning capacity. African Journal of Business Management, 3(5), pp.184-190.*
4. *Bass, B.M., 1985. Leadership: Good, better, best. Organizational dynamics, 13(3), pp.26-40.*
5. *Benefiel, M., 2005. The second half of the journey: Spiritual leadership for organizational transformation. The leadership quarterly, 16(5), pp. 723-747.*
6. *Benefiel, M., Fry, L.W. and Geigle, D., 2014. Spirituality and religion in the workplace: History, theory, and research. Psychology of Religion and Spirituality, 6(3), p.175.*
7. *Bodia, M. A., & Ali, H. (2012). Workplace spirituality: A spiritual audit of banking executives in Pakistan. African Journal of Business Management, 6(11), 3888-3897.*
8. *Cavanagh, G.F., 1999. Spirituality for managers: Context and critique. Journal of organizational change management.*
9. *Chen, C. Y., & Yang, C. F. (2012). The impact of spiritual leadership on organizational citizenship behavior: A multi-sample analysis. Journal of Business Ethics, 105, 107 114.http://dx.doi.org/10.1007/s10551-011-0953-3*
10. *Chen, C. Y., Yang, C. Y., & Li, Ch. I. (2012). Spiritual leadership, follower mediators, and organizational outcomes: Evidence from three industries across two major Chinese societies. Journal of Applied Social Psychology, 42(4), 890-938.*
11. *Crossman, J., 2011. Environmental and spiritual leadership: Tracing the synergies from an organizational perspective. Journal of business ethics, 103(4), pp.553-565.*
12. *Dabic, M., González-Loureiro, M. and Harvey, M., 2015. Evolving*

research on expatriates: what is 'known' after four decades (1970–2012). The International Journal of Human Resource Management, 26(3), pp.316-337.

13. *Daft, R.L. and Lengel, R.H., 1998. Fusion leadership: Unlocking the subtle forces that change people and organizations. Berrett-Koehler Publishers.*
14. *Dent, E.B., Higgins, M.E. and Wharff, D.M., 2005. Spirituality and leadership: An empirical review of definitions, distinctions, and embedded assumptions. The leadership quarterly, 16(5), pp.625-653.*
15. *Dent, E.B., Higgins, M.E. and Wharff, D.M., 2005. Spirituality and leadership: An empirical review of definitions, distinctions, and embedded assumptions. The leadership quarterly, 16(5), pp.625-653.*
16. *Duchon, D. and Plowman, D.A., 2005. Nurturing the spirit at work: Impact on work unit performance. The leadership quarterly, 16(5), pp.807-833.*
17. *Fahimnia, B., Sarkis, J. and Davarzani, H., 2015. Green supply chain management: A review and bibliometric analysis. International Journal of Production Economics, 162, pp.101-114.*
18. *Fairholm, G.W., 1996. Spiritual leadership: Fulfilling whole-self needs at work. Leadership & organization development journal.*
19. *Fry, L.W., 2003. Toward a theory of spiritual leadership. The leadership quarterly, 14(6), pp.693-727.*
20. *Fry, L.W., 2005. Introduction to the leadership quarterly special issue: Toward a paradigm of spiritual leadership.*
21. *Fry, L.W., Hannah, S.T., Noel, M. and Walumbwa, F.O., 2011. RETRACTED: Impact of spiritual leadership on unit performance.*
22. *Fry, L.W., Vitucci, S. and Cedillo, M., 2005. Spiritual leadership and army transformation: Theory, measurement, and establishing a baseline. The leadership quarterly, 16(5), pp.835-862.*
23. *Fry, L.W. and Slocum Jr, J.W., 2008. Maximizing the triple bottom line through spiritual leadership. Organizational dynamics, 37(1), pp.86-96.*
24. *Fry, L. and Kriger, M., 2009. Towards a theory of being-centered leadership: Multiple levels of being as context for effective leadership. Human relations, 62(11), pp.1667-1696.*
25. *Fry, L.W. and Matherly, L.L., 2006, August. Spiritual leadership and organizational performance: An exploratory study. In Annual Meeting of the Academy of Management,(11-16 Ağustos) Atlanta-Georgia. http://www. tarleton. edu/~ fry/sltorgperf. pdf Çağdaş Liderlik Yaklaşımları.*
26. *Fry, L.W. and Cohen, M.P., 2009. Spiritual leadership as a paradigm for organizational transformation and recovery from extended work hours cultures. Journal of business ethics, 84(2), pp.265-278.*

27. *Fry, L.W., Latham, J.R., Clinebell, S.K. and Krahnke, K., 2017. Spiritual leadership as a model for performance excellence: a study of Baldrige award recipients. Journal of Management, Spirituality & Religion, 14(1), pp.22-47.*
28. *Garcia-Zamor, J.C., 2003. Workplace spirituality and organizational performance. Public administration review, 63(3), pp.355-363.*
29. *Giacalone, R.A. and Jurkiewicz, C.L., 2003. Right from wrong: The influence of spirituality on perceptions of unethical business activities. Journal of business Ethics, 46(1), pp.85-97.*
30. *González-Serrano, M.H., Añó Sanz, V. and González-García, R.J., 2020. Sustainable sport entrepreneurship and innovation: a bibliometric analysis of this emerging field of research. Sustainability, 12(12), p. 5209.*
31. *Helminiak, D.A., 1998. Religion and the human sciences: An approach via spirituality. SUNY Press.*
32. *Helminiak, D.A., 1996. A scientific spirituality: The interface of psychology and theology. The International Journal for the Psychology of Religion, 6(1), pp.1-19.*
33. *Hicks, D.A., 2002. Spiritual and religious diversity in the workplace: Implications for leadership. The leadership quarterly, 13(4), pp.379-396.*
34. *Hill, P.C., Jurkiewicz, C.L., Giacalone, R.A. and Fry, L.W., 2013. From concept to science: Continuing steps in workplace spirituality research. Handbook of the psychology of religion and spirituality, pp.617-631.*
35. *Horton, W. R. (1950). God (9th printing). New York: Association Press.*
36. *Hyland, P., Shevlin, M., McBride, O., Murphy, J., Karatzias, T., Bentall, R.P., Martinez, A. and Vallières, F., 2020. Anxiety and depression in the Republic of Ireland during the COVID-19 pandemic. Acta Psychiatrica Scandinavica, 142(3), pp.249-256.*
37. *Jeon, K.S., Passmore, D.L., Lee, C. and Hunsaker, W., 2013. Spiritual leadership: A validation study in a Korean context. Journal of Management, Spirituality & Religion, 10(4), pp.342-357.*
38. *Kessler, M.M., 1963. Bibliographic coupling between scientific papers. American documentation, 14(1), pp.10-25.*
39. *Krishnakumar, S., Houghton, J.D., Neck, C.P. and Ellison, C.N., 2015. The "good" and the "bad" of spiritual leadership. Journal of Management, Spirituality & Religion, 12(1), pp.17-37.*
40. *Maddock, R.C. and Fulton, R.L., 1998. Motivation, emotions, and leadership: The silent side of management. Greenwood Publishing Group.*
41. *Makkar, S. and Singh, A.K., 2018. Development of a spirituality measurement scale. Current Psychology, pp.1-8.*
42. *Mitroff, I.I. and Denton, E.A., 1999. A spiritual audit of corporate America: A hard look at spirituality, religion, and values in the workplace. Jossey-Bass.*

43. *Mora, L., Bolici, R. and Deakin, M., 2017. The first two decades of smart-city research: A bibliometric analysis. Journal of Urban Technology, 24(1), pp.3-27.*
44. *Nanus, B., 1992. Visionary Leadership: Creating a Compelling Sense of Direction for Your Organization. Jossey-Bass Inc., 350 Sansome Street, San Francisco, CA 94104-1310.*
45. *Ngunjiri, F.W., 2010. Lessons in spiritual leadership from Kenyan women. Journal of Educational Administration.*
46. *Pawar, B.S., 2014. Leadership spiritual behaviors toward subordinates: An empirical examination of the effects of a leader's individual spirituality and organizational spirituality. Journal of Business Ethics, 122(3), pp.439-452.*
47. *Phipps, K.A., 2012. Spirituality and strategic leadership: The influence of spiritual beliefs on strategic decision making. Journal of business ethics, 106(2), pp.177-189.*
48. *Ramachandaran, S.D., Krauss, S.E., Hamzah, A. and Idris, K., 2017. Effectiveness of the use of spiritual intelligence in women academic leadership practice. International Journal of Educational Management.*
49. *Reave, L., 2005. Spiritual values and practices related to leadership effectiveness. The leadership quarterly, 16(5), pp.655-687.*
50. *Rego, A. and e Cunha, M.P., 2008. Workplace spirituality and organizational commitment: an empirical study. Journal of organizational change management.*
51. *Rey-Martí, A.; Ribeiro-Soriano, D.; Palacios-Marqués, D. A bibliometric analysis of social entrepreneurship. J. Bus. Res. 2016, 69, 1651–1655.*
52. *Ryff, C. and Singer, B., 2002. From social structure to biology. Handbook of positive psychology, pp.63-73.*
53. *Smith, H. (1992). The world's religions. New York: Peter Smith.*
54. *Townsend, J.S. and Wichern, F.B., 1984. The development of the spiritual leadership qualities inventory. Journal of Psychology and Theology, 12(4), pp.305-313.*
55. *Tkaczynski, A. and Arli, D., 2018. Religious tourism and spiritual leadership development: Christian leadership conferences. Journal of Hospitality and Tourism Management, 35, pp.75-84.*
56. *Yang, F., Huang, X. and Wu, L., 2019. Experiencing meaningfulness climate in teams: How spiritual leadership enhances team effectiveness when facing uncertain tasks. Human Resource Management, 58(2), pp.155-168.*
57. *Yang, M. and Fry, L., 2018. The role of spiritual leadership in reducing healthcare worker burnout. Journal of Management, Spirituality & Religion, 15(4), pp.305-324.*

58. *Yang, F., Liu, J., Wang, Z. and Zhang, Y., 2019. Feeling energized: a multilevel model of spiritual leadership, leader integrity, relational energy, and job performance. Journal of Business Ethics, 158(4), pp.983-997.*
59. *Wichern, F.B., 1979. The assessment of personality constructs derived from scriptual statements of spiritual maturity (Doctoral dissertation, Dallas Theological Semina)*

Vladimir Shedyakov
DSc (Sociology), PhD (Economics), Associate Professor, Freelancer Scientist
(Kyiv, Ukraine)
ORCID: https://orcid.org/0000-0003-2779-3736

FUTURE-DIAGNOSTICS: REAL SOVEREIGNTY AND POLITICAL-ECONOMIC EFFICIENCY

Abstract
In the context of future-diagnostics, the possibilities of an effective balance of socio-economic strategy, tactics and operatives are being studied. The identification of key and tangible points of the formation of the state orbit is taking place. The possibilities of strategic socio-economic programming of the effective development of the society system are considered from the point of view of global evolutionism. Conclusions on ways to improve the reforms are offered.

Keywords: *transformations, development, post-globality, efficiency, sovereignty, future-diagnostics.*

Introduction

The purpose of this text is to characterize the emerging relationship between real sovereignty and political and economic efficiency. Real sovereignty is considered as one of the criteria for the fruitfulness of the implementation of the balance of strategy, tactics and operational art in the government course. At the same time, real sovereignty resonates with a range of socio-economic, socio-demographic parameters, for example, the quality of life, the dynamics of fertility, mortality and migration, overcoming the relative and absolute impoverishment of the people, as well as the stratification of the population along property lines.

Materials and Methods

The general theory of global evolutionism of socio-economic organisms (first of all, cultural and civilizational worlds) provided reliable grounds for balancing strategy, tactics and operational art, including a flexible response to a change in the environment of existence (Kurth, 1993; Etzioni, Lawrence, 1989). Meanwhile, post-globality is a new reality that is being formed today. Post-globalism is a new worldview, new strategies for the world order. Forecasting has accordingly increased and changed its tools, resource and methodological bases.

Future-diagnostics uses a variety of scientific methods. Modeling emerging processes allows you to highlight the leading trends and their critical points. The conduction of the analysis provides an opportunity to optimize approaches and behavior. Programming focuses on desirable actions. Since understanding is provided not just by knowledge of the object under study, but by the study of its entire history, in the unity of transformations and their results, then knowledge about the future will be incomplete without tracking the ways of its formation. Methodological validity of the text is based on the syncretism of concrete-historical and abstract-logical approaches.

The creation and use of a combination of internal and external prerequisites, taking into account the characteristics of a particular statehood, allows to raise or lower, change or fix the orbit of people's development. The impact is especially noticeable at the key moments of transformations, which include periods of transition (especially inter-paradigm ones). Thus, it is precisely at the key, critical points of the historical development of both the ecumene as integrity and a separate cultural and civilizational world that the impact on the unique “buds of the future” and “windows of vulnerability” can lead to a significant change in the trajectory of transformation.

Results and Discussion

Turning the next page of history again raises interest in the future-diagnostics of changing relationships both in the world order and in the inner life of society (Hage, Powers, 1992; Dube, 1988). The past years have not only raised the question of the quality of organization and management: both systemic and in the personal aspect, but have once again revealed a strong connection with the realization of the ability to make and to realize decisions in the long-term interests of their peoples.

Under these conditions, the very concept of development needs to be updated: in addition to stable and balanced growth, it must provide innovative forms for the traditionally developed mechanisms of social life and focus on such maxims as solidarity, freedom of choice, beliefs and speech, tolerance, demanding adequate management flexibility, first of all, – incentive resources. Thus, in particular, the creation of objective conditions for increasing the need for creative work and the realization of highly individual talent of an employee requires fundamental changes related to the transition from directive management methods to stimulating activity, the widespread use of value-sense complexes of personnel, the use of an arsenal of industrial democracy, social partnership, flexible forms of organization and regulation. The discrediting of technocratic recipes of management as unrealistic, the increased attention to value orientations has demonstrated that traditional organizational approaches do not correspond to the modern economic and technological structure of society. Accordingly, both a change in economic culture and a renewal of the arsenal of an effective balance of strategy, tactics and operational art are required.

The innovative-synergetic approach to management is naturally consistent with the features of the control object and the elements of the decision-making system, i.e. all the complexity of managing nonlinear systems is contained in the analysis of the space-temporal parameters of problems, which allows you to make non-standard decisions, making point changes from the standpoint of a systemic vision of what is desired (Shedyakov, 2015; 2017). This is especially significant in the field of high-tech science-intensive industries. Reliance on the experience of “manual control” reinforces the lag of managerial decisions and, moreover, actions, from social processes, and belief in the optimality of spontaneous development weakens the regulatory capabilities of society, while the anticipatory reflection of complex reality by science lays the foundation for the adequacy of managerial mechanisms to global development trends. At the institutional and structural level, the corresponding reformation of corporations strengthens the tendency to eliminate the clutter of managerial links, the transformation of those previously employed in control and distribution functions into advisers to improve the professionalism of decisions, while in the value-cultural area, instead of the traditional cult of loyalty, servility and diligence, it focuses on self-esteem, achieving professionalism, freedom and creativity. At the same time, there is a transition from directive administration to stimulating desired changes (including in behaviour) as a model of managerial influence.

The main success factor in changing the balance of strategy, tactics and operational art is flexibility, mobility, susceptibility, and the ability to quickly adapt to changes in the economic situation, the possibilities of which are concentrated in managerial compositions, which are complex innovative solutions for mastering effective organizational and managerial models in these specific conditions. As you know, the traditional culture of the agrarian society implemented the main function of managing economic activity within the framework of the formula “do it because it was done before you”. In an industrial society with a modern culture, the generalizing direction of economic management was “do it because it is rational”. The post-industrial region is characterized by the “do it because it is effective” approach. Moreover, a variety of paradigms for the realizing of managerial compositions can be effective for regional economic systems. At the same time, under the influence of multidimensional transformations, it is meaningless to obediently follow any external canon; a set of solutions is needed to combine post-crisis and development logics in relation to specific conditions. From each class of models of life order and development, a specific cultural and civilizational world can receive its specifics, respectively, both to its value-sense complexes, and to the dynamics of change.

In particular, varieties of postmodern models are based on the priority release of the creative forces of post-globalism, the strengthening of the network (network-centric) nature of the socio-cultural environment and the growing role of the information sphere of competition (Shedyakov, 2021). At the same time, the creation of a program of political life with the resources of public strategic design correlates with the features of postmodernity as models and practices for the formation of a rough outline of the future, the creation of its plan and the identification of intentions.

Meanwhile, now the Oikumene is facing new challenges of a historical level, transforming both the priorities of social development and security, and the emphasis in the realization of partnership and competition between cultural and civilizational worlds. The operation of the law of uneven historical development leads to a constant change of development leaders in the ecumene, changing ideas about what is proper and desirable (in particular, in organizational and managerial relations). At the same time, on the one hand, history is full of zigzags in the social life of cultural and civilizational worlds, demonstrating uneven development, reliance on various combinations of factors of political and economic success, and the ability to "overtake without catching up". On the other hand, there are cases when cultural and civilizational worlds refused to develop and limited external interaction, which directly formed some important features in the management culture. Of course, the conditional predominance of any of the cultural and civilizational worlds at a certain moment does not at all mean its greater potential value for the entire ecumene, just as those who fell in competition often harboured saving opportunities for humanity. Sometimes it may seem as if it is easier to copy someone than to create one yourself. So, it seems to be easier to engage in the service of existing centres than to fight for independent production and real economic sovereignty. It may seem that it is faster to host nodes of foreign lines than to painstakingly improve one's own. However, ensuring long-term and sustainable development requires the creation of its own economic and social pillars, which are now priority related to maintaining both a stimulating environment and growth clusters, finding ways to resolve the contradiction between the objective need to cultivate creative talent (primarily spiritual) and "brain drain" in the direction of the most prosperous regions of the ecumene. Accordingly, the sound of the principles of meritocracy is growing, the role of scientific, educational and industrial clusters is increasing, the central figure of which is the invited / invited scientific consultant-expert on solving a specific range of issues as a representative of the expert community, a certain school of academic and applied science.

The transition in post-global social engineering to the network foundations of freedom and the logic of post-globalism, the logic of freedom are both a rejection of the unity of any basis for development and the affirmation of the universality of pluralism. There is no coercion, and no one owes anything to anyone. When there is no stable external support in the form of a common ideology, a single culture, a generally recognized science, then one should be tolerant of everything, recognize the right to exist that is unlike and unacceptable. There is a place here for cultural and civilizational worlds based on any productive value-sense foundations; former leaders of modernity are no more successful in terms of postmodern logic than others. At the same time, it is sad for any country if, unable to rely on its own potential, it does not organically enter any of the centres of power and is not able to interest any of them in itself, dooming itself to the fate of a resource donor.

Accordingly, the issue of spreading socially responsible behaviour is of cardinal importance. Socio-political regression – individual reduction to bestial instincts and social atomization – are stimulated by an environment that focuses on consumerism and hoarding, rejecting the essential forces of man in favour of the fetishization of things and capital. Accordingly, acculturation / socialization form two alternative strategies: to fight either for one's civilization or for oneself (often with adherence to the values of a successful one in a given period of history).

At the same time, some of the value and behavioural hierarchies may not correspond to the canons of external perception. The acquisition of meaning by the image, inclusion in the sociocultural space becomes a conscious personal choice, the formation of both citizenship and social relations (sociality, social fabric, sociocultural capital, etc.). The notorious resource-methodological pluralism of post-globalism implies overcoming the obligatory canons and clichés, the emergence and implementation of genuine freedom of choice for everyone, from directive coercion to stimulating desirable transformations for society. Dissent is by no means intent to commit a state crime, but a creative resource for development, expanding the potential of solutions. On the contrary, loyalty and servility are not at all grounds for condoning any anti-social act. The basis of socio-cultural capital includes and will strengthen the awareness of one's belonging to a certain circle of stable social relations and groups of online identity is created on the basis of socio-cultural networks. The place of forms of personal dependence in a traditional society and commodity dependence (taking a general form in monetary form) is occupied by the features of network rhizomic relations. At the same time, the social system completes the social-personal era, while the non-systemic social community opens the individual-psychological one. In the period of transformation of society, their features overlap and intersect. On the contrary, the descent to the patterns of “cultural chewing gum”, the cultivation of social infantilism and unanimity is one of the most dangerous vestiges of egalitarianism. Unpretentious culture robs the meaning of relationships, accessibility generally deprives of meaning. At the same time, the deepest inequality is the inequality of talents, primarily in the creation of meanings, in perception and interpretation. However, the very existence of the social environment of pseudo-democratic socio-political formations, on the one hand, allows their ruling and opposition elites to formally follow the quasi-Western canons to hide content different from them, but, on the other hand, makes them vulnerable to influences under the slogans of implementing the declared values. At the same time, as practice shows, measures of informational pressure are effectively complemented by the same forceful actions (often justified by pretexts that are later recognized as erroneous). Of course, without the economic power of the country, it is impossible for a long time to ensure the ability to make decisions in its own interests and prevent its transformation into a limitrophe serving the achievement of other people's goals. Today, this requires a foundation in the form of a knowledge economy and an emphasis on advanced technological paradigms.

The degradation of the legacy of past years and the loss of foreign policy subjectivity are strongly interconnected. The time of forced inter-paradigm transformations dramatically expands the window of opportunity, the use of which affects not only the current state of affairs, but also lays down long-term trends, bringing subsequent transformations into one or another orbit. The essence of the ongoing processes is related to the confrontation of various options for further changes, and not just the withering away of past strategies and the birth of future ones. The transitional period is the time of strategic manoeuvring. The essence of the processes that fill the transition period is associated with the confrontation of various options for further changes, and not just the withering away of past strategies and the birth of future ones. The importance of transitional inter-paradigmality is connected, first of all, with going beyond the "corridor of freedom", and, therefore, with a cardinal increase in the range of both opportunities and risks. In particular, if earlier organizational and managerial art was manifested in the most complete development of the "most advanced" model for its time, now the task is to cultivate "specialness" as the basis for the competition of various models.

On the former fundamental basis, new actual connections are growing. The priorities of ensuring both economic security and real sovereignty are also shifting. As the saturation of primary needs is achieved, spiritual production naturally comes to the forefront of life with its core – spiritual creativity. The achievements of the spirit and the achievements of the mind are intertwined with creative search. According to the well-known formula, "leaders create ideas; the lot of outsiders is to produce things". The place in the world of the future is a function of the quality of the organization of spiritual life, in particular, spiritual production. The main value is not things, money or capital, but knowledge and understanding. Spiritual production becomes a defining part of political and economic systems, and sociocultural intelligence enters the core of competition.

Conceptual power is one, that allowing determining actions / inaction at the level of mental matrices, operating with cultural and civilizational codes in the long-term political and economic programming of social processes. At this level, political-economic and socio-cultural organization and management are tightly linked. Its convex manifestation is the ability to set and maintain the vector of paradigm transformations, to ensure the effective reformatting of public consciousness and life. The subjectivity of changes often predetermines their direction, pace, nature, and influences in whose interests they will be carried out. And when reformatting as transformations of the paradigm level, it is especially important to maintain a balance between the stability of the basic structures and shaping that can ensure adaptation to new trends and processes of environmental change. Both attempts to transform (individual and social) into an element of a different cultural and civilizational world with the loss of their own identity, and the restoration of outdated forms that are ineffective in the new conditions, can become dangerous. Thus, realizing in social engineering involves the fusion of science, art and craft of the productive application of the collective unconscious and social consciousness, psychology and ideology of development (in particular, change), the allocation of controlled, self-controlled and uncontrolled processes.

As economic analysis clearly demonstrates, due to the rejection of the socialist system and the breakdown of the organization of mutual economic assistance, there was also a loss of the real political and economic weight of the countries that previously belonged to the camp of real socialism.

Meanwhile, real sovereignty was torpedoed by external vassal obligations. Solving the interests of external centres is undermining productive forces of nations. Attempts to increase external influence in the interests of others are often associated with a weakening of their socio-economic dynamics and production efficiency.

People's sovereignty, when making cardinal decisions, was increasingly de facto replaced by the imposition of approaches convenient for the Past and the manipulation of public opinion with the help of juggling bugbears, whipping up propaganda hysteria, and distorting the norms of upbringing, education and behaviour. Cancer cells of the military bases of regimes that do not want to leave the historical proscenium, their constant aggression and coups, the arsenal of biochemical weapons that threaten humanity and, in general, weapons of mass destruction, invasion and occupation of entire regions (in particular, the Islamic world) with the destruction of peaceful infrastructures and industries, robbery and massacres of the civilian population, the imposition of chaos, illiterate and unprofessional personnel leads to long-term responsibility of the cultivated elite of the enslaved countries to Past, but not to Future. Appropriate living standards of easy pastime, pleasure and relaxed expectation of a varied “miracle” are being aggressively imposed on new generations. The division into enclaves of study, residence, and life of opposing groups becomes so distinct that it resembles the antagonism of the classical “two nations”: the upper strata and the people. Inherited property, family interweaving of clans, selectivity in the application of the rule of law fixes this split in society.

Future-diagnostics confirmed, the renaissance of general cultural foundations is a prerequisite for creating a holistic social development: both a person and society, and its economy are organic, not mechanical phenomena; they cannot be understood, predicted or changed solely in terms of selfish choice. In particular, the ethical base of material and economic relations covers not only the old (including religious and hierarchical) values, but also new ones, associated with a critical view of "technological slavery" and the production imperative of life, with a focus on the harmony of labour and independence in the choice of activities, its place and time. So, sovereignty is directly related to dignity, self-worth, self-sufficiency, pride, institutional memory and basic value-sense complexes of the cultural and civilizational world, the role of which grows immeasurably with the strengthening of post-globalism tendencies. The ability to protect and grow one’s historical solutions, protecting them from the influence of competitors, characterizes creative innovative models, in contrast to imitation-borrowed ones. An effective form of maintaining the vector and structure of changes is the formation of one’s own social Super-project. The nature of the public Super-project programs political life, but it itself can be oriented either towards “pragmatic” values and cement public support for petty-bourgeois-consumer socio-political behaviour, or towards high values-ideals with the release of creative values.

Conclusions

Post-globalism is most clearly manifested as a quality, firstly, of understanding / perception / ideas and, secondly, mastering the emerging reality within the framework of material and spiritual practices. Real sovereignty and political-economic efficiency resonate mutually. Attempts to increase external influence in the interests of others are often associated with a weakening of their socio-economic dynamics and production efficiency. It is necessary to proceed from ideas about the changed environment in order to properly build the current balance of strategy, tactics and operational art. At the same time, selectivity in the choice of each person naturally increases, as well as the role of the quality of life, socio-demographic and socio-cultural processes, and the spiritual dimension of society too. An effective form of maintaining the vector and structure of changes is the formation of one's own social Super-project.

Thus, the strengthening of the post-globalism trend for models of life and development means, in particular, the orientation of resource bases and methodologies for organizational support of efficiency, competitiveness and conciliarity in the conditions of the political-economic environment not of the system, but of integrity - with a complex of special characteristics inherent in it. Future-diagnostics confirmed the renaissance of general cultural foundations is a prerequisite for creating a holistic social development: both a person and society, and its economy are organic, not mechanical phenomena; they cannot be understood, predicted or changed solely in terms of selfish choice. In particular, the ethical base of material and economic relations covers not only the old (including religious and hierarchical) values, but also new ones, associated with a critical view of "technological slavery" and the production imperative of life, with a focus on the harmony of labour and independence in the choice of activities, its place and time. So, sovereignty is directly related to dignity, self-worth, self-sufficiency, pride, institutional memory and basic value-sense complexes of the cultural and civilizational world, the role of which grows immeasurably with the strengthening of post-globalism tendencies. The ability to protect and grow one's historical solutions, protecting them from the influence of competitors, characterizes creative innovative models, in contrast to imitation-borrowed ones. The grounds for public consent are strengthened by productive opportunities for establishing civil dialogue and public-private partnerships. In addition, a significant increase in opportunities occurs, first of all, with the ordering of chaos in zones of active cultural diffusion. At the same time, the growth of activity in the long-term ensuring its competitiveness is associated mainly with the most knowledge-intensive and / or highly profitable industries. In a smart society, knowledge is a serious competitive advantage, the use of which requires flexibility, adaptability, and proportion to tasks and conditions. An increase in the role of deliberately spontaneous factors and an increase in the order of uncertainty orients towards a readiness for a combination of controlled, uncontrolled and self-controlled. Nowadays, the ecology of the individual presupposes a constant civic choice in favour of creativity as a manifestation of a purely individual combination of talents in a socially provided form. If earlier a person, as a rule, was realized within the strict framework of a life path predetermined by birth, today, on a social scale, the freedom of choice in the production of meanings has replaced the former freedom from choice with relegation to animal-thing reproduction. The place of a social predisposition to an alienated canon and an individual impulse to creativity was taken by a social need for creativity, supplemented by an individual tendency to escape from the complexities of freedom. The contradiction of tribal forces unfolds into social conflicts, causing variants of sublimation.

References:

1. *Kurth, J. (1993). Toward the Postmodern World. Dialogue, 2, 8-13.*
2. *Etzioni, A., Lawrence, P. R. (Eds.). (1989). Socio-Economics. Toward a New Synthesis. New York, London: M. E. Sharpe, Inc.*
3. *Hage, J., Powers, C. H. (1992). Post-Industrial Lives: roles and relationships in the 21st century. London, New Delhi: SAGE Publications, Inc. Intern. Educational and Professional Publisher.*
4. *Dube, S. C. (1988). Modernization and Development: The Search for Alternative Paradigm (Socio-cultural development alternatives in a changing world). Tokyo: Univ. Press.*
5. *Shedyakov, V. E. (2015). Futurodiagnostika kak faktor strategicheskogo modelirovaniya i upravleniya [Futuro-diagnostics as a factor of strategic modeling and management]. (in Russion) Aktual'ni problemy vykorystannya potentsialu ekonomiky krayiny: Mater. Mizhnar. nauk.-prakt. konf. Kyyiv, 36-39.*
6. *Shedyakov, V. E. (2017). Istoricheskie dinamiki mifodizaina obshchestva v strategii futurodiagnostiki: podgotovka i realizatsiya programmirovaniya budushchego, upravleniya nastoyashchim [Historical dynamics of society myth-design in the strategy of future-diagnostics: preparation and realizing of programming of the future, management of the present]. (in Russian). Politicus, 1, 150-155.*
7. *Shedyakov, V. E. (2021). Podderzhanie garmonii strategii, taktiki i operatiki v usloviyah post-global'noi regionalizatsii [Maintaining the harmony of strategy, tactics and operatives in the context of post-global regionalization]. (in Russian). Virtus, 56, 109-113.*

Svitlana Yermak
Doctor of Sciences in Economics, Professor, Chair of Economics
ORCID: https://orcid.org/0000-0001-5232-6406
Victoriia Serzhantova
PhD Student
ORCID: https://orcid.org/0000-0002-9731-1600
Serhii Buhenko
PhD Student
Chair of Entrepreneurship and Trade
ORCID: https://orcid.org/0000-0003-2679-0496
Odessa Polytechnic National University (Odessa, Ukraine)

ANTI-CRISIS MANAGEMENT ASPECTS OF SOCIO-ECONOMIC ACTIVITIES OF BUSINESS STRUCTURES

Abstract

Ukrainian economy in modern conditions is characterized by increased competition, the emergence of new opportunities and threats to the development of business structures associated with uncertainty and environmental impact, exacerbated by the COVID-19 pandemic in the country and the world. The rise and competitiveness of domestic business structures largely depend on the efficiency of their operation, as well as on methods and mechanisms of management. The key indicator of economic activity of the enterprise is the development of its socio-economic activity. The aim of the research was to study the main aspects of crisis management of socio-economic activities of business structures based on the analysis of theoretical research, publications and practice of individual enterprises. The essence of anti-crisis management, preconditions of activization of processes of social and economic development, mechanisms and tools of anti-crisis management are conditionally divided, four groups are conditionally divided: administrative, economic, financial and social. A meaningful description of anti-crisis management of socio-economic activities of business structures is devoted.

Keywords: *anti-crisis management, socio-economic activity, enterprise, business structure.*

Introduction

Economy of Ukraine in modern conditions is characterized by increased competition, the emergence of new opportunities and threats to the development of business structures associated with uncertainty and environmental impact, exacerbated by the COVID-19 pandemic in the country and the world. Moreover, the impact of the external environment is becoming increasingly significant, which is one of the powerful destabilizing factors in the development of the real sector of the economy, capable of leading it to crisis. The rise and competitiveness of domestic business structures largely depend on the efficiency of their operation, as well as on methods and mechanisms of management. The management of business structures must be prepared for possible manifestations of the crisis, so it is necessary to monitor the activities of the enterprise, timely assess the crisis in the enterprise, develop anti-crisis management solutions and improve methods of assessing the crisis. The key indicator of economic activity of the enterprise is the development of its socio-economic activity.

Materials and Methods

The information base of the study consisted of the works of many ukrainian scientists, such as: A. Peretyatko, O. Tarianyk, V. Yevtushenko, B. Sorin, A. Pohrebniak, T. Pozhuieva, O. Shylova, A. Tkachenko, S. Telin, S. Filyppova, L. Frolova, and others, as well as foreign scientists who have studied the mechanisms of crisis management: J. Schumpeter, I. Ansoff, F. Kotler, A. Thompson and others. However, views on the essence of the concept of "crisis management", given the modernity and constant development, are somewhat different and ambiguous. Thus, it is necessary to systematize the theoretical knowledge in the field of crisis management of business structures and identify further opportunities to address issues related to the concept of “crisis management of socio-economic activities of business structures”.

In the process of research, the methods of analysis and synthesis, comparison, grouping, method of graphic analysis, tabular method were applied.

Results and Discussion

During the analysis of scientific literature, we concluded that the essence of the concept of "crisis" is a disruption in the work of business structures up to the possibility of bankruptcy, caused by a combination of situations that are influenced by external and internal factors. We can agree with the authors O. Maslak and O. Hromiak, who note that "in the current instability and dynamism of economic activity, companies must have highly effective management technologies that would allow in a short period of time to form structured information about the current situation at the enterprise in order to make management decisions on prevention or effective crisis management". In particular, such a technology can be a rapid assessment of internal crises in the enterprise, which, using low resource costs, allows to form a preliminary idea of the causes and possible consequences of the crisis and provide a structured database for effective anti-crisis measures (Maslak, 2013). According to the authors I. Tarasenko and O. Batrak "in the functioning of any organization there is a probability of crisis, which is due not only to errors in management strategy, insufficient attention to development problems, but also such objective factors as market fluctuations, periodic modernization of technology, changes in production organization, personnel changes or changes in environmental factors of the enterprise, including – economic and political conditions and factors" (Tarasenko, 2013). The instability of the economy makes it necessary for each business entity to constantly look for ways to improve the efficiency of its economic activity.

The key indicator of economic activity of the enterprise is the development of its socio-economic activity (Yermak, 2017). Moreover, development in the modern context consists of two main semantic parts – economic and social. In this case, economic growth and social progress must be considered in conjunction, in unity, because, on the one hand, the economy creates conditions for human development, to improve the level and quality of their lives, on the other hand - man is the most important active resource for economic growth social development is an effective reproductive factor.

The following can be considered as objective preconditions for intensifying the processes of socio-economic development on the basis of innovation as a complex socio-economic entity:

– globalization of the economy and its ambiguous impact on human resource development, which leads to the unprecedented emergence of strategic challenges and social threats to various segments of the population, strengthening the processes of social stratification;

– development of a new economy, characterized by the development of the information society and intellectual economy through the creation of a powerful information and communication sector, the efficiency of health and education systems, the development of the banking and financial sectors;

– growth of social responsibility of business, which is associated with the need to maximize the company's positive impact on society; building civil society; promoting the implementation of the principles of public-private partnership;

– the growing importance of innovation in the socio-economic development of enterprises, which actualizes the development of innovative work in the management system of the enterprise in ensuring its long-term competitiveness;

– strengthening the importance of intellectualization of production, accompanied by a change in established views in the direction of increasing the value of human capital of enterprises;

– increasing the role of education and lifelong learning of staff, the development of competencies of different categories of professionals in ensuring their competitiveness in the labor market;

– exacerbation of problems of social protection of workers against the background of rising unemployment in the country, poverty, social inequality;

– the growing importance of greening the management of enterprises, which necessitates the integration of environmental protection measures into the strategy of sustainable socially oriented development of the enterprise (Simchenko, 2010).

Anti-crisis management of socio-economic activity is implemented based on the use of both general scientific methods and research approaches, as well as specific methods specific to scientific forecasting of socio-economic phenomena. Among the general approaches, the following can be distinguished: historical, complex, systemic, structural, system structural (Melnyk, 2011).

The historical approach consists in considering each phenomenon in the relationship of its historical forms. Management is based on the transfer of laws and trends that exist in the present beyond its borders, to recreate a not yet existing model of the future on this basis. The connection of different historical forms of existence of the same phenomenon means that the current state of the object under study is a natural result of its previous development. And the future state is a natural result of development in the past and present.

A comprehensive approach includes consideration of phenomena in their connection and dependence on each other, using research methods not only of this, but also of other sciences that study the same phenomenon. The theoretical basis for the development of scientific ideas about future development is political economy. For the same purpose, the scientific apparatus of other social sciences is widely used in the theory and practice of economic forecasting.

The systemic approach involves the study of quantitative and qualitative patterns of probabilistic processes in complex economic systems. It plays an important role in economic forecasting. Every phenomenon of reality can be considered as a system. This means that it consists of a few interconnected parts, elements that provide generally defined properties and functions. Knowing these properties and functions, it is possible to predict how the researched object will behave.

The structural approach plays an important role in the study of objects of management of socio-economic development, since the purpose of the study is a causal explanation, that is, establishing the cause of the phenomenon under study.

The systemic-structural approach assumes, on the one hand, the consideration of the economic system as a dynamically developing whole, and on the other hand – the dismemberment of the system into constituent structural elements in their interaction, since in real conditions each structural element affects both all other elements and and the system as a whole. This creates an opportunity to reveal the regularities of connections of system elements, as well as their relationship and subordination.

Mechanisms and tools of anti-crisis management of business structures can be conditionally divided into 4 main groups: administrative, economic, financial and social.

Administrative mechanisms are based on the one hand, on the power of state power and are divided into measures of prohibition, permission, and coercion, on the other hand, on processes that arise directly within the enterprise in the form of management teams, issuing tasks to executors that exclude alternatives when performing work, and differ in sub the objectivity of managers' approaches. In countries with a developed market economy, the scope of administrative methods is mainly limited to environmental protection (environmental regulations, limits, fines, sanctions), maintenance of the minimum parameters of the standard of living of the population (minimum salary, living wage, social norms, social standards), liquidation negative consequences of market competition (monopoly – by setting production quotas, limiting prices, profitability, standardization) and the fight against shadow business (Melnyk, 2011). Administrative mechanisms are implemented using a system of administrative regulation tools, namely: quotas, limits, licensing, rationing, standardization, government orders, etc.

The application of economic mechanisms of anti-crisis management best meets today's requirements, which are caused by the uncertainty of the external environment, the unstable economic and political situation in the country. The reason for the effectiveness of economic mechanisms is the great tendency of people to respond to economic incentives, which is due to the nature of economic interest. It is in the provision or deprivation of economic goods that the action of the economic mechanism consists of. After all, as S. Mochernyi notes, "...under capitalism... workers get personal freedom and are deprived of means of production and means of livelihood" (Mochernyi, 2005). The list of methods and tools of anti-crisis management of the socio-economic activity of the enterprise cannot be unambiguous, since the dynamics of changes in modern economic life, new challenges and problems forces the subjects of management to find new forms of influence on objects under their control. We should also note that, along with state subsidies, there may be state investments to finance targeted development programs, and the company's management, along with traditional material incentives (salary, bonuses), may offer employees insurance, medical care, payment for mobile communications and gasoline, free lunches, etc. (Semenova, 2012).

Most often, in the literature, financial mechanisms are defined as a set of financial methods and forms, tools and levers of influence on the social and economic development of society. Such tools are aimed at optimizing enterprise management in the short term (crisis management). They include the development of financial stimulation tools for the current situation: employees, suppliers and buyers through the optimization of working capital management, units of effective distribution of intra-economic resources, managers and business owners (Kaidrovych, 2014). This includes various financial management methods and business organization tools that ensure the effectiveness of using these methods.

The main tools of social mechanisms of anti-crisis management at the macro level are the culture of society, the system of economic management, and the socio-economic condition of social groups. At the level of business structures, the following main components can be distinguished: personnel development, health care and safe working conditions, socially responsible restructuring, which can be implemented using the following tools (Motivation, 2007): application of motivational and innovative schemes and payment systems; providing employees with a social package in various amounts; creation of conditions for recreation and leisure, including family; support and optimization of internal communications in the organization; participation of employees in management decision-making, etc.

The process of anti-crisis management of the socio-economic activity of business structures should include the stages of assessing the competitive status of the enterprise and diagnosing its socio-economic potential. For this, the phase of the life cycle of the enterprise is established (inception, formation, growth, early maturity, maturity, aging). The competitive status, which is characterized by the competitive position, competitiveness and competitive stability of the enterprise, can serve as an indicator for evaluating the phase of the enterprise's life cycle. Means of assessing the competitive status of an enterprise, which are based on discriminant and neural models, make it possible to obtain comprehensive quantitative and qualitative assessments of the competitive position of enterprises, their competitiveness, as well as competitive stability. There are also a number of other methods of assessing the competitive status of an enterprise, which include methods of financial analysis, methods of fuzzy set theory, economic and statistical methods, methods of system analysis, etc. (Timoshchuk, 2015). External factors affecting the competitiveness and competitive status of the enterprise can be represented by five groups: human resources, physical resources, intellectual resources, financial resources, infrastructure.

O. Shilova in his work "Development of the anti-crisis program of the enterprise in the conditions of the innovative path of development" presents a meaningful description of the mechanism of the anti-crisis program.

Considering this approach and transferring it to the anti-crisis management of the socio-economic activity of the enterprise, the latter can be presented in the form of a series of measures based on the proposed provisions, which will contribute to the further strengthening of the position of business structures in the conditions of a changing external environment (Table 1.5).

Monitoring indicators of socio-economic activity of business structures, as well as the external environment, makes it possible to make informed decisions regarding the regulation of the anti-crisis management process. At the same time, the effectiveness of management decisions significantly depends on the effectiveness of the company's management system and the perfection of the anti-crisis mechanisms used by the business structure.

Conclusions

So, some aspects of anti-crisis management of socio-economic activity of business structures have been considered. It has a strategic orientation and takes into account the dynamism of the development of the business structure, thus causing a more detailed study of the mechanisms, approaches and indicators of management of its socio-economic activity. The developed substantive characteristics of anti-crisis management of socio-economic activities of business structures will contribute to increasing the efficiency of their functioning in the future.

Table 1.5

Content characteristics of anti-crisis management of socio-economic activities of business structures

Characteristics of anti-crisis management	Types of anti-crisis management		
	Pre-crisis	Crisis	Post-crisis
1. Purpose	exit of the business structure from an unstable state and prevention of further bankruptcy		
2. Tasks	assessment of the risks of a crisis in the socio-economic activity of business structures and a forecast of its consequences	assessment of the scale of the crisis of socio-economic activity of business structures and its phase	review of strengths and weaknesses under new economic conditions
3. The main mechanisms of anti-crisis management	administrative, economic, financial and social		
4. Approaches to anti-crisis management	historical, complex, systemic, structural, system-structural		
5. Idicators for evaluation of business structures activitity for the selection of anti-crisis measures	availability of social, training, educational programs for personnel development; coefficient of financial autonomy; the ratio of the price of the company's products to the industry average	group of indicators of economic activity; group of indicators of social activity; internal rate of return; payback period	introduction of new products of higher quality, which is confirmed by relevant certificates; expenses for innovative research in the field of activity
6. Methods of monitoring indicators of socio-economic activity	scenario approach (optimistic, pessimistic, most expected scenarios); strategic controlling		

Source: developed by authors based on Shylova, 2013

References:

1. *Kaidrovych H.I. (2014). The concept of forming the mechanism of financial equilibrium of the enterprise in the system of ensuring its economic security. Proceedings. Lviv, no. 1-2 (46-47), pp.53-64.*
2. *Maslak O.O., Hromiak O.B. (2013). Express diagnostics of internal crises at the enterprise. Industrial economics, no.1-2 (61-62), pp. 68-75.*

3. *Melnyk A.F., Vasina A.Yu., Zhelyuk T.L., Popovych T.M. (2011). National economy: textbook. Manual. Kyiv, Knowledge, 463 p.*
4. *Mochernyi S.V., Larina J.S., Ustenko O.A. (2005). Economic encyclopedic dictionary: In 2 vols. Vol. 1. Lviv: Svit. 616 p.*
5. *Motivation of staff in a modern organization / under common. ed. Trapitsyna S.Yu. St. Petersburg, LLC "Book House", 2007. 240 p.*
6. *Semenova A.Yu. (2012). Economic mechanism of agricultural enterprise management: theoretical and methodological aspect. Bulletin of Poltava State Agrarian Academy, no. 3, pp.186 - 190.*
7. *Shylova O.Yu. (2013). Development of the anti-crisis program of the enterprise in the conditions of an innovative way of development. Marketing and innovation management, no. 4, pp. 173-180.*
8. *Simchenko N.O. (2010). Socially oriented management systems: the concept of construction. Economy and State, no.10, p.60.*
9. *Tarasenko I.O., Batrak O.V. (2013). Financial diagnostics in the context of crisis management. Economic Bulletin of the University: a collection of scientific papers of scientists and graduate students. Pereyaslav-Khmelnytsky State Higher Educational Institution, Hryhoriy Skovoroda State Pedagogical University, vol.21 / 1, pp. 217-222.*
10. *Timoshchuk M.R. (2015). Conceptual principles of enterprise development management. Scientific Bulletin of Uzhhorod University, pp.241 - 245.*
11. *Yermak S.O. (2014). Commercial and technological innovations in trade at the current stage of development of Ukraine. Effective Economy, no. 11.*
12. *Yermak S.O. (2011). Theoretical and methodological toolkit for the formation of combined working capital management policies. Economy of industry, no. 2, pp. 242-249.*

Chapter 2

IMPERATIVES OF MANAGEMENT AND MARKETING DEVELOPMENT

Bogdan Fleaca
PhD in Industrial Engineering,
Associate Professor
Department of Entrepreneurship and Management
Politehnica University of Bucharest
(Bucharest, Romania)
ORCID: https://orcid.org/0000-0001-5469-0885

ROLE OF KNOWLEDGE MANAGEMENT AND EDUCATION IN THE CONTEXT OF GLOBAL TRANSFORMATION

Abstract

Technological advance is reshaping how individuals work and learn, creating new opportunities and jobs. Reaping the full benefits of digital transformation depends on the capacity of education systems to guarantee a minimum threshold of the transferable mix of skills with cognitive, social and emotional components, allowing the workforce's changes within and between future occupations.

This chapter explores the knowing and learning processes as enablers for skills formation, adding value for students, other customers and educational organizations as a whole. Main instructional approaches (e.g. teacher-centred learning and student-centred learning) were analyzed as well as the multidimensional nature of knowledge and technology to highlight the growing importance of knowledge management within the educational context.

The findings emphasized the remaining unexploited potential of education through organizational learning and innovation for improving students learning outcomes and performance. Enhancement of learning opportunities by making the most use of the student-centred learning approach and suitable use of digital transformation may provide learners with skills needed for the transition to the digital world of work. Finally, the analysis of instructional approaches adopted by *educators as knowledge facilitators may provide useful insights in the attempt to place learners in the centre of learning and provide them with attitudes to absorb and expand knowledge to navigate labour market needs.*

Keywords: *digital transformation, knowledge management, education, student-centred learning.*

Introduction

Fast-evolving technology has changed the nature of economies and societies which are undergoing a digital transformation shaping the skills required and rewarded in the labour market. Digital transformation has many facets which are changing the way people interact with one another, work, communicate and live. Artificial intelligence and machine learning-enabled automation of most parts of the production processes by using automated tools that work, learn and react as human beings, particularly in the manufacturing sectors.

Digital technologies have also enabled the development of platform economies which bring together supply and demand in manifold ways, making it possible for people to share and exchange in ways that were unthinkable just two decades ago.

These technological advances have led to a significant reorientation of skills that people need to cope with the increased use of technology in their jobs. An adequate mix of skills (e.g. cognitive, social and emotional skills) is required to successfully navigate the transition to the digital world of work since a large share of the tasks may be automatable.

Worthy to mention, the current research on skills forecasts argued that future jobs will combine digital with technical, soft and behavioural skills which requires a strong level of complementary ICT skills, such as soft skills (e.g. cognitive and social components). Also, the jobs requiring advanced ICT skills depend heavily on the capacity to solve problems, learn, adapt, and apply new methods and technologies, and technical knowledge (OECD, 2019).

In addition, the increasing digitalization of many services as public (e.g. e-government, e-health) and private (e.g. e-banking) is significantly diminishing people's opportunities to interact with others, reducing, therefore, the sense of participating in and belonging to communities and societies. These raise the question of being aware of the implications of digitalization for citizens' well-being, the relationship between technology use and mental health and social ties as well as the issues of exposure of individuals to privacy risks, cyberbullying, as well as the effect of technology on many other societal dimensions.

Technologies enable the enrichment of work content by allowing job holders increasingly to focus on non-routine tasks such as problem-solving, creative activities and more complex communication while developing digital skills by using new technologies. To benefit from these new work opportunities, the education and training sectors are required to make the most of digital transformation, to be adapted to address these changes, ensuring that individuals benefit from new digital opportunities while avoiding the risks attached to digitalization.

As a World Bank report acknowledged, higher education plays a critical role in equipping students with transferable mixt of skills that shape the graduate's overall learning readiness. The education system therefore should guarantee a minimum threshold of transferable skills which are the most valuable counteracting measures against job uncertainty and the risk of automation, allowing the workforce changes within the occupations and navigating between occupations (WDR, 2019).

The multidimensional nature of technological advance and digital transformation needs to take into account the explosion of knowledge which are particularly important in the case of education providers accountable for human capital in a rapidly changing world. Therefore, leveraging knowledge and the process of knowing gain particular relevance for education having the mission to help individuals develop the knowledge needed to thrive in work and life.

As scholars argued, the nature of knowledge is a form of social and organizational activity rather than a simple possession (Weick, Sutcliffee, and Obstfeld, 2005). Knowing, in this context, is a form of creating meanings and individuals interact in social contexts and negotiate their meanings and understandings of the world. A couple of characteristics are worthy to be mentioned concerning knowing as a form of social interaction:

- A dynamic process as individuals and contexts change;
- Uncertainty as interpretations may change through different

interactions, roles and structures;
- Context-dependent and inseparable from its social and political environment.

These characteristics gain special importance, especially in the context of technological innovation that change how the learning process took place with more emphasis on learning models placing the learner (students) in the centre of the learning process.

Bransford (1999) advocated for the role of education to provide knowledge to improve individuals' abilities to become active learners, seeking to understand complex subject matters and being prepared to transfer what they have learned to new problems and settings.

In this view, analyzing the interconnectedness of learning and instructional approaches adopted by educators as knowledge facilitators may provide useful insights in the attempt to place learners in the centre of learning and provide them with attitudes to absorb and expand knowledge and skills needed to navigate new labour market needs and life circumstances.

Materials and Methods

Within the educational context, the role of knowledge management information of human capital is considered a critical factor for knowledge, skills and attitudes needed to cope with changing nature of work and uncertainty.

Given the interdisciplinary nature of this emerging field, there is a growing scientific literature that attempts to define it from different points of view. The concept of knowledge management has its roots in a wide variety of disciplines such as philosophy, business management, anthropology, information science, psychology and computer science.

Jashapara (2011) proposed an integrated definition of knowledge management as being the effective learning processes associated with exploration, exploitation and sharing of human knowledge that use appropriate technology and cultural environments to enhance an organization's intellectual capital and performance. Thus, technology is seen as a tool which enhances the potential of learning whereas the human dimension is critical for developing knowledge through different learning processes. Once the knowledge is created, a wide variety of tools, technologies and systems might be used to explore and exploit knowledge through a continuous cycle of knowledge creation, capturing, organization, evaluation, storage and sharing information.

Also, the globalization and increasing pressure to remain competitive in a long term determined researchers to recognize knowledge and technology as drivers of productivity and economic growth in modern economies (OECD, 2000).

Plenty of studies have been dedicated to exploring the role of technology in the knowing and learning processes from different perspectives. Albeit the new communication technology such as 5G has changed the way of acquiring knowledge, the educators have a pivotal role in cultivating the ability of students to accept diverse knowledge and technologies. Teachers need to become evaluators and facilitators of learning and should enable students to change their learning styles and adapt to using digital resources (Wang & Chang, 2021).

Looking at the implication of Industry 4.0 on education, the scholars proposed the challenge-based learning model allowing students to experience some of the implications of an interconnected system with instant information feedback and visualize some of the challenges when integrating into Industry 4.0. (Gutiérrez-Martínez et. all, 2021).

To further investigate the role of knowledge in education, Herranen, Vesterinen, & Aksela (2018) emphasized the growing trend toward learner-driven approaches to the student-led planning process. In this learner-driven pedagogy, the learners' actions create interest, which then creates more action because there are no external demands for what sort of actions are required. This type of action-competence driven by the learner is close related to the idea of meaningfulness, acting and making an influence in the learning environment, the nature and ownership of development knowledge, the diversity of the learners, and pedagogical support.

When the multidimensional nature of knowledge and technology is taken into account to improve the quality of teaching and learning processes, the National Institute′s for Standards and Technology with its Baldrige Excellence Framework for Education (2021) defined a systemic approach to educating and advocating for core values that create the basis for action, feedback, and ongoing success:

- *Systems perspective* by managing the parts of the organization as a coherent whole towards its mission;
- *Visionary leadership* with embedded clear and visible organizational values and ethics, and high expectations for the workforce;
- *Student-focused excellence* by considering all product and service characteristics, and modes of student access and support which contribute to satisfaction, loyalty, and positive referrals;
- *Valuing people* by an appreciation of all parts who have a stake in the organization, including customers, community members, suppliers and partners, and other people involved;
- *Agility* by proven capacity for rapid change and flexibility in operations;
- *Resilience* by organizational ability to anticipate, prepare for and recover from disasters, emergencies, and other disruptions, protecting and enhancing workforce and customer engagement, supply-network and financial performance, organizational productivity, and community well-being;
- *Organizational learning* considers both continuous improvements of existing approaches and significant change or innovation, leading to new goals, approaches, products, and markets;
- *Focus on innovation* by the ability to make meaningful change to improve products, services, programs, processes, operations, and business models, to create new value for stakeholders;
- *Management by facts* including assessment of performance with indicators supporting organizational evaluation, alignment, and decision making;
- *Societal contributions* by taking into account the consideration of societal well-being and benefit;
- *Ethics and transparency* by stressing ethical behaviour in all transactions and interactions, open communications and sharing of accurate information;
- *Delivering value and results* by the inclusion of not just financial results, but also product and process results, and societal performance.

To support the improvement of teaching and learning processes as a foundation for building an adequate mix of skills (e.g. cognitive, social and emotional skills) for students, the same framework advocated for seven categories of criteria addressing all key areas of running a successful education organization, including student learning outcomes, customer satisfaction and engagement, product and service outcomes, and process efficiency, workforce satisfaction and engagement, budgetary, financial, and market results, and social responsibility such as leadership, strategy, customers, measurement, analysis, and knowledge management, workforce, operations and results (BEF for Education, 2021).

Interestingly, the Baldrige framework introduced the concept of student-centred excellence where the student is the customer as an actual or potential user of organizations′ educational programs and services. The customer may include direct users (e.g. students and parents), as well as others (e.g. local businesses, future employees) who provide meaningful information on market behaviours and on how these views and behaviours may contribute to the organization's current and future success in the market.

Moreover, adding value for students, other customers and the organization as a whole include ensuring the quality and availability of data and information, managing, using, evaluating, and sharing ever-increasing organizational knowledge. This is particularly relevant for knowledge management requires clear roles and responsibilities, a culture of knowledge sharing, systematic processes for sharing knowledge and expertise, and appropriate tools and technology for the organization.

Results and Discussions

Looking at the foundation of knowing and learning processes, two different categories seem to be relevant for a thoroughly comprehending of knowledge development and learning competencies of learners: teacher-centred learning and student-centred learning.

In this regard, Table 2.1 highlights the results of the comparative analysis of both instructional methods used in the knowing and learning process in an attempt to equip learners with the right mix of skills, knowledge, and attitudes to cope with changing labour market, as active and responsible citizens.

Table 2.1

Analysis of classic vs. modern style of the learning process

	Teacher centred learning	Student-centred learning
Knowing Process	Relies on instructor	Relies on both instructor and students
Used language	Forms and structures are known by the instructor	Forms and structures used in typical situations
Learning	Instructor transmits knowledge; Students listen and work alone	Instructor models; Students interact with one another; Students work in pairs
Assessment	The instructor monitors the correctness of each work; The instructor asks students based on chosen topics; The instructor assesses students learning	Students communicate without constant instructor monitoring; Students answer each other's questions using the instructor as facilitator; Students evaluate their learning, the instructor also evaluates their learning

The traditional way of teaching and learning (e.g. teacher-centred learning) has been the dominant mode for more than a century. In this approach, the instruction process is built around standards chosen by teachers with no contributions/inputs from other educational stakeholders. The instructor has the primary active role, being the main source of information and knowledge whereas the learners take a passive, receptive role, listening, taking notes, giving answers to questions, or completing assignments and tests.

Within this model, students put all focus on the teacher, they are working alone, and collaboration is discouraged. The major roles of the instructor are related to helping students master knowledge and contents, starting class with a standard and target, lecturing, demonstrating concepts, reading and/or issuing instructions and supporting students continuously practising. The evaluation is mostly done through a summative assessment based on written tests whereby students demonstrate or reproduce knowledge in the form of short responses and/or multiple-choice selections. Albeit there is a large base of literature dealing with the shortcomings induced by teacher-centred learning, it is not surprising that there is not a unique, agreed approach to this subject.

Currently, the most dominant literature is about student-centred learning which is much more attractive than the traditional viewpoint of the teaching and learning process. This modern approach is built on the involvement of students in the production of knowledge and transforms students' perceptions and understandings. The process of knowing leading to skills formation is linked to the student/learner who influences the content, activities, materials, and pace of learning. The learner is in the centre and the instructor just provides opportunities to learn independently and from one another and coaches learners in their progress.

The instructor has mainly the facilitator role, doing fewer learning tasks, creating a learning environment more conducive to students taking responsibility for their learning, enabling therefore a higher degree of involvement and motivation. The paradigm shift of student-centred learning requires an instructor to promote individual accountability by keeping the group size small, assigning roles, having students do work before group meetings, choosing what is graded carefully, and determining the type of assessment, criteria used, and activities to prepare students for summative assessment. However, the evaluation tends to be a formative assessment including a range of formal and informal procedures to adapt teaching and learning activities and students' attainment. In assessing the results, the logic behind, as opposed to the traditional learning process, is that students/learners should be allowed to make mistakes without fear of the effect on their grades.

Summing up, student-centred learning is a strategic choice of organization, combining instructional approaches and techniques that take into account students' choices, interests, passions and ambitions. Whether initially the concept of students-centred learning was considered as a model of development of autonomy and/or independence of learner/student, it is not surprising that is currently seen as well as a way to develop better skills and practices for lifelong learning and independent problem-solving.

Conclusions

Given the major influence of science and technology as well as the explosion of knowledge, educational organizations and actors from the education and training sectors are required to drive organizational learning and innovation as a prerequisite for improving students learning outcomes and performance.

Organizational learning stands for the process of improving actions through better knowledge and understanding which in turn improves organizational efficiency and effectiveness and stimulates innovation. Therefore, the ability to blend and correlate disparate types of data, to manage, use, evaluate, and share the ever-increasing organizational knowledge is considered to be critical for adding value for students, and other customers and provides opportunities for a competitive advantage.

In this context, education and, in particular, higher educations are increasingly important in meeting the skills that will be sought by future labour markets. Enhancement of learning opportunities needs to be embedded in the teaching and learning processes by making the most of the student-centred learning approach and appropriate use of digital transformation to ensure the right mix of skills to the transition to the digital world of work and thrive in it.

References:

1. *OECD (2019). OECD Skills Outlook 2019: Thriving in a Digital World, OECD Publishing, Paris, https://doi.org/10.1787/df80bc12-en.*
2. *World Development Report 2019. The changing nature of work. World Bank Publications, DOI: 10.1596/978-1-4648-1342-9*
3. *Weick, K. E., Sutcliffe, K. M. and Obstfeld, D. (2005). Organizing and the process of sense-making. Organization Science, 16, pp. 409–21.*
4. *Bransford, J. D., Brown, A. L., & Cocking, R. R. (Eds.). (1999). How people learn: Brain, mind, experience, and school. National Academy Press.*
5. *Jashapara A.(2011). Knowledge management. An integrated approach. 2nd Edition, Pearson Education, London, UK.*

6. *OECD (2000). Knowledge management in the learning society. OECD Publishing, Paris, doi.org/10.1787/9789264181045-en*
7. *Wang, X.-Y., Li, G., Tu, J.-F., Khuyen, N. T. T., & Chang, C.-Y. (2021). Sustainable Education Using New Communication Technology: Assessment with Analytical Hierarchy Process (AHP). Sustainability, 13(17), 9640. https://doi.org/10.3390/su13179640*
8. *Gutiérrez-Martínez, Y., Bustamante-Bello, R., Navarro-Tuch, S. A., López-Aguilar, A. A., Molina, A., & Álvarez-Icaza Longoria, I. (2021). A Challenge-Based Learning Experience in Industrial Engineering in the Framework of Education 4.0. Sustainability, 13(17), 9867. https://doi.org/10.3390/su13179867*
9. *Herranen, J., Vesterinen, V.-M., & Aksela, M. (2018). From Learner-Centered to Learner-Driven Sustainability Education. Sustainability, 10(7), 2190. https://doi.org/10.3390/su10072190*
10. *Baldrige Performance Excellence Program. 2021. 2021–2022 Baldrige Excellence Framework (Education): Leadership and Management Practices for High Performance. Gaithersburg. MD: U.S. Department of Commerce, National Institute of Standards and Technology. https://www.nist.gov/baldrige*

Larysa Frolova
Doctor of Science in Economics,
Professor, Head of Chair
ORCID: https://orcid.org/0000-0001-7964-8173
Bohdan Kotov
PhD Student
Chair of Entrepreneurship and Trade
ORCID: https://orcid.org/0000-0001-7545-3985
Odessa Polytechnic National University
(Odessa, Ukraine)

THEORETICAL AND METHODOLOGICAL ASPECTS OF BUSINESS RISK MANAGEMENT IN AN INNOVATIVE ECONOMY

Abstract
The etymology of the concept of “risk” is investigated based on its translation from various ancient and modern languages. Based on the different opinions of scientists on the understanding of the category

"risk", it was determined that the existence of risk in management is most often associated with such concepts as uncertainty, probability of occurrence of a particular event, danger and loss. The main preconditions for the occurrence of risk are the uncertainty and probability of occurrence of a certain event on the one hand and the consequences of the risk situation – danger and loss, or the threat of loss of certain resources or losses – on the other hand. The author's vision of the interpretation of the category "risk" as a concept characterized by the uncertainty of processes occurring in society, due to the probability of certain events with adverse consequences in the form of danger and possible loss or failure to achieve the desired result. Two key distinctive aspects of the concept of entrepreneurial risk are identified, which are due to the definition and meaning of business as such: economic activity and profit. It is highlighted that within the risk management of entrepreneurial activity it is expedient to apply process, functional, system and situational approaches in close interaction. It is proved that the identification and assessment of business risks is the most important stage of their management and, accordingly, the methods of risk assessment are divided into two groups: qualitative and quantitative.

Keywords: *uncertainty, probability, loss, danger, business risk, methods of risk assessment, approaches, innovative economy.*

Introduction

Recent events in the world have exposed the magnitude and variety of risks that may accompany business activities and the need to manage them to reduce or eliminate the negative consequences. The problem of identifying and managing business risks arose in society in the nineteenth century, simultaneously with the beginning of construction of large industrial enterprises and the development of new modes of transport. However, the systematization of knowledge on decision-making on business risks and the development of procedures for managing them began only in the second half of the twentieth century, but there is still no consensus on these issues, nor is there a single interpretation of the concept of business risk. The understanding that risk is inherent in any form of human activity determines the variety of scientific judgments about its definition, which are determined, supplemented and concretized, including in the economic literature.

Materials and Methods

The study of risks in the general sense is devoted to many works of both foreign and Ukrainian scientists, such as: Algin A., Herasymchuk N., Kucherenko V., Karpov V., Karpov A., Keynes J., Mirzoeva T., Tomashevskaya O., Mocherny S., Tishchenko A., Fere V., Romanchenko O., Chernov Yu., Fomishyn S., Knight F. and others. Problems of understanding and managing business risks were raised by Vitlinsky V., Granaturov V., Shevchuk O., Donets L., Ilchuk M., Pilnova V., Havrish O., Kapelyushna T., Semenova K., Tarasova K., Chupryna I. Works of these scientists formed the information base of the study. However, given the growing degree of uncertainty in the external environment, the unstable political and economic situation in Ukraine and the world, the prerequisites, management methods and understanding of the concept of "business risk" need constant revision and refinement. Therefore, in our work with the help of methods of comparison, generalization, analysis and synthesis, as well as a graphical method conducted a study of the essence of the concept of "entrepreneurial risk", the prerequisites for its emergence based on analysis of its components and methods of evaluation.

Results and Discussion

The study of the categorical-conceptual apparatus related to "business risk" should begin with a consideration of approaches to the interpretation of its main components: "business" or "entrepreneurship" and "risk". The origin term "risk" is not precisely clarified, but it is known that it has its origins in foreign words, so in the ancient Greek language "*ridsikon", "ridsa"* – a cliff, a rock; in German "*risiko"* – danger, threat; in French *"risque"* is a threat. German scientist V.-R. Heilman believes that the concept of "risk" is a vulgarized form of the Latin term "*resecum*", which translates as "danger" or "rock" (Vilinskyi, 1996; 2004) (or literally "danger of maneuvering between rocks").

As already mentioned, there is still no single approach to defining the category of "risk" in the research of scientists. A generally accepted clear interpretation of this term has not yet been developed.

This indicates that, despite the large number of studies, scientists have a clear understanding of this important category not formed. The existence of risk in management is often associated with such concepts as uncertainty, the probability of an event, danger and loss.

In the most general form, uncertainty is “lack of information about the conditions in which economic activity will take place, low predictability, the inability to accurately predict these conditions" (Azrilian, 2004). Sometimes uncertainty is understood as "the possibility of obtaining different results, not just the desired” (Ovchinnikov, 1997). The impact of uncertainty on business may be reflected in the fact that the goal of making certain decisions will not be achieved. Therefore, in order to function effectively in a market economy, every entrepreneur must be able to correctly assess the degree of uncertainty and risk and be able to manage it in different situations. Objective uncertainty in various manifestations may hinder the implementation of planned activities, change their content or lead to undesirable results. In his research, P. Samuelson notes that “... uncertainty creates a mismatch between what people expect and what is really happening” (Mochernyi, 2002).

Yu. Chernov, S. Fomishyn and A. Tishchenko interpret uncertainty as “incomplete or inaccurate idea of the value of various parameters in the future, which are caused by various reasons and incompleteness or inaccuracy of information about the conditions of implementation of decisions, including related costs and results” (Chernov, 2003). A. Algin also interprets risk as “an activity that overcomes uncertainty” (Algin, 1998). In his opinion, “overcoming uncertainty becomes necessary in a situation of inevitable choice, in the process of which it is possible to quantify and qualitatively assess the probability of achieving the intended result, failure and deviation from the goal” (Algin, 1998). By definition N. Herasymchuk, T. Mirzoeva and O. Tomashevska “uncertainty is an objective impossibility of obtaining absolute knowledge about the objective and subjective factors of the system, the ambiguity of its parameters” (Herasymchuk, 1996).

The nature of the risk reflects the relationship and interaction of its main aspects: the probability of obtaining the desired result; the probability of adverse, undesirable consequences in the choice of alternatives and their implementation; the probability of deviation from the chosen goal or the uncertainty of achieving the goal. Therefore, the key characteristic of the risk can be considered its probabilistic nature. Scientists V. Kucherenko, V. Karpov and A. Karpov (Kucherenko, 2011) also emphasize that the concept of risk is characterized by uncertainty, which is associated with the probability of adverse situations and consequences that arise during the project, situations with objective and subjective probability.

Probability is a philosophical and general scientific category, which is a quantitative measure that can be calculated, the possibility that some expected event will happen or will not happen under certain fixed conditions. An event is called probable when the grounds for its occurrence outweigh the opposite grounds, otherwise the event is called unlikely or improbable. The term "probability" as such is the basis of probability theory, in which events can be quantitatively compared depending on the degree of their probability (Vasylkiv, 2020). So, the probability can take values from “0” to “1”. The value “1” corresponds to the actual event. An impossible event has a probability of “0”. If the probability of occurrence of the event is equal to p, then the probability of its occurrence is equal to 1-p. In particular, the probability “1/2” means an equal probability of occurrence and non-occurrence of the event.

Some scientists interpret the term “risk” to define probability. So, P. Hrabovyi, S. Petrov and S. Poltavtsev in his work note that “risk is the probability (threat) of loss of the enterprise part of its resources, loss of profits or the emergence of additional costs as a result of certain production and financial activities” (Hrabovyi, 1994). For O. Sharapov “risk is the probability of loss or loss of profit compared to the projected option” (Sharapov, 2001). That is, scientists in their definitions of “risk” emphasize the likelihood of certain consequences, often negative. Such consequences may be a certain danger or loss, or threat of loss of property, resources, part of income, etc. Although in the definition provided by V. Hranaturov and O. Shevchuk “risk is a situational characteristic of the activity of any producer, including such an economic object as a manufacturing enterprise, which assesses the uncertainty of its economic activity and the possibility of adverse consequences in case of failure” (Hranaturov, 2000). That is, the result of a risky decision can not be identified only with a threat or danger to the company, whose actions only lead to the deterioration of the enterprise. Favorable conditions allow you to make a profit, achieve your goals, and only with negative coincidences can bad results occur. That is, the quality of the consequences directly depends on the probability of occurrence of certain events.

Some researchers in certain categories of risk focus on its possible consequences in the form of additional costs or loss of certain resources. For example, “risk is the threat of losing part of the company's resources, loss of income or additional costs due to certain activities”; “risk is a potential, quantifiable possibility of loss” or “risk is the chance of incurring losses or damages due to the implementation of any case” (Klymenuk, 2000). L. Donets notes that “risk can be defined as the risk of loss of resources or loss of income compared to the option designed for the rational use of resources” (Donets, 2006). So there is another term that is closely related to the risk category is “danger”.

Regarding the relationship between the concepts of “risk” and “danger”, some authors, such as, for example, Ye. Stoianova (Stoyanova, 1996), believe that “risk is the danger of an unfavorable end to one expected event”. The same opinion is held by scientists V. Fere and O. Romanchenko (Fere, 1997). Many authors study the concept of “danger” in a narrower sense than the concept of “risk”, and also use it to define the concept, for example: risk is "the possibility of danger or action at random with the hope of a happy outcome" (Ozhegov, 1999). Risk is “the danger that certain events will occur” (Semenova, 2017). When we talk about danger, we mean what already exists. So danger is a phenomenon, process, etc., that has already manifested itself and negatively affects the subject. Therefore, it is advisable to investigate the danger through awareness of the various risks.

Thus, we have the prerequisites for the emergence of risk – it is the uncertainty and probability of a certain event on the one hand and the consequences of a risk situation – danger and loss, or threat of loss of certain resources – on the other hand, graphically it can be represented as a diagram (Figure 2.1).

Based on this, we can formulate the author’s vision for the interpretation of the category “risk”, risk is characterized by uncertainty of processes occurring in society, due to the probability of certain events with adverse consequences in the form of danger, possible loss or failure.

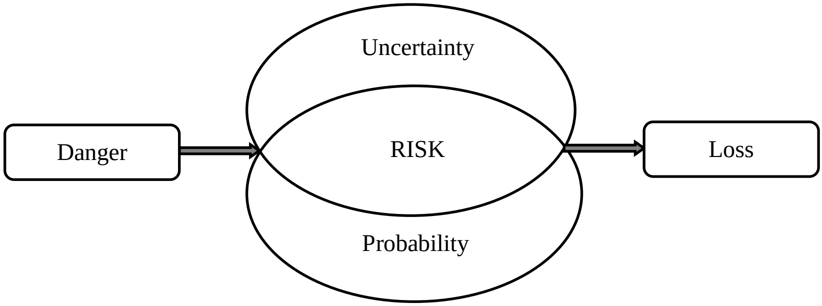

Figure 2.1 Interdependence of the main categories forming the concept of "risk"

Source: author's development

The concepts of "risk" and "entrepreneurship" or "business" cannot be considered separately. These two categories are closely related. It can be said that risk is an objective characteristic of business activity, which accompanies any management decision in uncertain conditions and is measured by the probability of failure to achieve the expected results. The concept of risk is present in the very definition of business. However, we would like to draw your attention to the fact that in Ukraine there is no normative, legislative definition of business risk.

Business risk as an economic category characterizes the objective-subjective nature of the situation of uncertainty that accompanies all areas of operation of the business entity, and the probability of the enterprise receiving an adverse result in the form of loss (Semenova, 2015). M. Ilchuk defines business risk as "the probability of incurring losses in the course of business operations or obtaining additional profits due to the variety of possible decisions or uncertainty of production situations" (Ilchuk, 2002). According to O. Bondar, "business risk is the threat that the entrepreneur will incur unplanned, additional costs and receive income lower than expected" (Bondar, 2012). I. Chupryna interprets business risk as "risk that arises in any activity related to the production of products, goods, services and is characterized as the danger of potentially possible, probable loss of resources or non-receipt of income" (Chupryna, 2012). Also, among scientists (Pylnova, 2020) there is an opinion that "business risk is a probable category that characterizes the realization of future consequences of current decisions made by an individual in the course of his activities aimed at making a profit".

Thus, we can distinguish two key distinctive aspects of business risk compared to its general concept, due to the definition and meaning of business as such:

1) economic activity. When it comes to business risk, the area of occurrence of a risky event moves from the sphere of public relations to the sphere of economic activity, which is related to the production, sale of products, performance of works or provision of services of a cost nature;

2) profit. Based on the fact that the purpose of entrepreneurial activity is to make a profit, the main negative consequence of the risk situation is the threat of loss or loss of profit.

Business risk management can be considered as a set of techniques and methods that can reduce the likelihood of such risks or localize their consequences. In the conditions of market transformations it is important to determine risk management through the process of developing an optimal, reasonable solution aimed at achieving a balance between the benefits of risk optimization and the necessary costs in terms of comparing them with the value of the enterprise as a result of its effectiveness.

Within the framework of business risk management, it is expedient to apply process, functional, system and situational approaches in close interaction (Kotov, 2021).

Identification and assessment of business risks is the most important stage of their management. The main tasks of qualitative risk analysis are: to determine the sources and causes of business process risks, to identify areas and types of risk, to identify the benefits and possible negative consequences that may arise in the course of entrepreneurial activity. Qualitative risk assessment is "a process of identifying and identifying risks that require a rapid response" (Nazarchuk, 2016). The technology of qualitative risk assessment can be presented in the following sequence (Brukhovetskaya, 2011):

1. Identification (definition) of possible business risks.
2. Description of possible consequences of risks.

3. Selection of measures aimed at reducing risks.

4. Monitoring of risks inherent in business activities.

As a rule, qualitative methods of risk assessment are used in a situation where it is impossible to obtain quantitative indicators, they are quite simple and involve the use of methods of expert assessment or scenario testing. Expert assessment allows to divide the identified business risks into the following categories: high, medium and low; fully acceptable, partially acceptable and unacceptable; insignificant, serious and unacceptable (Alexandrov, 2011); permissible, critical and catastrophic, etc.

The purpose of quantitative analysis is to obtain a numerical expression of individual risks to determine the characteristics of the probability and possible losses (Nazarchuk, 2016). The sequence of quantitative risk assessment may consist of the following stages:

1. Selection of criteria for assessing the degree of risk.

2. Determining the maximum allowable degree of individual risk.

3. Calculation of the actual value of risk using individual methods.

4. Assessment of risk dynamics, choice of risk reduction methods.

Quantitative methods of assessing business risk are a variety of mathematical, analytical and statistical methods: Sensitivity Analysis method, Probability Estimation method, Monte Carlo method, Discounting method, Cost Recovery Analysis, Modeling method, Risk Metrics method, Value at Risk and others.

The final stage of quantitative analysis is the development of a plan of countermeasures to eliminate or reduce the negative consequences of business risks.

Both qualitative and quantitative methods of assessing business risks have certain advantages and disadvantages, so it is advisable to use mixed methods or a set of methods, which consists of methods of both groups of risk assessment, to obtain a more reliable result.

Conclusions

The result of the scientific research was to clarify the definition of “business risk”, for which the etymology of the concept of “risk” was studied and identified the main categories that shape it, namely: uncertainty, probability, loss and danger, which are prerequisites for risk – uncertainty and the probability of occurrence of a certain event on the one hand and the consequences of a risk situation – danger and loss, or the threat of loss of certain resources or losses – on the other hand.

The author's vision of the interpretation of the category "risk" as a concept characterized by the uncertainty of processes occurring in society, due to the probability of certain events with adverse consequences in the form of danger and possible loss or failure to achieve the desired result.

Two key distinctive aspects of the concept of business risk compared to its general concept are identified, which are due to the definition and meaning of business as such: economic activity and profit.

It is determined that all methods of assessing business risks can be divided into qualitative and quantitative. Both qualitative and quantitative methods of assessing business risks have certain advantages and disadvantages, so it is advisable to use mixed methods or a set of methods, which consists of methods of both groups of risk assessment, to obtain a more reliable result.

References:

1. *Alexandrov A. (2011) Factor of subjectivity in assessing the risk of quality. Pharmaceutical industry, no. 5, pp.116-119.*
2. *Algin A.P. (1998). Risk and its role in public life. Moscow.*
3. *Azrilian A.N. (2004). Large Economic Dictionary. Moscow.*
4. *Bondar O.V. (2012). Situational management: textbook. Kyiv.*
5. *Brukhovetskaya N.E., Pedersen I.A. (2011). Methodology of enterprise risk assessment. Strategy and mechanisms for regulating industrial development, no. 3. pp. 17–27.*
6. *Chernov Yu.V., Fomishin S.V., Tishchenko A.I. (2003). Management consulting. Kherson.*
7. *Chuprina I.V. (2012). The concept and classification of risks in business. URL: http://econjournal.vsau.org/files/pdfa/812.pdf*
8. *Donets L.I. (2006). Economic risks and methods of measuring them: A textbook. Kyiv.*
9. *Fere V.A., Romanchenko O.V. (1997). Methods of financial risk assessment. Finance of Ukraine, no. 2, pp. 48-53.*
10. *Frolova, L., Zhadko, K., Ilyash, O., Yermak, S., & Nosova, T. (2021). Model for opportunities assessment to increase the enterprise innovation activity. Business: Theory and Practice, 22(1), 1-11. https://doi.org/10.3846/btp.2021.13273*
11. *Herasymchuk N.A., Mirzoieva T.V., Tomashevskaya O.A. (2015). Economic and financial risks. Kyiv.*

12. *Hrabovyi P.H., Petrova S.N., Poltavtsev S.I. (1994). Risks in modern business. Moscow.*
13. *Hranaturov V.M., Shevchuk O.B. (2000). Risks of entrepreneurial activity. Kyiv: Zvyazok, 2000. 149 p.*
14. *Ilchuk M.M. (2002). Fundamentals of entrepreneurship and agribusiness. Kyiv.*
15. *Klymenuk M.M., Bryzhan I.A. (2000). Risk management in economics. Kyiv.*
16. *Kotov B.V. (2021) Approaches to business risk management. Entrepreneurship and trade: development trends: materials of the IV International scientific-practical conference (Odesa, May 20-21, 2021). Odesa: Odesa Polytechnic State University, pp. 369-371.*
17. *Knight F.H. (2003). Risk, uncertainty and profit]. Moscow.*
18. *Kucherenko V.R., Karpov V.A., Karpov A.V. (2011). Economic risk and methods of measuring it: Textbook. Odessa.*
19. *Mochernyi S.V. (2002). Economic encyclopedia. Kyiv.*
20. *Nazarchuk T.V., Kosiyuk O.M. (2016). Management of organizations: textbook. Kyiv: Center for Educational Literature, 560 p.*
21. *Ovchinnikov G.P. (1997). Microeconomics. Macroeconomics. St. Petersburg.*
22. *Ozhegov S.I., Shvedova N.Yu. (1999). Explanatory dictionary of the Russian language. Moscow.*
23. *Picus R.V. (2004). Entrepreneurial risk assessment. Finance of Ukraine, no. 5, pp. 88-93.*
24. *Pylnova V.P., Havrysh O.M., Kapeliushna T.V. (2020). Formation of a business risk management system. Investments: practice and experience, no.24, pp. 51-57.*
25. *Semenova E.D., Tarasova K.I. (2015). Organization of risk management system at the enterprise. Bulletin of socio-economic research (ed. MI Zveryakova). Odessa, 2015, is. 3, no. 58, pp. 221–227.*
26. *Semenova K.D., Tarasova K.I. (2017). Risks of activity of industrial enterprises: integral estimation: monograph. Odessa.*
27. *Sharapov O.D. (2001). Riskology in economics and entrepreneurship. Proceeding of the international scientific-practical conference (Kyiv, March 27-28, 2001) Kyiv: Kyiv National Economic University; Academy of State Tax Service of Ukraine. 452 p.*
28. *Stoyanova E.S. (1996). Financial management: theory and practice. Moscow.*
29. *Vasylkiv I.M. (2020). Fundamentals of probability theory and mathematical statistics: textbook. manual. Lviv.*
30. *Vytlinskyi V.V., Nakonechnyi S.I., Sharapov O.D. (1996) Economic risk and methods of measuring it: a textbook for students. econ. special.*

Kyiv: Institute of content and teaching methods; Kyiv state University of Economics.

31. *Vytlinskyi V.V., Velykoivanenko G.I. (2004). Riscology in economics and entrepreneurship: monograph. Kyiv.*
32. *Yermak S. (2021). Diagnosis of the effectiveness of innovative activities of business structures in the implementation of anti-crisis management policy. Innovation and Sustainability, no.1, pp. 28-39.*

Margarita Išoraitė
PhD in Economics, Associate Professor
Vilnius University of Applied Science
ORCID: https://orcid.org/0000-0001-9108-0525
Nendrė Černiauskienė
PhD in Management and Administration, Master in Law, Self-employed
ORCID: https://orcid.org/0000-0002-4990-4807
(Vilnius, Lithuania)

ADVERTISING DEVELOPMENT FEATURES IN LITHUANIA

Abstract
Advertising is a relatively new concept, but it is evolving rapidly. It is becoming one of the most important means of attracting as many consumers as possible and influencing them to become regular consumers of the company's goods. Many advertisers choose television advertising and the Internet when planning their advertising campaigns. The Internet is interactive and allows the curious user to learn more about the advertised product or service by clicking on a link, which no other media can provide. The article analyse the concept of advertising, advertising statistics, the advantages and disadvantages of advertising, and advertising legislation.

Keywords: *advertising, advertising advantages and disadvantages, advertising development.*

Introduction

Advertising is usually about material benefits: it aims either to directly increase profits or to secure it in the future. Vaišvilienė, A. (2008) mentioned that The advertising market in Lithuania is consistent it expands in line with the needs of the user, it changes and improves – companies and organizations use advertising means smarter, there are specific advertising for certain business areas and product groups ways. According Visa Lietuva (2015). Advertising is often perceived in society as a phenomenon that can mislead the consumer. Advertising is subject to various legal provisions that must protect consumers from the likely false or harmful effects of advertising. Advertising of alcohol and tobacco is restricted or banned in Lithuania in the hope that its consumption will decrease significantly. Unfortunately, advertising bans do not always pay off. Some ads may be restricted, but you should not see only the negative side of the ad. Although most users are very annoyed by advertising, but many people do not know that because of it, we can watch free TV programs, listen to music online. It is not possible to restrict or ban all advertisements, nor is it necessary to properly educate the younger generation, their analytical thinking, which will help to realize that not everything that is advertised in advertisements is true. The purpose of this article is to evaluate the peculiarities of advertising in Lithuania. To achieve the goal, the following tasks are planned: to analyse the concept of advertising, to evaluate the data of advertising statistics, to analyse the legal system of advertising, to evaluate the advantages and disadvantages of advertising. The article uses methods of literature analysis, analysis of legal documents, static analysis and comparison.

Advertising concept

Advertising business is developing in Lithuania, which helps to increase competition between companies. Advertising is used in many areas of business activity. It includes industry, trade, education, show business, sports. Advertising affects companies in various fields. At present, in the conditions of the pandemic, advertising on the Internet and on television is intensifying. Never before has the internet evolved so fast. The Internet has changed many areas of business over the past decade. In the 21st century, when the production of goods and services is growing or may grow faster than the purchasing power of the population, online advertising is becoming one of the most effective ways to attract as many consumers as possible. Online advertising helps to market a new or existing product. With the help of various forms of online advertising and social networks, it is possible to form the opinion of consumers and make casual consumers loyal. Weber, P. & Schweiger, W. (2017) mentioned that advertising is ubiquitous and its various potential consequences provide a fertile ground for exploring its intended and unforeseen, short-term and long-term, functional and dysfunctional effects at the individual, collective, or organizational level. Onișor, L., F., Ioniță, D. (2021) stated that advertising is an important tool that organizations use in their marketing communications process. Korenkova, M., Maros, M., Levicky, M., Fila, M. (2020) notice that understanding customers is important to increase the effectiveness of advertising. Advertisers need to know them and know what “works” to affect them. Companies need to know their values, desires, desires, etc. It is important to attract their interest and attention. This is the first step to start thinking about the need for a product or service. It should be noted that each customer is different and receives and responds to information differently. It depends on the variety aspects and influences how the consumer reacts to the information. Eram, M. (2020) stated that advertising is a means of communicating with consumers of a product or service. Ads are messages paid for by the senders and intended to inform or influence the recipients. Sinclair, J. (2015) stated that advertising is very important in the media industry not only in itself but also due to the intermediate structural link it maintains between on the one hand, commercial media and consumer goods and services industries, on the other hand. It can be imagined as a production and marketing media complex. Terkan, R. (2014) mentioned that advertising is a form of communicative activation. It can be informative and persuasive; using mass or new media to persuade consumers to buy goods and services. Advertising can be used to promote a new product or to promote existing products. Xu, J. (2020) notice that like most strategic communication efforts, advertising produces both intended and unintended effects. But there are systematically sought to synthesize the unintended effects of advertising. One or another of the advertising methods is chosen to achieve the advertising goals, the following are some of the most popular advertising methods: printing, printed advertising media radio television, cinema mail showcases outdoor (external) on vehicles packaging photo internet, search engine optimization The choice of a particular method is determined by several factors – price, coverage, target audience, and advantages and disadvantages. In Lithuanian, there is a tendency for the millennium generation to spend more and more time online, and digital and online advertising has been developing rapidly in recent times. Internet advertising is the fastest growing branch of the advertising business, the following forms of online advertising can be distinguished: websites billboards search sites backlinks news or discussion groups email newsletters

Advertising statistical data analysis

As mentioned Kantar (2021) the Lithuanian advertising market fell less than expected last year – 12.5 percent or 15 million and reached EUR 105 million eur. Per capita in the pandemic year of 2020, advertising costs averaged € 37.6 million. 2020 year, the advertising market is expected to stabilize and will show signs of recovery – likely 0.05 percent growth. Advertising spending declined across all media. The hardest hit movie commercial has lost over 80 percent revenue, domestic advertising declined 38.5 percent, outdoor advertising – almost 20 percent, radio – 10.6 percent. 2020 year was probably the hardest hit in the press: newspapers lost a quarter of their advertising market and magazines almost a third. These media have about 6 percent each advertising market. The overall advertising pie has shrunk by more than a tenth. Compared to 2019, the market for TV advertising traditionally accounted for the largest share, its market decreased by 6.3 percent and accounted for 46.7 percent. Similarly, both 6.5 percent the decrease in banner Internet advertising accounted for 20.5% advertising market. The Internet and TV are expected to grow the advertising market the most this year. These ad segments are projected to grow accordingly 8.3 and 3.5 percent. Indoor advertising will also grow by more than a tenth, albeit with a small market share of one percent. Newspapers, magazine and radio advertising will decline somewhat. No drastic changes are expected in advertising prices. On average, they are projected at 2 percent fall. Advertising in cinemas, Newspaper and domestic TV prices will fall the most, by 8.6% and 5% respectively.

Outdoor advertising, internet and TV advertising are forecast slightly more expensive, most TV – about 4.3 percent (Table 2.2).

Table 2.2

Advertising market 2019-2020

Media net mln. EUR	2019	2020	Change
TV	52.3	49	-6.3
Interney	23	21.5	-6.5
Outdoor advertising	13	11	-19.7
Radio	11.3	10.1	-10.6
Magazines	8.5	6.2	-27.1
Newspapers	8.1	6.1	-24.7
Cinema	1.8	0.3	-83.3
Indoor advertising	1.3	0.8	-38.5
Total	120	105	-12.5

Source: Kantar (2021)

Advertsising legal system in Lithuania

Dissemination, supervision and control over advertising in Lithuania is ensured by the passed legislation harmonized with EU directives as well as by supervising institutions and courts. Article 2 of the Law on Advertising of the Republic of Lithuania states that advertising is the dissemination of information in any form and by any means related to a person's commercial, economic, financial or professional activities promoting the acquisition of goods or services, including acquisition of real estate, transfer of property rights and obligations. The notion of advertising comprises not only advertising in mass media, but also advertising in leaflets, goods' labels, etc. Therefore, in order to categorize a piece of information as advertising, the attribute of its renumeration is not necessary, as it was stated by The Constitutional Court of the Republic of Lithuania. This attribute can be relevant for the notion of advertising as much as it is related to advertising in mass media. Advertising law provides advertising, misleading advertising, comparative advertising, surreptitious advertising, promotional advertising business entities, users of advertising, producer of advertising, distributor of advertising and other advertising Article 1 of the Law on Advertising provides that other laws may to regulate additional and, in individual cases, other requirements for the use of advertising; and prohibitions.

Article 16 of the Law on Competition prohibits the use of advertising that is considered misleading under the laws of the Republic of Lithuania. This law also establishes the procedure for the investigation and examination of violations attributed to the Competition Council regarding violations of the Law on Advertising, and the enforcement and appeal of adopted resolutions. Other legislation currently in force regulates the use of advertising only in certain respects or regulates only the advertising of certain goods are the Law on Public Information, the Law on the Health System, the Law on Pharmacy, the Law on Seimas Elections and the Civil Code. There are two main aspects of European Union law governing advertising: the regulation of unfair competition and the protection of consumer rights. The legislation referred to is very clear about the model of fair presentation and transparency currently being formulated in the field of consumer protection in the European Union. When analysing European Union directives, it should be borne in mind that a directive is not generally an act of direct application and sets out more objectives than measures to achieve them. According to the Lithuanian Consumer Rights Protection Service (hereinafter – Service) (2021), advertising must be: decent and fair; clearly recognizable; presented in the correct Lithuanian language; without violating the moral principles of society; does not humiliate human honour and dignity; does not incite national, racial, religious, gender or social hatred or discrimination; non-defamatory or non-misleading; does not encourage coercion, aggression, panic or behavior that endangers health, safety and the environment; abusive of prejudice, people's trust, lack of experience or knowledge; without the consent of a natural person, it is prohibited to mention his / her name, surname, provide an opinion, information about his / her private or public life, property, use of the image of a natural person; The use of special subconscious means and technologies for the dissemination of advertising is prohibited; It is forbidden to use advertising material that has been prepared in violation of copyright in literary, artistic, scientific and / or related rights. It is forbidden to despise the religious symbols of religious communities registered in Lithuania. In order to recognize a piece of advertising as misleading it is sufficient to state that the piece of advertising being used is misleading in accordance with one of the criteria mentioned in art. 5

p. 2 of the Law on Advertising (fairness, incompleteness or presentation). In accordance with the subject of the Law on Advertising, the giver of the advertising is responsible for using the advertising not satisfying the requirements of the laws (art. 23 p. 1 of the Law on Advertising), who is understood as a body in whose interests and by whose initiative the advertising is used (ordered, produced, disseminated) (art. 2 p. 10 of the Law on Advertising). Basing on the provisions of art. 5 p. 2 and art. 23 p. 1 of the Law on Advertising, "Service is not obliged to prove the quilts of the suspected offenders since having proven that a piece of advertising is misleading or might mislead and that a subject of economy is the giver of the misleading advertising, the guilt of the giver of the advertising is presumed" (The verdict of Lithuanian Supreme Administrative Court dated 1 7 02 2020, in administrative case Nr. eA-140-822/2020, Trial process Nr. 3-61-3-04224-2017-5) (hereinafter – LSAC Verdict). "In the case when the damage is not clearly identified, one must assess if the information presented in the advertising is related to potentially big probability of damage to the consumers" (verdict dated the 17th of November 2005 in administrative case Nr. A1-931/2005; verdict dated the 23rd of September 2010 in administrative case Nr. A858-1184/2010; verdict dated the 27th of May 2010 in administrative case Nr. A858-806/2010). "The ascertainment of the influence on economical consumer's behavior does not require to prove the fact that a consumer affected by advertising made a particular decision and purchased a good – it is sufficient to detect a probability of misleading and its influence on a consumer's economic behavior" (Practice of Lithuanian Supreme Administrative Court, verdict dated the 11th of 2010 in administrative case Nr. A858-1235/2010). "When investigating misleading advertising, Competition Council constructs a consumer's behavior basing on probable behavior of an average consumer bearing in mind the circumstances, detected in the process of investigation as well as social, cultural and oral factors." (LSAC verdict).

Advertising advantages and disadvantages

Advertising has become an inevitable tool for both innovative and outgoing companies. This is the single most powerful element of a combination of promotions that can account for a significant portion of your advertising budget. It is clearly a powerful weapon that can protect and enhance the interests of the company. Veleva, S.,S., Tsvetanova, A., I. (2020) mentioned that The main advantages and disadvantages of digital marketing and new ones are explained has been added. Veleva, S., S., Tsvetanova, A., I. (2020) stated that additional advantages: assumptions and favorable conditions are created successful development of virtual enterprises; increases the degree of control and correction processes for the development and implementation of various marketing activities; fit start-ups, small and medium-sized enterprises and create opportunities for new business models and strategies such as mass deployment, co-development, etc. according Veleva, S., S., Tsvetanova, A., I. (2020) additional disadvantages include: in digital marketing, you need to connect with a a user you don't see personally; digital marketing campaigns can perceive consumers as frivolous if they are not professionally designed and properly targeted; digital marketing is not suitable for all types of products, services and businesses; use of inappropriate digital media and programs; the lack of clear criteria for selecting digital tools in marketing campaigns; very much often digital marketing campaigns are created and run independently, without in line with the company's overall marketing strategy and is sometimes emphasized technical solutions at the expense of content. Advertising advantages and disadvantages is presented in Table 2.3.

Table 2.3

Advertising advantages and disadvantages

Advantages	Disadvantages
Sales Promotion	Increases the cost of production and product
Production Development	Leads to a price war
Increases Prestige	Misleading advertising
High Turnover and Huge Profits	Leads to unequal competition
Information on Different Choices and Comparative Prices	Creates a monopolistic market
Creates Jobs	Promotes unnecessary consumption
Higher Living Standards	Decreases moral value

Source: Minakshi, B. (2022)

Conclusions

1. Advertising is a particular piece of information which is used in all areas of economic activities in order to encourage a consumer or help him or her to purchase goods or services. Advertising is related to financial benefits: it is used to directly increase profit in the current time by expanding consumption or ensure the latter in the future.

2. Shifts in advertising sales depends on economic, technologic and socio-cultural changes and is determined by consumers' habits and possibilities of the customer of advertising to reach a final consumer of goods or services.

3. The legality of advertising content, its transfer and supervision, control over compliance with the legislation in Lithuania is ensured by the passed harmonized with EU directives as well as by supervising institutions and courts of various levels deciding both clarification and definition of notions and the content of advertising being used and argued.

4. By its purpose, advertising should be directed towards a target consumer of goods or services and increase a company's profit. However, advertising is not a tool allowing to identify a target consumer. And without application of innovative technological approaches and without careful assessment of restrictions – both already set and possible ones, advertising may pose hazard to implementation of the strategy of an organization and probable effect of advertising on excessive usage of resources.

References:

1. *Eram, M. (2020). Importance and Efficacious of Advertisement. JETIR, Volume 7, Issue 2, p.p.285-291.*
2. *Kantar (2021). Metinė medijų tyrimų apžvalga 2020. http://www.kantar.lt/data/files/Metines_apzvalgos/Metinė_media_tyrimų_apžvalga_2020.pdf*
3. *Korenkova, M., Maros, M., Levicky, M., Fila, M. (2020). Consumer Perception of Modern and Traditional Forms of Advertising. Sustainability 2020, 12, p.p.1-25, doi:10.3390/su12239996*
4. *Law on Advertising of the Republic of Lithuania. Valstybės žinios, 2000-07-31, Nr. 64-1937.*
5. *Law on Competition of the Republic of Lithuania. Valstybės žinios, 1999-04-02, Nr. 30-856.*
6. *Lithuanian Consumer Rights Protection Service (2021). Prohibitions*

and requirements for advertising. https://www.vvtat.lt/veiklos-sritys/reklama-ir-nesazininga-komercine-veikla/reklamos-draudimai-ir-reikalavimai-jai/188

7. *Minakshi, B. (2022). Advantages and Disadvantages of Advertising. https://www.economicsdiscussion.net/advertising/advantages-and-disadvantages-of-advertising/31464/*
8. *Onișor, L., F., Ioniță, D. (2021). How advertising avoidance affects visual attention and memory of advertisements. Journal of Business Economics and Management. 2021 Volume 22 Issue 3: p.p.. 656–674 https://doi.org/10.3846/jbem.2021.14546.*
9. *Practice of Lithuanian Supreme Administrative Court, verdict dated the 11th of 2010 in administrative case Nr. A858-1235/2010*
10. *Sinclair, J. (2015). Advertising, the Media, and Globalization. Media Industries Journal, p.p.42-47.*
11. *Terkan, R. (2014). Importance of Creative Advertising and Marketing According to University Students' Perspective. International Review of Management and Marketing Vol. 4, No. 3, 2014, pp.239-246.*
12. *Xu, J. (2020). Unintended Effects of Advertising: An Updated Qualitative Review. Review of Communication Research, 8, p.p.1-16. https://doi.org/10.12840/ISSN.2255-4165.021.*
13. *Vaišvilienė, A. (2008). Reklamos reikšmė rinkos informavimo sistemoje. Knygotyra. P.p.176-191.*
14. *Veleva, S., S., Tsvetanova, A., I. (2020). Characteristics of the digital marketing advantages and disadvantages. IOP Conf. Series: Materials Science and Engineering, p.p.1-9, doi:10.1088/1757-899X/940/1/012065.*
15. *The verdict of Lithuanian Supreme Administrative Court dated 1 7 02 2020, in administrative case Nr. eA-140-822/2020, Trial process Nr. 3-61-3-04224-2017-5*
16. *Verdict dated the 17th of November 2005 in administrative case Nr. A1-931/2005; verdict dated the 23rd of September 2010 in administrative case Nr. A858-1184/2010*
17. *Verdict dated the 27th of May 2010 in administrative case Nr. A858-806/2010*
18. *Visa Lietuva (2015). Efektyvi reklama: nauda ir verslininkams, ir vartotojams. https://www.visalietuva.lt/straipsniai/efektyvi-reklama-nauda-ir-verslininkams-ir-vartotojams#.*
19. *Weber, P. & Schweiger, W. (2017). Content Effects: Advertising and Marketing. In. P. Roessler (Hg.), International Encyclopedia of Media Effects. Hoboken, NJ: Wiley-Blackwell. doi: 10.1002/97811*

Chapter 3

STRATEGIC IMPERATIVES OF FINANCIAL AND INVESTMENT MANAGEMENT

Lukasz Furman
ORCID: https://orcid.org/0000-0002-9156-8165
Anna Hanczyk
ORCID: https://orcid.org/0000-0003-2407-4007
Carpathian State University in Krosno (Krosno, Poland)

SPATIAL DIFFERENTIATION OF PUBLIC REVENUE IN POLAND IN 2016-2020

Abstract
The current administrative division of Poland into 16 voivodeships, fiscal decentralisation, industrialisation of the territory and revenues from direct and indirect taxes affect the different levels of public revenues in certain regions of the voivodeships. The resources provided by public authorities are inextricably linked to the efficiency of meeting the economic and social obligations arising from public sector tasks. The aim of this article was to investigate the hypothesis that between 2016 and 2020 different per capita income occurred in different Polish voivodeships. To verify this hypothesis, the state of the literature, including foreign languages, was analysed and the statistical data published in the Local Data Base kept by the Central Statistical Office was researched. The study has shown that the level of public revenue depends on the fiscal efficiency of direct and indirect taxes and shows an imbalance in income assets due to more efficient tax revenues in more industrialised areas.

Keywords: *budget, public revenue, taxes, income level, spatial diversification.*

Introduction

A country's economic potential correlates with its level of economic development. This dependency also depends to a large extent on the financial capacity of the individual regions that make up a country. According to Felis, the fiscal performance of the public sector is one of the key factors determining the level of public expenditure (Felis, 2010). The State needs financial resources to enable the public sector to function properly and to implement its socio-economic plans. The State is not in a position to raise the money itself, but the Law on Public Finance defines and formulates the revenue of the State budget, which includes public levies and, above all, taxes. The tax liability is, above all, compulsory and non-refundable, and the taxpayer has no direct influence on how the money going into the budget is spent, which distinguishes between the public and private sectors, where transactions are voluntary and dependent on the company. The most important taxes are two indirect taxes: VAT and excise duty, and two direct taxes: PIT and CIT. There is a link between income and economic development in the affected areas of Poland. This is to some extent due to budgetary decentralisation, whereby responsibilities and resources are transferred from the higher (central) levels of the organisational units to the lower levels, thereby making them independent and financially independent. The greater the financial resources of a local authority (JST), the better the public sector can be in a region. The most common demand is the creation of public institutions to promote the technological development of the economy as part of the creation of a regional innovation system (Brezden, Spallek, 2012).

The aim of this article is to investigate the hypothesis that in the period 2016-2020 different per capita income occurred in different Polish voivodeships. To verify this hypothesis, the state of the literature, including foreign languages, was analysed and the statistical data published in the Local Data Base kept by the Central Statistical Office was researched.

1. The concept of public revenue in the light of specialist literature

The issue of public revenue as part of the public funds provided by the authorities is precisely defined in the Law of 27 August 2009 on Public Finances. This is an essential part of the smooth functioning of both the social and economic spheres. According to Bal-Domanska, the income structure of a territory makes it possible to assess the financial independence of the territory compared to other territorial units and expresses its ability to perform its functions in relation to the current needs of the territory and its population. In the studies carried out, Bal-Domanski used the classification with the median and the spatial statistics I Morana, which made it possible to identify classes of municipalities with a similar income structure, with three main groups of budget resources being given: own income, general grants and earmarked grants (Bal-Domanska, 2018). When researching the level of public revenues and their differentiation, it is useful to take further account of spatial econometrics, which deals with spatial dependencies and heterogeneity. Luc Anselin, one of the pioneers in this field, proposes models of spatial processes and implements them in his literature, focuses on solving problems related to the identification of local spatial patterns and outlines a general class of local spatial binding indicators (LISA) (Anselin, 1995). Anselin's publications help regional scientists to produce different studies and use all aspects of the data, but his considerations are closer to model specifications, estimates and conclusions than to a purely data-based approach to spatial statistics (Anselin, 1988). An important contribution to the topic of spatial autocorrelation was also made by Cliff (Cliff, 1973).

Kolodziejczak and Kossakowski emphasize the important function of spatial autocorrelation (LISA) in determining the concentration of a phenomenon. It is a method that finds application in the important process of pauperization, helping to estimate the differentiation of poverty levels in different regions in order to compare the development of selected areas or to indicate the disproportion of the standard of living of the population living in a region (Kolodziejczak, Kossakowski, 2016). Panek defines poverty as a situation in which an individual does not have sufficient income or savings to meet their needs (Panek, 2014). Therefore, it can be concluded that the societies inhabiting a given territory (voivodeship), in which income wealth is lower and the degree of impoverishment is higher, will be characterized by lower revenues to the budget, which will ultimately affect the overall condition of the area in the light of comparison with equivalent units.

2. Use of economic indicators to measure the financial well-being of countries and their regions

The issue of differentiation of the level of public revenues in individual Polish voivodeships is a complex one that requires careful analysis. Required the use of metrics that reflected the facts of the situation. In this paper, the following indicators were used to verify the hypothesis:

a) own revenues of provinces in Poland from 2016 to 2020 per capita of the province,

b) own income – shares in taxes constituting income of the state budget personal income tax in 2016-2020 per capita of the province,

c) own income – shares in taxes constituting income of the state budget corporate income tax in 2016-2020 per capita of the province.

These indicators make it possible to estimate public income on the basis of the data published in the Local Data Base, which made it possible to visualize the differences in income in the various provinces by means of exploration techniques.

3. Spatial analysis of the phenomenon

In all 16 provinces that operate in Poland taxes are successively collected and then transferred to the budget. The greatest influence is to be found in the industrialized countries, especially in the metropolitan areas. So far, the subject of state taxes across the voivodeship and the role they play in building the revenue streams of the budget have been very rarely discussed in the economic literature.

In the case of public finances operating in a country, great attention is paid to the analysis of tax revenues. The information obtained from the analysis makes it possible to make sound economic decisions. This article analyses in detail the value of the shares in corporate and personal income tax revenues. Voivodeships receive transfers from the state budget of income taxes paid by business units and other institutions, e.g. employees. In this way, the richness of the individual voivodeships can be assessed. The study period covered 5 years and ranged from 2016 to 2020.

Table 3.1

Own revenues of voivodeships in Poland in 2016-2020

Name of voivodeship	total in PLN (million)				
	2016	2017	2018	2019	2020
POLSKA	13505,6	14771,3	16953,6	18754,9	20956,5
DOLNOŚLĄSKIE	1129,2	1155,9	1254,5	1180,2	1378,7
KUJAWSKO-POMORSKIE	740,4	690,4	793,0	897,3	1122,5
LUBELSKIE	815,5	869,3	866,0	1209,0	1047,3
LUBUSKIE	430,7	440,6	428,1	489,1	616,1
ŁÓDZKIE	707,2	701,4	829,7	978,3	1090,2
MAŁOPOLSKIE	1068,3	1337,6	1366,5	1417,5	2046,2
MAZOWIECKIE	2302,6	2550,1	2964,6	3319,4	3525,1
OPOLSKIE	506,2	479,7	519,4	550,8	631,5
PODKARPACKIE	738,6	942,6	1197,2	1158,3	1283,4
PODLASKIE	423,9	567,8	707,1	884,2	840,5
POMORSKIE	729,3	817,9	1040,8	1286,9	1102,3
ŚLĄSKIE	1228,1	1250,1	1582,3	1663,4	1860,3
ŚWIĘTOKRZYSKIE	416,6	513,8	656,3	700,1	689,5
WARMIŃSKO-MAZURSKIE	513,1	511,0	570,3	674,2	873,7
WIELKOPOLSKIE	1087,9	1137,0	1235,8	1548,8	1814,7
ZACHODNIOPOMORSKIE	667,4	805,5	941,3	796,5	1033,9

Source: Local Data Base kept by the Central Statistical Office, stat.gov.pl, accessed: 16.06.2022

Based on the data in Table 3.1, the following conclusions can be drawn:

– the economically strongest and richest is the Mazowieckie Voivodeship, which shows the highest income; Over the period considered, these revenues increased from PLN 2,3 billion to more than PLN 3,5 billion;

– the economically weakest and poorest region is the Świętokrzyskie Voivodeship, which is far behind the richest region, the Mazowieckie Voivodeship; during the investigation period, revenues ranged from PLN 416 million to PLN 689 million.

Table 3.2

Own income of the voivodeships in Poland in the years 2016-2020 per inhabitant of the voivodeship

Name of voivodeship	total in PLN (million)				
	2016	2017	2018	2019	2020
POLSKA	351,46	384,45	441,35	488,58	546,40
DOLNOŚLĄSKIE	388,87	398,27	432,45	407,00	475,67
KUJAWSKO-POMORSKIE	355,20	331,46	381,30	432,58	542,47
LUBELSKIE	381,88	408,27	408,20	572,43	497,93
LUBUSKIE	423,34	433,44	421,60	482,85	609,91
ŁÓDZKIE	284,22	282,84	335,85	397,69	445,24
MAŁOPOLSKIE	316,42	395,04	402,44	416,32	599,37
MAZOWIECKIE	429,84	474,66	549,85	613,40	649,44
OPOLSKIE	509,02	484,02	525,80	559,59	643,98
PODKARPACKIE	347,30	443,03	562,43	544,47	603,72
PODLASKIE	356,97	479,11	597,92	749,77	714,45
POMORSKIE	315,52	352,62	447,05	550,50	469,72
ŚLĄSKIE	269,08	274,59	348,53	367,69	412,66
ŚWIĘTOKRZYSKIE	332,09	411,17	527,44	565,87	560,56
WARMIŃSKO-MAZURSKIE	356,92	356,22	398,46	472,85	615,08
WIELKOPOLSKIE	312,83	326,28	354,06	443,11	518,44
ZACHODNIOPOMORSKIE	390,56	472,01	552,73	469,01	610,65

Source: Local Data Base kept by the Central Statistical Office, stat.gov.pl, accesed: 16.06.2022

Analysis of the data in Table 3.2 shows:

– the best personal income (over 600 PLN) per capita was in Opolskie, Mazowieckie, Lubuskie, Podkarpackie and Zachodniopomorskie Voivodeships, which is due to the great economic potential of these voivodeships;

– the lowest indicator was reached in the voivodeships of Śląskie and Łódzkie, which is not used as these areas are industrialised and should produce a high indicator value.

Table 3.3

Own revenue – Proportion of taxes representing the revenue of the state budget Income tax of natural persons in the years 2016-2020 per inhabitant of the voivodeship

Name of voivodeship	total in PLN (million)				
	2016	2017	2018	2019	2020
POLSKA	34,47	37,56	42,53	46,85	45,94
DOLNOŚLĄSKIE	36,63	40,09	45,70	50,52	49,61
KUJAWSKO-POMORSKIE	28,72	31,39	34,87	38,62	37,66
LUBELSKIE	23,83	25,57	28,91	31,82	31,01
LUBUSKIE	28,78	31,59	36,20	39,79	38,50
ŁÓDZKIE	32,65	35,62	40,29	44,47	43,67
MAŁOPOLSKIE	32,36	35,89	41,42	45,86	45,33
MAZOWIECKIE	53,32	57,76	65,61	72,06	70,05
OPOLSKIE	27,95	30,58	34,30	37,76	36,89
PODKARPACKIE	23,04	25,21	28,35	31,56	30,90
PODLASKIE	25,65	28,06	31,76	35,21	34,64
POMORSKIE	34,80	38,25	43,02	47,03	47,44
ŚLĄSKIE	38,35	40,91	45,78	49,68	48,55
ŚWIĘTOKRZYSKIE	24,34	26,74	29,91	33,14	32,63
WARMIŃSKO-MAZURSKIE	25,85	27,86	31,48	34,54	33,33
WIELKOPOLSKIE	34,51	38,07	43,32	48,29	47,54
ZACHODNIOPOMORSKIE	30,05	33,04	37,24	40,79	39,97

Source: Local Data Base kept by the Central Statistical Office, stat.gov.pl, accessed: 16.06.2022

According to the level of the indicator calculated for the individual voivodeships, the largest in the Mazowieckie Voivodeship reached more than 70 PLN per person (2020), the smallest in the Świętokrzyskie Voivodeship. This confirms previous findings that the most profitable voivodeship is Mazowieckie and the least prosperous voivodeship is Świętokrzyskie. This aspect relates to income tax receipts.

Table 3.4

Own revenue – Proportion of taxes representing revenue from the state budget Corporation tax in the years 2016-2020 per inhabitant of the voivodeship

Name of voivodeship	total in PLN (million)				
	2016	2017	2018	2019	2020
POLSKA	124,97	140,81	162,89	183,21	190,12
DOLNOŚLĄSKIE	149,39	180,27	187,33	189,39	198,47
KUJAWSKO-POMORSKIE	95,81	93,87	102,94	131,43	142,71
LUBELSKIE	54,85	61,89	70,93	83,18	84,76
LUBUSKIE	85,68	98,06	102,79	97,17	127,54
ŁÓDZKIE	106,24	106,56	130,73	143,38	149,74
MAŁOPOLSKIE	106,89	110,54	139,60	160,74	161,82
MAZOWIECKIE	272,13	333,91	386,74	426,04	444,54
OPOLSKIE	86,66	86,82	102,47	100,88	118,12
PODKARPACKIE	68,00	73,26	90,14	88,54	111,56
PODLASKIE	55,20	62,60	68,91	73,93	83,44
POMORSKIE	119,48	134,99	156,62	209,85	189,94
ŚLĄSKIE	108,34	119,84	149,14	178,32	156,48
ŚWIĘTOKRZYSKIE	51,02	50,01	71,59	86,89	99,35
WARMIŃSKO-MAZURSKIE	55,43	52,75	69,79	68,74	87,97
WIELKOPOLSKIE	154,26	163,80	173,94	196,33	212,27
ZACHODNIOPOMORSKIE	78,43	84,11	87,98	98,54	111,87

Source: Local Data Base kept by the Central Statistical Office, stat.gov.pl, accessed: 16.06.2022

The data in Table 3.4 provide the following conclusions:

– corporation tax is a very good source of public revenue in the individual voivodeships; the largest is between PLN 272 and PLN 444 per capita in the Mazowieckie Voivodeship during the period under review;

– the lowest level of the indicator was reached in the voivodship of Świętokrzyskie confirming the previous conclusions of the analyses that the voivodship has the lowest income and is therefore slower in its development.

Conclusions

The analysis carried out using synthetic indicators has revealed many situations, which show a good development for the individual voivodeships in Poland. It also drew a number of conclusions on income strength, namely:

– the phenomenon of income wealth does not occur uniformly in the 16 voivodeships of Poland;

– the highest income is earned by the local authorities of the voivodships in the industrialized areas (e.g. higher income per inhabitant in the PIT or CIT tax than in other provinces, which are less industrialized);

– the level of public revenue depends on the budgetary efficiency of direct and indirect taxes.

References:

1. *Anselin, L. (1988). A Typology of Spatial Econometric Models. In: Spatial Econometrics: Methods and Models. Studies in Operational Regional Science, vol 4. Springer, Dordrecht. https://doi.org/10.1007/978-94-015-7799-1_4*
2. *Anselin, L. (1995), Local Indicators of Spatial Association—LISA. Geographical Analysis, 27: 93-115. https://doi.org/10.1111/j.1538-4632.1995.tb00338.x*
3. *Bal-Domańska, B. (2018), Klasyfikacja gmin według wysokości i struktury dochodów budżetów, RESEARCH PAPERS OF WROCŁAW UNIVERSITY OF ECONOMICS, nr 517, ISSN 1899-3192*
4. *Brezdeń, P., Spallek, W. (2012), Kondycja finansowa samorządu terytorialnego w Polsce jako czynnik stymulujący innowacyjność gospodarki, Prace Komisji Geografii Przemysłu, 19, 183– 19, https://prace-kgp.up.krakow.pl/article/view/76/21*
5. *Cliff, A. D., Ord, J. K. (1973). Spatial Autocorrelation. London: Pion*
6. *Cliff, A. D., Ord, J. K. (1981). Spatial Processes: Models and Applications. London: Pion.*
7. *Felis, P., (2010), Główne źródła dochodów budżetowych w Polsce, Studia BAS Nr 3(23) 2010, s. 91–114*
8. *Furman, Ł., Furman, W., (2016). Analiza rozwoju gospodarczego w świetle wybranych wpływów podatkowych w latach 2011–2015 na terenie województwa podkarpackiego. Zeszyty Naukowe Małopolskiej Wyższej Szkoły Ekonomicznej W Tarnowie, 31(3), 13-34. https://doi.org/10.25944/znmwse.2016.03.1334*

9. *Kołodziejczak, A., Kossakowski, T., (2016), Wykorzystanie metody autokorelacji przestrzennej do analizy ubóstwa na obszarach wiejskich, Wiadomości Statystyczne, PL ISSN 0043-518X*
10. *Kornberger-Sokołowska, E. (2001). Decentralizacja finansów publicznych a samodzielność finansowa jednostek samorządu terytorialnego. Warszawa: Liber.*
11. *Martinez-Vazquez, J., Lago-Penas, S., Sacchi, A. (2017). The impact of fiscal decentralization: a survey. Journal of Economic Surveys, 31(4), 1095–1129. https://doi.org/10.1111/joes.12182*
12. *Oulasvirta, L., Turala, M. (2009). Financial autonomy and consistency of central government policy towards local governments. International Review of Administrative Sciences, 75(2), 311– 332. https://doi.org/10.1177/0020852309104178*
13. *Panek, T. (2014). Statystyka społeczna. PWE, Warszawa*
14. *Rodríguez-Pose, A., Ezcurra, R. (2010). Does decentralization matter for regional disparities? A cross-country analysis. Journal of Economic Geography, 10(5), 619–644. https://doi.org/10.1093/jeg/lbp049*
15. *Smoke, P. (2015). Rethinking decentralization: assessing challenges to a popular public sector reform. Public Administration and Development, 35(2), 97–112. https://doi.org/10.1002/pad.1703*
16. *Środki publiczne a dochody publiczne, https://www.infor.pl/prawo/encyklopediaprawa/%C5%9B/290855, [dostęp: 15.06.2022]*
17. *USTAWA z dnia 27 sierpnia 2009 r. o finansach publicznych, tj. Dz. U. 2009 Nr 157 poz. 1240*

Dusan Karpac
Ing., Doctoral Student
Viera Bartosova
Assoc. Prof. Ing., PhD.
ORCID: https://orcid.org/0000-0001-7960-4429
Department of Economics
Faculty of Operation and Economics of Transport and Communications
University of Zilina
(Zilina, Slovakia)

APPLYING FORMS OF PROFIT IN PREDICTING THE FINANCIAL STABILITY OF BUSINESSES IN THE CONTEXT OF GLOBALISATION

Abstract
Predicting financial health of a company is in this global world necessary for each business entity, especially for the international ones, as it is very important to know financial stability. Forecasting business failure is a worldwide known term, in a global notion, and there is lot of prediction models constructed to compute financial health of a company and, by that, state whether a company inclines to financial boom or bankruptcy. In the current global world of uncertainty and continuous change, it is in each business's interest to improve its performance. Businesses have to adapt to changing market conditions and keep moving to maintain their, either local or global, market position. In the past, entities preferred to increase primary accounting profit forms. The global modern goal of enterprises, value creation, is achieved through the concept of economic profit.

Keywords: *prediction models; economic profit; globalization; business failure; accounting profit.*

1. Introduction

In today's world of uncertainty and continuous change, it is in the interest of every business to increase its performance. Businesses need to adapt to changing market conditions and make steady progress in order to maintain their market positions. If a company wants to succeed in the fight against competition, it must be able to use its resources efficiently (Susanto et al., 2019; Tahmasebi et al., 2020; Stefko et al., 2020).

The term “prediction of a company’s financial health” is well known in the world, but the intensity of how different countries deal with this issue is uneven. Business entities in our country forecast their financial stability only minimalistically, mainly due to the fact, that for the conditions of the Slovak market a general prediction model has not yet been fully applicable to any entity, regardless of the sector in which they operate (Svabova et al., 2020).

The professional literature names the issue of failure of business entities in various terms: ex-ante financial analysis method, bankruptcy prediction, default prediction, failure forecasting, early warning systems, financial distress forecasting, credit risk assessment, etc. Regardless of the diversity of individual names, all methods have a common goal – to determine in good time whether a business entity tends to go bankrupt or financial development. The failure of one entity also negatively affects the financial operation of all other entities that are in contact with it, either in closer or wider contact, often due to secondary insolvency resulting from non-fulfillment of obligations between individual entities. Based on financial analyzes and financial health predictions, it is possible to take corrective measures well in advance, thus mitigating or eliminating any bankruptcy risk (Bilan et al., 2020).

Financial analysis represents a basic aspect of financial management of a business entity and points to the operation of the company. The state of financial stability of each entity is most reflected in the different forms of the profit indicator. Profit, within the result of management, represents one of the most important flow quantities. This explains how effectively corporate capital is used in the entity (Valaskova et al., 2020).

There must be some form of financial management within each business entity. It is in the interest of financial managers to consider the internal situation of the company in their decisions, but also the broad economic environment. This actually means constantly monitoring the financial health of the business entity. In order to ensure the best possible financial health of the company, we can predict it, i.e. predict how the funds and total assets of the company should be handled in the short or long term, for their most efficient use. Predictive models, also called early warning systems, are applied for identifying the level of a company’s financial health. They assess the health of the company using complex characteristic, both in terms of past and current development and in terms of future development of the entity. They are created using different combinations of financial and economic indicators, which often include various forms of profit.

2. Literature review

Paul Joseph Fitzpatrick was the first to address this issue. In 1931, he published a study comparing the development of indicators in solvent and insolvent companies. He pointed out that the development of selected corporate indicators – indicators long before the outbreak of serious economic difficulties, which usually result in insolvency – is beginning to differ in endangered companies. The next step in the research of the problem has been taken by Merwin (1942), who published a research based on the comparison of arithmetic averages of selected business indicators, which he quantified in successful and unsuccessful companies. The disadvantage of this research was that it included in the set of unsuccessful companies those that ceased to exist for non-economic reasons (Valaskova et al., 2018).

V. H. Beaver (1966) and E. J. Altman (1968) are considered the founders of forecasting the financial development of business entities. Beaver came up with the method of one-dimensional discriminant analysis in 1966, now known as the Beaver model. The MDA (Multivariate Discriminant Analysis), also known as the multidimensional discriminant analysis, has been criticized for arguing that the results may have been skewed and lacked meaning. The three main critics of MDA include Eisenbeis (1977), Ohlson (1980) and Jones (1987). Ohlson came up with the Logit model (1980) and four years later was first applied to predict the bankruptcy of Zmijewski's Probit model (1984). Shumway (2001) stated that the Logit and Probit models have problems that can subsequently skew the results and the result in inefficiencies and inconsistencies in the estimated coefficient, too. To overcome these problems, he proposed the gambler Model (Kliestik et al., 2020).

3. Methods

The measurement of financial performance has developed relatively rapidly in the past. This development has been driven, and still is driven, by requests for information on performance in changing economic conditions from investors and managers. Ende (2017) states that the benefit of the analysis of the company's financial performance is the provision of information about the company's perspective in the financial perspective. Profit, within the result of management, represents one of the important flow quantities. This explains how effectively corporate capital is used in the entity. It is one of the pension sources of the owners of the accounting unit and the most important internal source of financing business needs, especially in the long run (Sebo, 2014).

Business failure is common to every economy in the world. This failure can have various forms, manifestations and consequences. In the literature, the issue of business failure is referred to in many different terms, such as. bankruptcy prediction, failure prediction, early warning system, etc. Despite different terminology, they have a common goal – to predict the insolvency of business entities. Insolvency is the main cause of business liquidation (Cisko & Kliestik, 2013).

An early warning system is a system that, based on symptoms, can identify changes in time within the company and in the company environment, where there may be danger (Zuzak & Königová, 2009).

Predictive models make it possible to identify the company’s current position in the market environment based on the evaluation of selected financial indicators, and even to estimate its position in the given environment in the near future (Pernsteiner et al., 2011).

Given that profit is a very important indicator of the stability of business entities, we decided to determine on a selected sample of predictive models whether and to what extent the profit indicator and its forms are used as part of predictive mathematical constructions.

In general, profit means a positive benefit from a particular activity. In economics, this is usually the difference between revenues and costs over a period of time. In microeconomic theory, two categories of profit are distinguished, namely accounting profit and economic profit.

Accounting profit is considered to be a positive result of the company recorded as a mandatory information in the profit and loss statement, balance sheet and notes to the financial statements of the entity. This is the difference between total revenue and explicit costs.

There are several forms of profit that are reported in accounting:

- *EAT (earnings after taxes) + Income tax*
- *EBT (earnings before taxes) + Interest expense*
- *EBIT (earnings before interest and taxes) + depreciation*
- *EBITDA (earnings before interest, taxes and depreciation)*

On the right, there are other items making the generation of the chosen form of profit – processed according to (Marik & Marikova, 2005).

The concept of economic profit uses the cost of capital in calculations. Every capital costs something. The price of a given capital is expressed by its cost. The cost of capital is spent on raising individual parts of capital. The cost of total capital consists of the cost of equity and the cost of debt. The cost of equity represents the expected share of profit for the owner investing his capital in the business. The asking price that owners ask for varies depending on the business and therefore the risk involved. The higher the risk, the higher the cost of equity, as it is necessary to compensate this risk to investors. The cost of borrowed capital is expressed as interest paid by creditors. Interest is determined by the situation on the financial market and its actual amount varies depending on the duration of the loan and the creditworthiness of the borrower. In general, the cost of equity is higher than the value of the cost of equity. For example, the degree of risk for the owner, which is higher than for the creditor, is considered the decisive reason, and interest paid on the loan is recorded in the company's costs, thus reducing the tax base (Marik & Marikova, 2005).

Economic profit is achieved if the company makes an accounting profit and at the same time can cover the cost of equity.

Various other equivalents of economic profit are also used in the professional literature. In the domestic, but also in foreign literature, we can find the issue under terms such as surplus value, residual income, abnormal income, surplus profit, super-profit. The basic idea of all these terms is usually the same, namely to produce a company's income in excess of the cost of capital. The equivalent "residual profit" is used because it takes into account the cost of the opportunity sacrificed. This term is also related to residual income. The main idea is to produce such revenue for the owners to cover the cost of the opportunity sacrificed. The terms surplus-value, surplus-profit, or super-profit are used to denote returns in excess of the cost of total capital. Abnormal income expresses a profit, which after deducting the cost of equity is positive. This positive result is no longer the normal profit produced by the company, but it is the so-called abnormal income of business owners (Siekelova et al., 2019).

Alternative costs mean the best feasible opportunity, but it has not been realized. Due to the limited economic resources, it is not possible to implement all the variants that are available on the market. For the highest achievable benefit, it is necessary to reject those variants where a lower benefit is achieved. The company has several options on the market and decides between several alternatives. By choosing one alternative, the company gives up the implementation of the other. Opportunity costs represent the value of the profit from the opportunities that must be sacrificed in favor of another alternative. Thus, opportunity costs do not represent the implemented activities of the company, but the potential profit from the implementation of the second alternative. They are also defined as lost revenue that the company did not achieve because it preferred another alternative (Kotulic et al., 2010).

$$\text{Economic profit} = \text{accounting profit} - \text{implicit costs} \tag{3.1}$$

$$\text{Economic profit} = \text{total return on capital} - \text{cost of capital} \tag{3.2}$$

$$\text{Economic profit} = \text{revenues} - \text{explicit costs} - \text{implicit costs} \tag{3.3}$$

The best-known indicators in foreign practice, which use the concept of economic profit to evaluate the company’s performance, are Economic Value Added (EVA), Market Value Added (MVA), return on net assets (RONA), IN economic value added (INEVA). The basic features of these indicators are the calculation of opportunity costs in the form of Weighted Average Cost of Capital (WACC) and profit from operating activities after tax (NOPAT for short). An interest rate comparable to the degree of risk is used in determining the alternative cost of equity (Kotulic et al., 2010).

4. Results

Financial prediction models are used to diagnose and predict a company's financial situation, but they can also be used to evaluate the results of its economic activities within a group of competing companies, or even within the industry (Kubenka, 2016; Jencova, 2011; Shelley et al., 2020).

The financial situation of a company is a numerical expression of its results, which it has achieved in various areas of its activities. Prediction models are based on the evaluation and interpretation of the results achieved so far and on the basis of them predict the development of the future financial and economic situation of the company. Such an analysis is called an "ex ante" financial analysis. The word "ex ante" is of Latin origin and means "before the situation". The aim of the prediction models is to examine the financial situation of the company in time, and thus prevent potential problems. All prediction models are based on the assumption that some time before the bankruptcy of a company we can observe certain characteristic differences in the development of a bankrupt company in comparison with financially sound companies (Galetto et al., 2020).

Mathematical constructions of prediction models consist in a combination of various financial and economic indicators indicating financial stability at individual levels of financial management of business entities. Due to the fact, that profit is one of the basic indicators of this nature, we decided to examine the extent to which it is used on a sample of prediction models.

First of all we looked at it, if at all, and if so, how many prediction models use profit in their estimates.

Based on research we found out that 96% of the prediction models of the selected sample use a certain form of profit in their mathematical constructions of financial and economic indicators.

We also distinguished to what extent the types of profit are used, i.e. whether traditional forms of economic profit or accounting forms of profit are used more.

The division of the use of economic and accounting profit in the sample of models, which our research brought shows, that, within the selected sample of models, forms of economic profit such as EVA, MVA, RONA or INEVA indicators are not part of mathematical combinations of financial and economic indicators for predicting the financial health of business entities. However, forms of accounting profit are fully used, whether in the form of indicators such as EAT, EBT, EBIT, EBITDA or even cash Flow.

5. Conclusions

In case of favorable prospects for the future, good financial health and the competitiveness of the company on the market and within the sector in which the company operates are assumed. However, if the prospects calculated using predictive models are not favorable, then the company can eliminate the shortcomings at a time when its financial health is good and can thus prevent future bankruptcy and leaving the industry (Kocisova & Kubala, 2012). Bankruptcy is a situation where a company is unable to pay its debts and ultimately fails to meet its obligations. Bankruptcy is a situation in which all commercial and economic activities cease and are therefore also referred to as “economic death” (Moharrampour et al., 2014).

Predictive models make it possible to identify the company’s current position in the market environment based on the evaluation of selected financial indicators, and even to estimate its position in the given environment in the near future. Models of financial health assessment are made up of indicators, the combination of which indicates the very state of the entity at various levels of financial management. In the presented article, we investigated the participation of profit and its various forms in the combination of these indicators in a selected sample of prediction models. We conclude from the findings that the models do not use economic profit at all, but accounting profit is a very important part of assessing the stability and health of businesses through predictive models.

Acknowledgement: This is paper is an outcome of project VEGA: 1/0544/19.

References:

1. *Susanto, Y. K., Pirzada, K., Adrianne, S. (2019). Is tax aggressiveness an indicator of earnings management? Polish Journal of Management Studies, 20(2), 516-527.*
2. *Tahmasebi, R., Rostamy, A.A.A., Khorshidi, A, Sharif, S.J.S. (2020). A*

data mining approach to predict companies' financial distress. International Journal of Financial Engineering, 7(2), 2050031.

3. *Stefko, R, Horvathova, J, Mokrisova, M. (2020). Bankruptcy Prediction with the Use of Data Envelopment Analysis: An Empirical Study of Slovak Businesses. Journal of Risk and Financial Management, 13(9), 212.*
4. *Svabova, L., Michalkova, L., Durica, M., Nica, E. (2020). Business Failure Prediction for Slovak Small and Medium-Sized Companies. Sustainability, 12(11), 4572.*
5. *Bilan, S., Melas, D., Melasova, K. (2020). Identifying manager´s aspects associated with company´s income through the point-bisserial correlation: The middle Europe example. Ekonomicko-manazerske spektrum, 14(1), 1-9.*
6. *Valaskova, K., Durana, P., Adamko, P., Jaros, J. (2020). Financial Compass for Slovak Enterprises: Modeling Economic Stability of Agricultural Entities. Journal of Risk and Financial Management, 13(5), 92.*
7. *Valaskova, K., Kliestik, T., Kovacova, M. (2018). Management of financial risks in Slovak enterprises using regression analysis. Oeconomia Copernicana, 9(1), 105–121.*
8. *Kliestik, T., Valaskova, K., Lazaroiu, G., Kovacova, M., Vrbka, J. (2020). Remaining Financially Healthy and Competitive: The Role of Financial Predictors. Journal of Competitiveness, 12(1), 74.*
9. *Sebo, A. (2014). Podnikové financie. Nitra: SPU Nitra.*
10. *Cisko, S., Kliestik, T. (2013). Finančný manažment II. Žilina: EDIS-vyd. ŽU v Žiline.*
11. *Zuzak, R., Königová M. (2009). Krizové řízení podniku. Praha: Grada.*
12. *Pernsteiner, H., Wagner, E., Kabat, L. (2011). Podnikanie v nových ekonomických a sociálnych podmienkach. Bratislava: EUROKÓDEX.*
13. *Marik, M., Marikova, P. (2005). Moderní metody hodnocení výkonnosti a oceňování podniku. Praha: EKOPRESS.*
14. *Siekelova, A., Kovacova, M., Adamko, P., Stehel, V. (2019). Profit Management as an Instrument for SMEs Developing: The case for Slovakia. Marketing and Management of Innovations, (3), 285-296.*
15. *Kotulic, R., Kiraly, P., Rajcaniova, M. (2010). Finančná analýza podniku. Bratislava: Iura Edition.*
16. *Bartosova, V., Kicova, E., Salaga, J. (2015). Economic Value Added as a measurement tool of financial performance. Procedia Economics and Finance, 26, 484-489.*
17. *Kubenka, M. (2016). The strictness of traditional indicators for creditworthiness measuring. In T. Loster & T. Pavelka (Eds.), Proceedings of the 10th International Days of Statistics and Economics*

(985 – 995). Prague, Czech Republic: Melandrium.
18. Jencova, S. (2011). Finančno-ekonomická analýza podnikateľských subjektov. Prešov: GRAFOTLAČ PREŠOV, s.r.o.
19. Shelley, G.L., Traian, A., Trainor, W.J. (2020). Stock market „prediction“ models. Economics Bulletin, 20(2), 1548-1556.
20. Galetto, M., Verna, E., Genta, G. (2020). Accurate estimation of prediction models for operator-induced defects in assembly manufacturing processes. Quality Engineering, 32(4), 595-613.
21. Kocisova, K., Kubala, P. (2012). Bankruptcy and credible models and their use in a competitive environment. The proceedings of the International Scientific Conference for PhD Students and Young Scientists (pp. 403 – 418). Bratislava: Ekonóm.
22. Moharrampour, M., Esfandiyari, S., Asgarzadeh, A. (2014). Evaluating the Bankruptcy prediction models. Applied mathematics in Engineering, Management and Technology, 2(3), 620-633.

Olexandr Yemelyanov
DSc in Economics, Professor
ORCID: https://orcid.org/0000-0002-1743-1646
Lilia Lesyk
PhD in Economics, Associate Professor
ORCID: https://orcid.org/0000-0003-1324-9027
Anastasiya Symak
PhD in Economics, Associate Professor
ORCID: https://orcid.org/0000-0001-6371-2206
Lviv Polytechnic National University (Lviv, Ukraine)

THE INVESTMENT IMPACT IN ENERGY SAVING ON THE FINANCIAL SUSTAINABILITY OF ENTERPRISES

Abstract
The aim of the study is to establish the impact of the implementation of certain investment measures aimed at reducing the energy intensity of enterprises, on the financial stability of their activities. Indicators for assessing this sustainability and measuring the level of investment activity of enterprises in the field of energy saving are proposed.

According to a sample of Ukrainian enterprises, it was found that investments in energy saving had a positive impact on the financial sustainability of the studied companies.

Keywords: *enterprise, investment, energy saving, energy consumption, energy saving project, financial sustainability.*

Introduction

One of the main conditions for ensuring high efficiency of enterprises for a long period is the presence of an appropriate level of economic sustainability (Yaqoob, 2020; Mokeev et al., 2015). This sustainability characterizes the enterprises ability to maintain a sufficient amount of financial and economic results of their activities in the event that the parameters of the external environment deteriorate. At the same time, an important component of economic sustainability of business entities is their financial sustainability , which reflects the ability of enterprises to conduct their financial activities in case of deterioration of the conditions of its implementation (Savchenko & Nagorna, 2018; Korepanov et al., 2020). It is necessary to take into account the fact that for most enterprises there is always the potential to increase their financial sustainability. However, the formation of this potential is a difficult task, because the magnitude of the potential to increase the financial sustainability of enterprises is influenced by a large number of factors, and the mechanism of such influence is difficult to formalize.

Among the possible factors for increasing the financial sustainability of enterprises should be noted the reduction of unit costs of production resources for the manufacture of their products. In particular, for companies in many Eastern European countries there is a need to reduce the specific consumption of fuel and energy resources (Yemelyanov et al., 2018; Yemelyanov et al., 2021). However, such a reduction often requires the investment of large amounts of investment resources (Brandt, 2017). In this regard, the implementation of energy saving measures should be preceded by a detailed assessment of their socio-economic efficiency and feasibility (Garcia-Casals et al., 2019; Gielen et al., 2019). To this end, it is necessary to predict all the main socio-economic consequences of the implementation of energy-saving investment projects in enterprises (Lv & Yang, 2020; Máša et al., 2018). Among these consequences is an important change in the financial sustainability of enterprises. Therefore, it is necessary to establish the impact of the implementation of certain investment measures aimed at reducing the energy intensity of enterprises, on the financial sustainability of their activities.

Materials and methods

To assess the impact of investments in energy saving on the financial sustainability of enterprises, it is necessary, first of all, information on the volume of such investments during the reporting period and the level of financial sustainability of the studied entities according to and after investing in energy saving projects. In this case, all this information in this study was obtained from arrays of information presented in the materials of accounting, statistical and management reporting of enterprises.

The theoretical background of the study were works on assessing the financial stability of enterprises, the formation of potential to increase this sustainability and the rational use of energy resources of enterprises.

The method of economic and mathematical modeling was used to build a formalized indicator for assessing the financial sustainability of companies. The need for this method is due to the fact that the financial sustainability of enterprises is a complex and multifaceted property. Therefore, measuring its level requires prior formalization.

In order to streamline measures to increase the financial sustainability of enterprises, the method of system analysis was used. The need for this is due to the presence of a significant number of factors shaping the potential to increase the financial sustainability of enterprises, which are interconnected and require systematic consideration.

With the aim to perform empirical research, techniques of technical and economic calculations and economic analysis were used. A tabular method was used to visualize the results obtained during the research.

An abstract-logical method was used in formulating the conclusions. This made it possible to identify the main results of the research and identify promising ways to further study the issues.

Results and discussion

Considering features of formation of increase potential of financial sustainability of the enterprise, it is necessary to note such characteristic features of this potential:

1) the magnitude of this potential is determined by the set of resources of the enterprise and the competencies of its managers in relation to the management of these resources in order to increase the level of financial sustainability of the entity;

2) with regard to the resources needed to increase the financial sustainability of the enterprise, these resources may include not only their available value, but also resources that may be involved in addition;

3) the potential to increase the financial sustainability of the enterprise is closely related to other components of the total economic potential of the entity, in particular the marketing and sales potential of the company;

4) the magnitude of the potential to increase the financial sustainability of the enterprise depends not only on the factors of its internal environment, but also on the current and future parameters of the external environment of the enterprise. n particular, we are talking about such parameters as the level of prices for products manufactured and sold by the company, the amount of demand for it, the level of credit rates, the terms for which it is possible to take a loan, and so on.

Given the potential for increasing the financial sustainability of the enterprise, it is advisable to understand the component of its economic potential, which is a set of available and possible resources and competencies that determine the ability of the enterprise to increase its financial sustainability under certain environmental conditions or in the future. In this case, the financial sustainability of the enterprise is a measure of its ability to timely and fully meet its credit obligations. Accordingly, it is possible to assess the level of financial sutainability of the enterprise by the amount of its revenues, which this enterprise can use to repay bank loans and other types of loans taken by it.

We will consider the average values of the main parameters of the loan portfolio of the enterprise, namely – the value of the loan interest and the total duration of repayment of loans. These indicators will be considered as the average of the total amount of borrowed capital of the economic entity. Regarding the amount of revenue that an enterprise may use to repay the principal amount of the debt and to pay interest thereon, that amount will be considered to be the average of the total time that the enterprise has fully repaid all of its debt. Given these assumptions, the condition of the appropriate level of financial stability of the enterprise can be represented as such an expression:

$$\sum_{j=1}^{T} \frac{P}{(1+r)^{i}} = \frac{P}{r} \cdot \left(1 - \frac{1}{(1+r)^{T}}\right) \geq C\,, \tag{3.4}$$

where: T – the average maturity of all loans taken by the company, years; P – the average amount of income that the company can use to repay loans and interest for their use, monetary units; r – loan interest on loans taken by the company in shares of the unit; C – the total amount of loans taken by the enterprise, monetary units.

Note that the value of P in expression (3.4) is set taking into account the fact that the payment of funds to repay loans does not cause the termination of the normal conduct of its business activities. In other words, the repayment of loans does not occur through the sale of the property of the enterprise, which is necessary for its operation in accordance with the established objectives of the activity.

Therefore, if inequality (3.4) is met, the company will have time to repay the loans taken by it in due time and pay interest in full for their use. Also, expression (1) allows for a quantitative assessment of the financial stability of the enterprise. To do this, we give (3.4) as an equation and express P from it:

$$P_m = \frac{C \cdot r \cdot (1+r)^{T}}{(1+r)^{T} - 1}\,, \tag{3.5}$$

where: P_m – the minimum possible amount of income that an entity can use to repay loans taken by it and to pay interest on those loans, under which inequality (3.4) will be met, monetary units.

Then a quantitative assessment of the financial sustainability of the enterprise may be performed by comparing the indicators P and P_m:

$$L = \frac{P}{P_m} = \frac{P \cdot \left((1+r)^T - 1\right)}{C \cdot r \cdot (1+r)^T}, \qquad (3.6)$$

where: L – the financial sustainability level of the enterprise, the share of the unit.

It follows from expression (3.6) that a certain enterprise will be considered financially stable if the value of indicator (3.6) is equal to or exceeds one. If this condition is not met, the company can not be considered financially stable. At the same time, as the value of indicator (3.6) increases, the level of financial sustainability of the enterprise increases.

Thus, the level of financial sustainability of the enterprise depends on four main factors, namely – the average amount of income that the entity can use to repay loans and pay interest on their use; the amount of loan interest on loans taken by the company; the average maturity of all loans taken by the entity and the total amount of loans received by the enterprise. Accordingly, it is possible to identify four main ways to realize the potential to increase the financial sustainability of the enterprise, namely:

– increasing the amount of income that the business entity will be able to use to repay loans and interest on their use. Such growth can be ensured, in particular, by optimizing prices and sales of the enterprise, reducing unit costs for its production, entering new markets, expanding the range of products and more;

– reduction of the amount of loan interest on loans taken by the company. This reduction can be achieved, in particular, by changing the structure of both the total capital of the enterprise and its loan capital, finding creditors who offer a lower interest rate, and so on;

– increase in the average maturity of all loans taken by the entity. The directions of ensuring such an increase generally coincide with the directions of reducing the amount of loan interest;

– reducing the value of the total volume of loans taken by the company. This reduction may be achieved primarily by reducing the assets of the enterprise by releasing those that are not needed by the enterprise to conduct its business. In particular, this applies to excess fixed assets and excess working capital. Then, reducing the excess assets, the company will be able to reduce its borrowed capital by the same amount. In this case, the financial results of the enterprise will not decrease, but, conversely, may increase due to the reduction of costs for the maintenance of unnecessary assets of the enterprise.

It should be noted that in the general case, a change in each of these four parameters, which affect the level of financial sustainability of enterprises, will cause a change in other parameters. For example, an increase in the amount of revenue that a business entity will be able to use to repay loans can significantly improve the creditworthiness of the enterprise and, consequently, reduce the interest rates at which lenders agree to provide loans to such enterprises. On the other hand, the reduction of borrowed capital of the enterprise may lead to a decrease in its revenues due to the reduction of the value of production and sales potential of the enterprise.

Given the above, it seems appropriate to use an optimization approach when building the potential to increase the financial sustainability of enterprises. According to this approach, a set of technical, technological, organizational and economic measures is determined, the implementation of which will ensure the maximum level of financial sustainability of enterprises, which is calculated by formula (3.6). It is necessary that all measures provide the company with a non-negative value of the excess profit (economic effect), ie the difference between the increase in profit due to the implementation of the measure and the product of investment in such implementation on the rate of return (Figure 3.1).

For the purpose of practical application of the offered methods of an estimation of influence of realization of energy saving investment projects on financial stability of the enterprises data on 97 industrial enterprises of the western region of Ukraine belonging to three types of economic activity (food production, wood processing and manufacturing from it) as well as the manufacture of machinery and equipment). All these enterprises carried out energy saving investment projects during 2019-2021. Information on the average level of financial sustainability of enterprises before and after their implementation of energy-saving investment projects are given in

Table 3.5. This level was calculated by formula (3.6). According to the above data, one of the three types of economic activity (namely, the production of machinery and equipment) reduced the average level of their financial sustainability during 2019-2021.

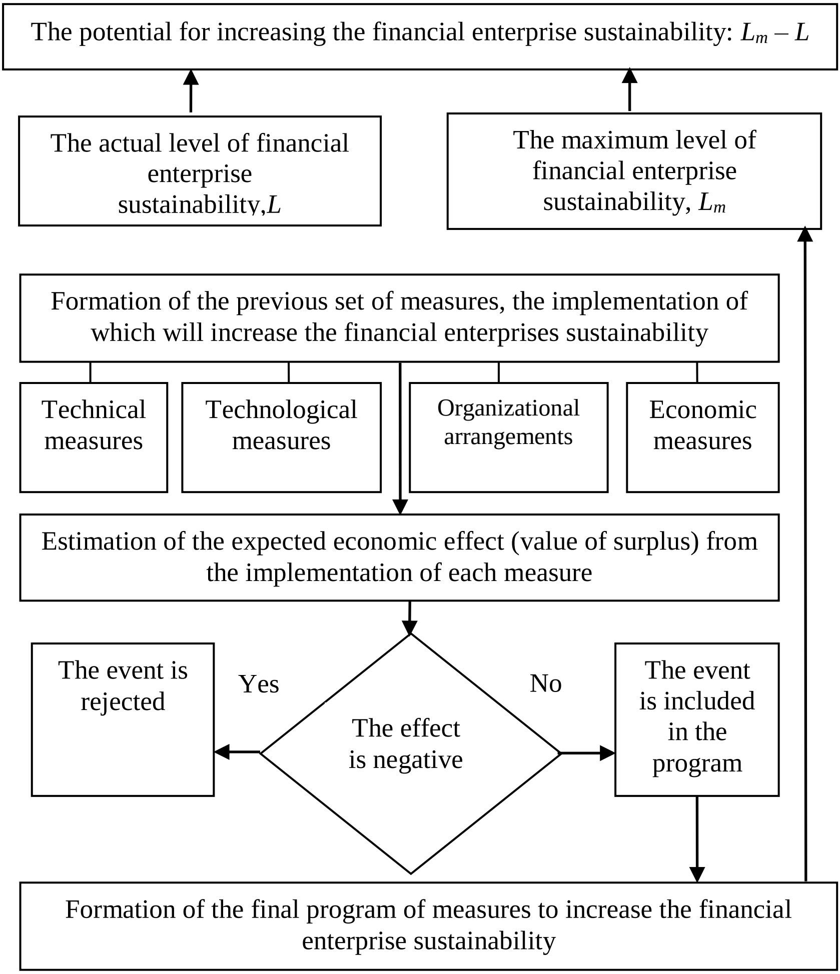

Figure 3.1 Model of formation of potential of increase of financial sustainability of the enterprise

Source: developed by the authors

Table 3.5

The average level of financial sustainability of the studied enterprises before and after investing in energy saving projects

Names of indicators	Average data of enterprises by types of economic activity		
	Food production	Wood processing and manufacture of wood products	Manufacture of machinery and equipment
Number of enterprises	45	29	23
The level of financial sustainability of enterprises to invest in energy saving projects	0.906	1.017	0.923
The level of financial sustainability of enterprises after investing in energy saving projects	0.976	1.146	0.847
Increase in the level of financial sustainability of enterprises after investing in energy saving projects	0.070	0.129	-0.076

Source: calculated by the authors on the basis of data on the activities of the studied enterprises for the period 2019-2021

In order to assess the investment activity of the studied enterprises in the field of energy saving for each of them was calculated the level of this activity. It was calculated as the ratio of the volume of investments made by enterprises during 2019-2021 in energy saving to the book value of the assets of these enterprises. All enterprises were divided into the following three groups according to the level of their investment activity in energy saving: enterprises with a low level of this activity (< 0.05), enterprises with an average level (0.05-0.15) and enterprises with high level of their investment activity in energy saving (> 0.15). The results of this distribution are presented in Table 3.6, and Table 3.7 shows the average values of the index of financial sustainability of the enterprises depending on the level of their investment activity in the field of energy saving. This index was calculated as the ratio of the level of financial sustainability of enterprises at the end of 2021 and the beginning of 2019.

Table 3.6

Distribution of the studied enterprises according to the level of their investment activity in energy saving

The level of investment activity in energy saving	Number of enterprises by level of investment activity in energy saving		
	Food production	Wood processing and manufacture of wood products	Manufacture of machinery and equipment
Low	21	12	13
Average	13	10	7
High	11	7	3

Source: compiled by the authors

Table 3.7

The average values of the index of financial sustainability of enterprises depending on their investment level in energy saving

The level of investment activity in energy saving	Index of financial sustainability of the enterprises		
	Food production	Wood processing and manufacture of wood products	Manufacture of machinery and equipment
Low	1.013	1.048	0.859
Average	1.107	1.119	0.914
High	1.155	1.224	0.960

Source: compiled by the authors

As follows from the data (Table 3.7), for all types of economic activity, the growth of investment activity in energy saving is accompanied by an increase in the average values of their level of financial sustainability. Using the method of analysis of variance, it was possible to establish that this dependence is statistically significant, because the actual values of the *F*-criterion exceed its critical values with a significance level of 0.05. Thus, investing in energy saving had a positive impact on the financial sustainability.

Conclusions

The level of financial sustainability of the enterprise depends on four main factors, namely – the average amount of income that an entity can use to repay loans and pay interest for their use; the amount of interest on loans taken by the company; the average maturity of all loans taken by the entity and the total amount of loans received by the enterprise. At the same time, it is expedient to assess the financial sustainability of enterprises by comparing the actual amount of revenues to the enterprise, which can be used to repay loans taken by them, with the minimum allowable amount of these revenues. Then the possibility of increasing this ratio will characterize the potential for increasing the level of financial sustainability of enterprises. One of the possible directions of this potential formation is the implementation of energy-saving investment projects by enterprises. A study of Ukrainian enterprises showed that the growth of their investment activity in energy saving is accompanied by an increase in the average values of the financial sustainability level. Further research requires the establishment of opportunities to determine the financial stability level of enterprises without first averaging the indicators that determine this level.

References:

1. *Yaqoob, U.H. (2020). China-Pakistan Economic Corridor (CPEC) and Questions on Pakistan's Economic Stability, Strategic Analysis, Vol. 44, Issue 2, pp. 137-152, doi: 10.1080/09700161.2020.1735097.*
2. *Mokeev, V.V., Bunova, E.V., Perevedentceva, A.V. (2015). Analysing the Economic Stability of an Enterprise with the Help of Eigenstate Method, Procedia Engineering, Vol. 129, pp. 681-689, doi: 10.1016/j.proeng.2015.12.091.*
3. *Savchenko, I., Nagorna, I. (2018). The Evaluation of Methodological Aspects of the Trade Enterprises Financial Stability Analysis, Buhalterinės apskaitos teorija ir praktika, Vol. 17-18, pp. 85-96, doi: 10.15388/batp.v0i1.11955.*
4. *Korepanov, G., Yatskevych, I., Popova, O., Shevtsiv, L., Marych, M., Purtskhvanidze, O. (2020). Managing the Financial Stability Potential of Crisis Enterprises (May 13, 2020). International Journal of Advanced Research in Engineering and Technology (IJARET), Vol. 11(4), pp. 359-371, Available at: https://ssrn.com/abstract=3599794.*
5. *Yemelyanov, O., Symak, A., Petrushka, T., Lesyk, R. et al. (2018). Evaluation of the Adaptability of the Ukrainian Economy to Changes in*

Prices for Energy Carriers and to Energy Market Risks, Energies, Vol. 11(12), pp. 3529, doi: 10.3390/en11123529.

6. *Yemelyanov, O., Symak, A., Petrushka, T., Vovk, O. et al. (2021). Criteria, Indicators, and Factors of the Sustainable Energy-Saving Economic Development: The Case of Natural Gas Consumption, Energies, Vol. 14, 5999, doi: 10.3390/en14185999.*
7. *Brandt, A.R. (2017). How Does Energy Resource Depletion Affect Prosperity? Mathematics of a Minimum Energy Return on Investment (EROI), Biophys Econ Resour Qual, Vol. 2, Issue 2. doi: 10.1007/s41247-017-0019-y.*
8. *Garcia-Casals, X., Ferroukhi, R., Parajuli, B. (2019). Measuring the socio-economic footprint of the energy transition, Energy Transit, Vol. 3, pp. 105–118, doi: 10.1007/s41825-019-00018-6.*
9. *Gielen, D., Boshell, F., Saygin, D., Bazilian, M.D., Wagner, N., Gorini, R. (2019). The role of renewable energy in the global energy transformation, Energy Strategy Reviews, Vol. 24, pp. 38-50, doi: 10.1016/j.esr.2019.01.006.*
10. *Lv, Y., Yang, X. (2020). Research on Grid Precision Investment Strategy of Grid Companies considering Multidimensional Economic and Social Factors, 2020 IEEE 9th Joint International Information Technology and Artificial Intelligence Conference (ITAIC), pp. 128-132, doi: 10.1109/ITAIC49862.2020.9339176.*
11. *Máša, V., Stehlík, P., Touš, M., Vondra, M. (2018). Key pillars of successful energy saving projects in small and medium industrial enterprises, Energy, Vol. 158, 293-304, doi: 10.1016/j.energy.2018.06.018.*

Chapter 4

INTRODUCTION OF INFORMATION TECHNOLOGIES AND DIGITALIZATION OF ECONOMIC SYSTEMS MANAGEMENT

Olesia Bezpartochna
PhD in Economics (Finance, Insurance, Social Insurance), Bulgaria
Official VUZF University Representative in Ukraine
ORCID: https://orcid.org/0000-0002-0919-2972
Nataliia Trushkina
PhD in Economics, Senior Researcher
Institute of Industrial Economics of NAS of Ukraine
ORCID: https://orcid.org/0000-0002-6741-7738
Diana Chernukh
Analyst of Social Processes, Master's degree in Management
National Aviation University
(Kremenchuk, Kyiv, Ukraine)

INFLUENCE OF DIGITAL TECHNOLOGIES ON THE DEVELOPMENT OF THE CORPORATE CULTURE OF LOGISTICS COMPANIES

Abstract
Exogenous and endogenous threats to the introduction of digital technologies at logistics enterprises have been identified. The characteristics of key digital technologies in the activity management system of a logistics enterprise in the conditions of digitalization of business processes are studied. It has been established that the introduction of digital technologies leads to transformational changes in personnel needs and requirements for specialists of logistics companies. The main principles that influence the formation of digital culture, taking into account modern challenges, are considered.

Keywords: *logistics company, corporate culture, personnel management, personnel management system, corporate social responsibility, principles, methods, organizational and management mechanism, information systems, digital technologies, digital culture, digital economy, efficiency.*

Introduction

Today, technologies continue to develop, so the number of their users is gradually increasing. According to the Digital 2020 Global Digital Overview Report, the number of Internet users since the beginning of the pandemic has increased to 4.54 billion, which is a 7% increase compared to January 2019. And this is about 298 million people per year. In general, global trends show that digital technologies are moving towards inclusiveness, and the growth of Internet users is a priority for countries. Thus, according to UN estimates, about two million new jobs will be created in the future in the fields of technology, logistics, mathematics, architecture and engineering. And in general, about 90% of jobs will require digital skills. According to an analysis by the Boston Consulting Group, digitization is recognized as a key driver of GDP growth. And according to some expert estimates, the share of the global information economy already now, taking into account digital skills and digital capital, is 22.5% of the world economy. At the same time, the growth trend of the volume of the global digital transformation market is predicted in 2016-2027 (Figure 4.1).

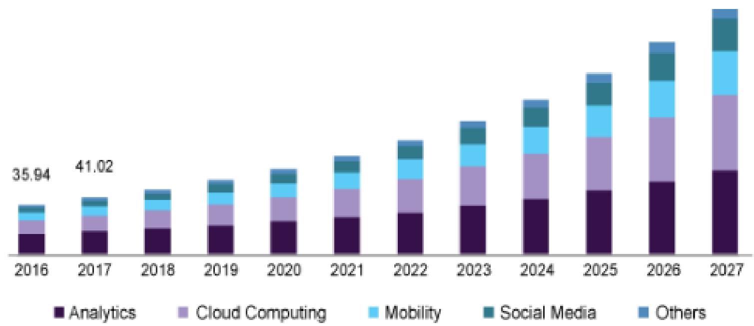

Figure 4.1 Global digital transformation market volume growth trend in 2016-2027

Source: Daschenko, 2020; Martyniuk, 2020

According to a study by the Ministry of Digital Transformation of Ukraine, 15.1% of Ukrainians aged 18 to 70 in 2019 had no digital skills at all, and 53% had digital skills below the basic level. A repeat study, which was conducted in 2021, showed that the percentage of Ukrainians who do not have digital skills decreased by 4%, and the number of people whose digital skills are below the basic level decreased by 5.2% (to 47.8%). With this in mind, the key goals of the Ministry of Digital Transformation of Ukraine are to train six million citizens in digital skills by 2024, as well as to transfer 100% of services to the online format.

Thus, the development of the modern information society, the digital transformation of logistics processes with the intensive use of digital technologies (Zaloznova, Trushkina, 2018; Trushkina, 2019a; Trushkina, 2019b; Tryfonova, Trushkina, 2019a; Zaloznova, Trushkina, 2019; Hryhorak et al., 2020; Trushkina, 2020), the growing demand for specialists in the field of information and communication technologies, the modernization of the education system lead to radical changes in the development of corporate culture (Trushkina et al., 2020; Kharchyshyna, Trushkina, 2021a; Kharchyshyna, Trushkina, 2021b; Kharchyshyna et al., 2021) and form qualitatively new requirements for level of digital skills and knowledge of enterprise personnel.

The priority task of strategic documents for the development of the digital economy and society in many countries of the world is the creation and implementation of National programs of continuous training of general and professional digital competences and knowledge in the context of the concept of lifelong learning.

The above clearly illustrates the high need for digital skills in the labour market and the need to develop and implement a set of measures to transform the corporate culture of logistics companies in the conditions of the rapid development of the digital economy.

Materials and Methods

Foreign and Ukrainian scientists pay quite a lot of attention to the issue of the influence of digital technologies on the corporate culture of enterprises. In particular, scientific publications of foreign scientists are devoted to the problems of forming corporate culture in the system of social responsibility of business (Drucker, 1946;

Bowen, 1953; Sethi, 1975; Salzmann, Ionescu-Somers, Steger, 2005; Ebner, Baumgarther, 2006; Kotler, Lee, 2008).

The analysis of special literature shows that the study of issues related to the definition of the essence and content of the concept of "organizational culture" from different scientific points of view, its features and differences from the definition of "corporate culture" (Alvesson, 2005; Armstrong, 2009; Iljins, Skvarciany, Gaile-Sarkane, 2015; Pennington, 2014; Robbins, Judge, 2012; Sheyn, 2007; Simosi, 2012).

Leading researchers (Cameron, Quinn, 2011; Denison, 1984; Denison, 1990; Dwivedi et al., 2014; Dzwigol, 2017; Dzwigol, 2019; Hofstede, 2011; Kwilinski, 2018; Kwilinski, 2019; Lapina et al., 2015; Millington, Schultz, 2009; Trang, 2017; Suryaningtyas et al., 2019; Tortorella et al., 2019) pay significant attention to identifying factors influencing corporate culture on the efficiency and level of competitiveness of enterprises; scientific and methodological substantiation of the relationship between corporate culture and financial results; development of methods for assessing the level of development of corporate culture; application of information technologies in the activities of enterprises, including for improving the personnel management system.

In view of this, the purpose of this study is the need, based on the analysis of the current level of development of information and digital technologies, to reveal the essence and features of digitalization in order to identify the impact on the transformational processes of the corporate culture of logistics companies and the sustainable development of economic systems.

In the process of research, general scientific methods (analysis and synthesis, content analysis, expert survey, marketing analysis, comparison, structural and logical generalization, systemic approach) were used for a comprehensive analysis of modern problems, challenges and threats that determine the need for transformations in the existing system of corporate social responsibility; determination of transformational changes in the corporate culture of logistics companies in the conditions of digitalization.

Results and Discussion

With the onset of the COVID-19 pandemic, businesses around the world began to move to a new level of the digital economy. There have been effective changes in the development of enterprises. In particular, Digitization is the transformation of information from physical media to digital media. Today, digitization has become a key component for successful business in most countries of the world. The development of mobile communications, online services, e-commerce (Kwilinski, Trushkina, 2019; Tryfonova, Trushkina, 2019b; Trushkina, Bezpartochnyi, Shkrygun, 2020; Trushkina, Bezpartochna, Shkrygun, 2020; Bezpartochna, Trushkina, 2021) make it possible to eliminate paper document circulation, speed up the organization of business processes, and simplify access to export markets.

In 2021, especially for Ukrainian entrepreneurs, the leading consultants of the German Economic Group (GET) presented the results of a study dedicated to the digital transformation of business in Ukraine, its achievements and problems. The event was organized by the Kyiv Chamber of Commerce and Industry together with the German-Ukrainian Chamber of Commerce and Industry. GET surveyed 500 Ukrainian companies regarding the state of digital transformation. It turned out that 92% of companies see this as an opportunity, not a risk. However, only 17% of companies consider themselves leaders in this process. Few companies have clear digitalization strategies, but instead face a number of challenges. This is a lack of finances, specialists, and experience, and the impact on the corporate culture of companies in the system of corporate social responsibility.

Today, digitalization is one of the defining trends in the development of human civilization, which forms a more inclusive society and better governance mechanisms, expands access to health care, education and banking, improves the quality and coverage of public services, expands the way people cooperate, and also enables take advantage of a greater variety of products at lower prices. This is one of the main factors of the growth of the world economy in the next 5-10 years. In addition to the direct productivity gains that companies get from digital technologies, there is a chain of indirect benefits of digitalization, such as time savings, new demand for new goods and services, new quality and value, and more. It should be noted that the introduction of digital technologies at logistics enterprises can cause many exogenous and endogenous threats (Table 4.1).

Table 4.1

Threats of the introduction of digital technologies at logistics enterprises

Endogenous threats	Exogenous threats
- unstable political and economic situation in the country; - lack of standards for the use of digital technologies; - lack of special measures by the state to support enterprises; - significant costs for the introduction of digital technologies; - insufficient number of digital ones solutions that can be used by a limited number of the population; - insufficient level of information security; - insufficient level of information infrastructure development	- high cost of digital technology projects; - significant costs for the operation of systems using digital technologies; - reluctance of employees to change the form of work; - insufficient digital competence of logistics personnel; - the impossibility of conducting business in the transport and logistics sphere without the use of digital technologies

Source: summarized and compiled based on the analysis of scientific literature and information materials of international consulting companies and analytical centers

Today, digitalization is the active integration and consolidation of digital technologies into an enterprise's business processes, its CSR and corporate culture, which fundamentally changes the way it works and benefits customers. It is also a certain cultural change that requires the enterprise to constantly challenge the existing state of things, experiment and get used to failure. Sometimes this means abandoning the established business processes on which enterprises have been built in favour of relatively new practices that have yet to be defined. This approach allows predicting not only the installation of modern equipment or software, but also fundamental changes in management approaches, corporate culture, and external communications (Tkachuk, 2021). As a result, the productivity of each employee and the level of customer satisfaction increases, and the company gains the reputation of a progressive and modern organization and competitiveness. Customers are essentially one of the main drivers of digitalization. Because they interact daily with commercial and public companies, many of which have already begun to transform their operations. In such cases, the client sees that modern technologies make processes faster and easier, so he expects such changes from other enterprises as well.

In the last few years, the logistics business of Ukraine has undergone positive and driving changes in the development of the digital transformation of enterprises, which affected the corporate culture of companies; in particular, such transformational changes arose for several reasons:

1) strengthening of client-oriented activities – the active implementation of digitalization technologies allows to organize the most personalized interaction, which is preferred by the majority of clients. Digital communication channels, omnichannel, artificial intelligence, robotics – we already deal with all this in our everyday life;

2) providing flexibility and speeding up business processes – to be successful and competitive, you need to be fast and flexible: change not when there is an opportunity, but when there is a need;

3) the need for partnership and cooperation – it is difficult to imagine a successful modern business without partners. Digitization in corporate culture creates new opportunities for cooperation with other enterprises. For example, thanks to modern technologies, it is possible to conduct business and look for partners in any part of the globe. And the open API makes collaboration easier and more convenient.

Digitization in corporate culture is a radical rethinking of how an organization works with technology, people and processes to fundamentally change its business performance and meet customer needs. And the technologies themselves are a driving tool that allows employees in particular to work more efficiently and in better conditions, and the business as a whole to strengthen its core operations. But despite this, it should be noted that digital transformation can end before it has even begun, if company employees do not understand why, how and what is happening (Lisova, 2019). Therefore, the transformation of the company into a digital one requires major changes in the actions of employees, their behaviour and interaction with other people, inside and outside the organization. In other words, successful digital transformation begins with cultural transformation. It is a certain set of principles and values in corporate culture, which characterizes the use of technologies for interaction with society and solving tasks in professional activities. In essence, these are attitudes or some kind of unspoken code of how things happen in the company, which gives employees freedom of thought and situational decision-making.

Integrating digital technologies into the enterprise's business process, it is necessary to ensure that its employees realize the true role of technology in their daily life and work, adapt to changes as quickly as possible, and correctly understand their human role. Inside the enterprise, it is appropriate to emphasize the introduction of project-based, flexible work methods, training in working with digital tools, education of corporate culture, formation of creative thinking of employees. A large-scale transformation of the requirements for specialists is already being observed, as labor automation is taking place. And the main competence that determines the competitive advantages of logistics enterprises is big data analytics. Thus, the ability and skills to work with a large volume of massive structured and unstructured information allows companies today to improve the quality of demand forecasting and optimize processes (Schallmo, Williams, Boardman, 2017).

Information technologies create additional value for the company, forming a unique business environment with additional competitive advantages in the areas of unlimited communication opportunities, sales, branding, attracting specialists and experts, controlling, organizational flexibility and access to digital databases, services of high-class professionals in various industries. Today, the development of digitalization also affects the management of the enterprise and personnel (Table 4.2).

At the same time, logistics companies are increasingly giving priority to especially valuable resources of the company, namely employees, their knowledge, skills and abilities. Thus, in order to provide the company with personnel, great attention is paid to personnel policy, because the introduction of digital technologies dictates transformational changes in personnel needs and requirements for specialists (Ryzhenko, 2018; Daschenko, 2020), in particular:

Table 4.2

Information technologies for managing the activities of logistics companies in conditions of digitalization

Technologies	Characteristic
Information production technologies	This is the first generation of software and information products developed to order or independently to perform clearly defined functional tasks (for example, "Accounting", "Warehouse", "Logistics"). They can be both local and network
Internet technologies	Can be defined as an inherited generation. These are technologies for creating and maintaining various information resources in the Internet computer network. Modern Internet technologies ensure the development and implementation of corporate local and global systems (CIS). Design of intra-corporate and communication resources, creation of virtual departments and organizational units, expansion of commercial opportunities of the enterprise and creation of new business models of sales in e-commerce and PR in e-business
Network technologies	It is based on service-oriented architecture SOA (service-oriented architecture). The concept of SOA, a modular approach allows you to implement basic management functions and functions of distributed delegation, substitutability of components and software complexes to create comprehensive user access to various enterprise databases. The modern level of network technologies also involves the use of cloud technologies. This is a convenient environment for storing and processing information, which combines hardware, licensed software, communication channels, as well as technical support for users. Work in the "cloud space" is aimed at reducing costs and increasing the efficiency of enterprises with partial virtualization of general activities. A feature of cloud technologies is that they are not tied to a hardware platform geographical area, scalability and flexible location. The client can work with cloud services from anywhere on the planet and from any device that has access to the Internet, as well as quickly respond to changing business tasks of the enterprise and market needs
Technologies of Artificial Intelligence	A software environment that simulates the human thinking process by computer means. In recent years, these technologies have been growing and being introduced into the business environment hyperdynamically. They help to structure the excessive accumulation of management information, using BigDate knowledge bases, model genetic algorithms for non-standard solving of complex problems by selecting and combining variations of given parameters

Source: generalized and compiled on the basis (Daschenko, 2020; Martyniuk, 2020)

1) decrease in demand for professions related to the performance of formalized repetitive operations;

2) reduction of the life cycle of professions in connection with the rapid change of technologies;

3) transformation of competence profiles of some categories of personnel (risk analysts, HR managers, marketers-analysts, contact centre operators, etc.) in connection with a change in work tools;

4) emergence of new roles and professions;

5) increasing requirements for flexibility and adaptability of personnel;

6) increasing the requirements for "soft skills" – possession of social and emotional intelligence, that is, in general, those abilities that distinguish a person from a machine;

7) growing demand for specialists with "digital dexterity" – the ability and desire to use new technologies to improve business results.

Effective implementation of digitalization in logistics enterprises and its symbiosis with corporate culture allow employees to get the desired results of their work faster. Thus, the digital culture emerging in these companies is a certain code of conduct that gives employees freedom of choice and coordinates their situational decision-making. At the same time, it should be noted that the main secret of the company's success is providing more freedom for employees. Where everyone's authority is wider than the job description (Kalach, 2020). Digitalization has a significant impact on the development of corporate culture. Digital culture implies increasing the level of digital skills of employees, literacy and the ability to use modern technologies and software, taking into account all the opportunities provided by information progress. It is worth noting that there is no universal formula for the formation of digital culture (Filyppova, 2017). It is possible to highlight the main principles that influence the formation of digital culture (Lazebnyk, Voitenko, 2020):

1) Customer orientation: the customer or user is at the centre of all activities, employees put themselves in the customer's place when developing products or services. Digital transformation, where technology is implemented for its own sake, is doomed.

2) Value approach: prioritizing the development of products and solutions based on value.

3) Work on the basis of data: in a digital culture, the quality of data and information is ensured, and decisions are made on the basis of data.

4) Openness to radical changes (disruption): employees are open to solutions that fundamentally change the usual business models.

5) TL approach (test and learn): boldness is encouraged, not caution. In digital culture, people are encouraged to take risks, analyse failures, and learn from mistakes.

6) Dynamics of decision-making: employees act and react quickly; the emphasis is on action, not on planning. In the rapidly changing digital world, planning and decision-making must move from long-term to short-term.

7) In order to increase the dynamics, it is necessary to expand the rights and opportunities for employees: employees should get autonomy to make their own decisions.

8) Openness: communications between different levels in the hierarchy are direct and honest. A very important point is the transformation of “vertical” communication (by hierarchy – from top to bottom) to “horizontal”, control – to delegation.

9) Collaboration: working in cross-functional teams, collaboration is valued more than individual efforts. Success in a digital culture is achieved through teamwork and information sharing between departments, divisions and functions.

10) Formation of the ecosystem: the company develops together with competitors, partners, other categories of stakeholders.

Conclusions

Today, companies are facing not a simple task, namely the scaling of digital culture. Because with the development of digital technologies, the traditional corporate culture is gradually undergoing transformational changes, where a clear hierarchy and instructions are replaced by the delegation of responsibilities between employees, collaboration, openness and speed of decision-making, which play an important role in shaping not only the modern business, but also the employee. It should be noted that in the era of digital technologies, corporate culture needs to be changed, in particular, in order to remain relevant. For example, despite budget challenges caused by the COVID-19 outbreak, global spending on digital transformation technologies and services grew by 10.4% to $1.3 trillion in 2020, according to IDC. This is due to the fact that most implemented large-scale projects are tools for a broader business strategy.

So, the modern world, under the influence of the global crisis caused by the COVID-19 pandemic, has changed and is leading to the most significant consequences. Such transformations require new skills and competencies, readiness to use fundamentally new technologies. Of particular importance is the formation of a correct awareness of the opportunities, threats and prospects for the development of technologies in the future, which will allow not only to use them effectively, but also to ensure conscious digital corporate social responsibility in business and society.

Prospects for further research consist in the theoretical generalization of approaches to defining the essence and content of the term “corporate culture”.

References:

1. *Alvesson, M. (2005). Organizatsionnaya kul'tura [Organizational culture]. Kharkov: Publishing House of the Humanitarian Center. (in Russian)*
2. *Armstrong, M. (2009). Praktika upravleniya chelovecheskimi resursami [The practice of human resource management]. 10th ed. St. Petersburg: Peter. (in Russian)*
3. *Bezpartochna, O., Trushkina, N. (2021). E-commerce in the age of digital transformation. Concepts, strategies and mechanisms of economic systems management in the context of modern world challenges: scientific monograph / VUZF University of Finance, Business and Entrepreneurship. Sofia: VUZF Publishing House “St. Grigorii Bogoslov”, pp. 306-318.*
4. *Bowen, H. (1953). Social Responsibilities of the Businessman. New York, USA: Harper & Row.*
5. *Cameron, K. S., Quinn, R. E. (2011). Diagnosing and Changing Organizational Culture: Based on the Competing Values Framework. 3rd ed. New Jersey: John Wiley & Sons.*
6. *Daschenko, N. M. (2020). Sotsialno vidpovidalne upravlinnia personalom pidpryiemstva v umovakh tsyfrovizatsii ekonomiky [The Socially Responsible Human Resources Management of Enterprise in the Conditions of Digitization of the Economy]. Business Inform, no. 4, pp. 424-432. (in Ukrainian)*

7. *Denison, D. R. (1984). Bringing corporate culture to the bottom line. Organizational Dynamics, vol. 13, no. 2, pp. 4-22.*
8. *Denison, D. R. (1990). Corporate culture and organizational effectiveness. New Jersey: John Wiley & Sons.*
9. *Drucker, P. (1946). Concept of the Corporation. New York: The John Day Company.*
10. *Dwivedi, S., Kaushik, S., Luxmi (2014). Impact of Organizational Culture on Commitment of Employees: An Empirical Study of BPO Sector in India. Vikalpa, vol. 39, no. 3, pp. 77-92.*
11. *Dźwigoł, H. (2017). Organisational structure within the process of organisation management. Marketing i Rynek, nr. 24(7), pp. 171-183.*
12. *Dźwigoł, H. (2019). Research methods and techniques in new management trends: research results. Virtual Economics, vol. 2, no. 1, pp. 31-48. https://doi.org/10.34021/ve.2019.02.01(2).*
13. *Ebner, D., Baumgarther, R. (2006). The relationship between sustainable development and corporate social responsibility. Corporate Responsibility Research: Conference Materials (Dublin, September 4–5, 2006). Dublin: Queen's University Belfast.*
14. *Filyppova, S. V. (2017). Sotsialna vidpovidalnist u stratehii upravlinnia vitchyznianym pidpryiemstvom: problemni pytannia intehruvannia mekhanizmu [Social responsibility in the management strategy of a domestic enterprise: problematic issues of mechanism integration]. Economy: realities of time, no. 30, pp. 5-17. (in Ukrainian)*
15. *Hofstede, G. (2011). Dimensionalizing Cultures: The Hofstede Model in Context. Online Readingsin Psycology and Culture, vol. 2, no. 1, pp. 1-7.*
16. *Hryhorak, M., Trushkina, N., Popkowski, T., Molchanova, K. (2020). Digital transformations of logistics customer service business models. Intellectualization of Logistics and Supply Chain Management, vol. 1, pp. 57-75. https://doi.org/10.46783/ smart-scm/2020-1-6.*
17. *Iljins, J., Skvarciany, V., Gaile-Sarkane, E. (2015). Impact of Organizational Culture on Organizational Climate during the Process of Change. 20th International Scientific Conference Economics and Management-2015. Procedia-Social and Behavioral Sciences, vol. 213, pp. 944-950.*
18. *Kalach, H. M. (2020). Modeli otsinky brendu v umovakh tsyfrovizatsii biznesu [Models of brand evaluation in conditions of digitalization of business]. Entrepreneurship and Trade, iss. 27, pp. 26-30. (in Ukrainian)*
19. *Kharchyshyna, O. V., Trushkina, N. V. (2021a). Osoblyvosti orhanizatsiinoi kultury pidpryiemstv u sferi hotelnykh posluh [Features of organizational culture of enterprises in the field of hotel services].*

Business Inform, no. 1, pp. 309-319. https://doi.org/10.32983/2222-4459-2021-1-309-319. (in Ukrainian)

20. *Kharchyshyna, O., Trushkina, N. (2021b). Diagnosis of organizational culture and trends in its development in higher education. Modern management: theories, concepts, implementation: monograph / Edited by M. Duczmal, T. Nestorenko. Opole: The Academy of Management and Administration in Opole, pp. 294-308.*
21. *Kharchyshyna, O., Trushkina, N., Rynkevych, N. (2021). Teoretyko-metodychni ta praktychni zasady upravlinnia transformatsiieiu orhanizatsiinoi kultury pidpryiemstv [Theoretical-methodical and practical principles of management of transformation of organizational culture of enterprises]. Věda a perspektivy, no. 3(3), str. 126-146. https://doi.org/10.52058/ 2695-1592-2021-3(3)-126-146. (in Ukrainian)*
22. *Kotler, P., Lee, N. (2008). Corporate Social Responsibility: Doing The Most Good For Your Company And Your Cause. Wiley India Pvt. Limited.*
23. *Kwilinski, A. (2018). Mechanism of formation of industrial enterprise development strategy in the information economy. Virtual Economics, vol. 1, no. 1, pp. 7-25. https://doi.org/ 10.34021/ve.2018.01.01(1).*
24. *Kwilinski, A. (2019). Implementation of Blockchain Technology in Accounting Sphere. Academy of Accounting and Financial Studies Journal, vol. 23(SI2), pp. 1-6. https://www.abacademies.org/articles/Implementation-of-Blockchain-Technology-in-Accounting-Sphere-1528-2635-23-SI-2-412.pdf.*
25. *Kwilinski, A., Trushkina, N. (2019). Features of digital marketing in the context of informational economy. Modern innovative and information technologies in the development of society: monograph / Edited by M. Ekkert, O. Nestorenko, M. Szynk; Katowice School of Technology. Katowice: Wydawnictwo Wyzszej Szkoly Technicznej w Katowicach, pp. 158-165.*
26. *Lapina, I., Kairisa, I., Aramina, D. (2015). Role of Organizational Culture in the Quality Management of University. 20th International Scientific Conference Economic and Management – 2015 (ICEM – 2015). Procedia-Social and Behavioral Sciences, vol. 213, pp. 770-774. https://doi.org/10.1016/j.sbspro.2015.11.472.*
27. *Lazebnyk. L. L., Voitenko, V. O. (2020). Informatsiina infrastruktura v tsyfrovizatsii biznes-protsesiv pidpryiemstva [Information infrastructure in the digitalization of the enterprise's business processes]. Scientific Bulletin of the International Humanitarian University, iss. 42, pp. 18-22. (in Ukrainian)*
28. *Lisova, R. M. (2019). Vplyv didzhytalizatsii na biznes-modeli: etapy ta*

instrumenty tsyfrovoi transformatsii [Impact of digitalization on business models: stages and tools of digital transformation]. Scientific Bulletin of the Uzhhorod National University. Ser.: International economic relations and world economy, iss. 24(2), pp. 114-118. (in Ukrainian)
29. *Martyniuk, O. A. (2020). Vplyv didzhytal-tekhnolohii na rozvytok sotsialnoi vidpovidalnosti biznesu [The impact of digital technologies on the development of business social responsibility]. Economics: time realities, no. 4(50), pp. 78-86. https://doi.org/10.15276/ETR.04.2020.11. (in Ukrainian)*
30. *Millington, M. J., Schultz, J. C. (2009). The Challenge of Organization Culture in Quality Assurance Implementation. Journal of Rehabilitation Administration, vol. 33, pp. 121-130.*
31. *Pennington, L. (2014). Impact of organizational culture on sustainability endeavors: the real story of sustainability. North Ryde: Macquarie University.*
32. *Robbins, S. P., Judge, T. A. (2012). Organizational Behavior. 15th ed. London: Prentice Hall.*
33. *Ryzhenko, O. (2018). Yak tsyfrova ekonomika zminyt Ukrainu [How the digital economy will change Ukraine]. Ekonomichna Pravda, January 16. https://www.epravda.com.ua/ columns/2018/01/16/633057/. (in Ukrainian)*
34. *Salzmann, O., Ionescu-Somers, A., Steger, U. (2005). The business case for corporate sustainability. Literature review and research options. European Management Journal, vol. 23, no. 1, pp. 27-36. https://doi.org/10.1016/j.emj.2004.12.007.*
35. *Schallmo, D., Williams, C. A., Boardman, L. (2017). Digital Transformation of Business Models – Best Practice, Enablers, And Roadmap. International Journal of Innovation Management, vol. 21, no. 08, pp. 1-17. https://doi.org/10.1142/ S136391961740014X.*
36. *Sethi, S. P. (1975). Dimensions of corporate social performance: An analytic framework. California Management Review, vol. 17, no. 1, pp. 58-64.*
37. *Sheyn, E. (2007). Organizatsionnaya kul'tura i liderstvo [Organizational culture and leadership]. 3rd ed. St. Petersburg: Peter. (in Russian)*
38. *Simosi, M. (2012). The role of self-efficacy in the organizational culture – training transfer relationship. International Journal of Training and Development, vol. 16, no. 2, pp. 92-106.*
39. *Suryaningtyas, D., Sudiro, A., Troena, E. A., Irawanto, D. W. (2019). Organizational resilience and organizational performance: examining the mediating roles of resilient leadership and organizational culture.*

Academy of Strategic Management Journal, vol. 18, no. 2, pp. 1-7.

40. *Tkachuk, V. O. (2021). Vplyv tsyfrovoi transformatsii na zminy v pidkhodakh do formuvannia korporatyvnoi kultury pidpryiemstva [Influence of digital transformation on changes in approaches to the formation of corporate culture of the enterprise]. State University "Zhytomyr Polytechnic". https://conf.ztu.edu.ua/wp-content/uploads/2021/01/351.pdf.*
41. *Tortorella, G. L., Vergara, A. M. C., Garza-Reyes, J. A., Sawhney, R. (2019). Organizational learning paths based upon industry 4.0 adoptions: An empirical study with Brazilian manufacturers. International Journal of Production Economics, vol. 219, pp. 284-294. https://doi.org/10.1016/j.ijpe.2019.06.023.*
42. *Trang, To Thu (2017). Integral'naja metodika issledovanija organizacionnoj kul'tury [The integrated methodology of organizational culture investigation]. Naukovedenie, vol. 7, no. 1. https://doi.org/10.15862/115EVN115. (in Russian)*
43. *Trushkina, N. (2019a). Transformation of customer relationship management in the digital economy. Digital economy and digital society: monograph / Edited by T. Nestorenko, M. Wierzbik-Stronska; Katowice School of Technology. Katowice: Wydawnictwo Wyzszej Szkoly Technicznej w Katowicach, pp. 311-316.*
44. *Trushkina, N. (2019b). Organizational-economic mechanism of management logistic activity of enterprise: essence and structure. Strategies for sustainable socio-economic development and mechanisms their implementation in the global dimension: collective monograph / VUZF University of Finance, Business and Entrepreneurship. Sofia: VUZF Publishing House «St. Grigorii Bogoslov», vol. 3, pp. 117-125.*
45. *Trushkina, N. V. (2020). Kliientooriientovanyi pidkhid do lohistychnoho servisu v umovakh informatsiinoi ekonomiky [A customer-oriented approach to logistics service in the conditions of the information economy]. Business Inform, no. 6, pp. 196-204. https://doi.org/10.32983/2222-4459-2020-6-196-204. (in Ukrainian)*
46. *Trushkina, N., Abazov, R., Rynkevych, N., Bakhautdinova, G. (2020). Digital Transformation Organizational Culture under Conditions of the Information Economy. Virtual Economics, vol. 3, no. 1, pp. 7-38. https://doi.org/10.34021/ve.2020.03.01(1).*
47. *Trushkina, N., Bezpartochnyi, M., Shkrygun, Yu. (2020). E-commerce in the conditions of digitalization of business processes. Strategies, models and technologies of economic systems management in the context of international economic integration: scientific monograph / Edited by M. Bezpartochnyi, V. Riashchenko, N. Linde. 2nd ed. Riga:*

Institute of Economics of the Latvian Academy of Sciences, pp. 245-256.

48. *Trushkina, N., Bezpartochna, O., Shkrygun, Yu. (2020). Priority directions for development of digital marketing in the conditions of globalization. Pandemic Economic Crisis: Changes and New Challenges to Society: scientific monograph / Edited by M. Bezpartochnyi; VUZF University of Finance, Business and Entrepreneurship. Sofia: VUZF Publishing House "St. Grigorii Bogoslov", pp. 227-238.*
49. *Tryfonova, O., Trushkina, N. (2019a). Application of information technologies in logistic activities of enterprises. Conceptual aspects management of competitiveness the economic entities: collective monograph / Edited by M. Bezpartochnyi, I. Britchenko. In 2 Vol. / Higher School of Social and Economic. Przeworsk: WSSG, vol. 1, pp. 161-172.*
50. *Tryfonova, O., Trushkina, N. (2019b). E-commerce as an effective form of organization of logistics activities of enterprises. Modern Technologies in Economy and Management: collective scientific monograph / Edited by O. Nestorenko, T. Pokusa; The Academy of Management and Administration in Opole. Opole: Publishing House WSZiA w Opole, pp. 397-406.*
51. *Zaloznova, Yu., Trushkina, N. (2018). Information technologies as a tool for management of the logistic activity of enterprise. Innovation technologies in Economy and Society: monograph / Scientific edit.: T. Nestorenko, M. Wierzbik-Stronska, R. Jendrus; Katowice School of Technology. Katowice: Wydawnictwo Wyzszej Szkoly Technicznej Katowice, pp. 165-178.*
52. *Zaloznova, Yu., Trushkina, N. (2019). Management of logistic activities as a mechanism for providing sustainable development of enterprises in the digital economy. Virtual Economics, vol. 2, no. 1, pp. 63-80. https://doi.org/10.34021/ve.2019.02.01(4).*

Jasmina Gržinić
PhD in Economics, Full Professor
Juraj Dobrila University of Pula, Croatia
ORCID: https://orcid.org/000-0003-2371-1406
Sonja Bajramović Hajdarović
Master of Economics
Camping Bi Village, Croatia
ORCID: https://orcid.org/0000-0003-1478-373
Mirela Sučić Čevra
PhD in *Economics*
Kuoni Tumlare Zagreb, Croatia
ORCID: https://orcid.org/000-0002-3891-8971

DIGITAL NATIVES IN TRANSFORMATIVE TOURISM

Abstract
In this paper, the relationship is determined between transformative travel and the digital native travellers' motives for travel. The purpose of the research is to point out the impact of transformative travellers on attraction management in the destination. Digital natives represent a whole generation of young people raised in the digital era. Since transformative tourism is a new age term, there is a connection between them. In the first part of this research, we analyse up to date theoretical contributions related to transformative travel. The second part of the paper analyses impacts that the new generation of travellers (digital natives) create in the global tourism market, changes in the conditions and effects on the local population in the destination. This includes the impact of digital natives and sustainability ambassadors as the dominant groups of young travellers who alter the tourism industry, which requires the creation of new business models and adaptation of offer providers in the global market. The main goal of this paper is to analyse the relationship between the habits of a digital tourist and transformative offers in international tourism. The scientific contribution is in the recommendations for adapting the tourism offer.

Keywords: *digital natives, transformative travel, tourism offer, local population.*

1. INTRODUCTION

Main topics of this research are new travellers' motives and impacts of digital natives on transformations in tourism. Under the influence of globalisation and development of new technologies, the main travellers' motivation has changed and deepened. Travel is no longer mass or uneventful; on the contrary, a more detailed involvement is required from service providers – personalisation, use of mobile technologies and social networks, as well as accessibility. The new generation of young travellers travel for reasons of a whole range of in-depth psychological drivers which motivate them for transformative travels. The purpose of the research is to define the changes and new trends in transformative tourism in the last several decades and to prove the impacts they have on attraction management in the destination.

The aim of the research is to analyse the main transformative travellers' trends and discover how digital natives affect the tourism product market, influenced by technology.

The research hypotheses are:

- H1 – Travellers are changing. A new generation of 21st century travellers is being created, a generation that has a different psychological profile, needs and motivations compared to the travellers who travelled in the course of the last decades.
- H2 – New motives and needs of tourists (digital travellers) create transformations in tourism at the global level, which partly affects the tourism product offer.

The scientific methods used in the research are the collection of secondary information sources, the deductive method, the method of analysis and synthesis and the methods of comparison and observation. The paper is in the form of a research review, due to the awareness of an insufficiently researched topic within the national framework.

2. TRANSFORMATIVE TRAVEL AND NEW TRAVELLERS' MOTIVES – THEORETICAL POSTULATES

Transformative travel is a recently developed concept in modern tourism and encompasses two dimensions – transformations and travels. Travel is considered to be a mean of transformation as it "contains a vast majority of prerequisites which lead to individual and social changes due to a higher personal awareness, empathy and development of new values" (Kottler, 1998, 98). The real psychology that stands behind the consumer behaviour studies the internal and external psychological impacts on the perception of future travels and on making decisions about them. They are: inclusion of ego, dedication and commitment, making of family decisions and influence of friends and relatives, as well as looking for novelties (Ross, 1994).

In that context, transformation becomes a result of the integration of experiential elements into travel. Ross (2010, 32) defines transformative travel as "a sustainable travel on which a traveller intentionally embarks with the purpose of creating pleasant circumstances for the achievement of transformation of one or more basic structures of his own character". Upon their return home, some individuals would continue to follow the principles of ecological and sustainable development and, more importantly, to convey these new values and attitudes to their family members and friends (Richardson, Grose, Allum, 2016).

The process of transformation enables an individual to become "someone else" on his travels, i.e. to experience a positive change in his "attitude, behaviour, personality traits or some other basic personal level" (Maslow, 1943, 1954 in McLeod 2007, Pine, Gilmore 1999 in Gelter 2010, 48). Transformations that are made by physical travel have become a complex social phenomenon (Lean, 2009). The most important groups of the new generation of travellers do not include only young travellers, nor do they include travellers who are being led by trends. The movement is wider and includes all generations and types of travellers who, in the past several decades, have been given an opportunity to use travel as a tool for self-cognition. Pearce (2005) sees transformations in tourism through: improvement of emotional and mental health through travel and personal reflection, travel for re-evaluation of personal priorities, physical health through active holiday, therapeutic travel, search for a new career and passion, finding solutions for personal problems, keeping distance from bad relationships, working on oneself, regaining control, pilgrimages and more active and richer experience.

“Transformation is conditioned by a combination of effects and consequences of going through a new experience, location and time in which a traveller finds himself, as well as of his perception. In this context, transformation and personal transformation become synonyms” (Ross, 2010). Transformation is, therefore, considered as “personal growth and developmental changes with potentially wide social implications” (Merriam, Caffarella, 1999, Saunders, Laing, Weiler, 2014).

Under the influence of the development of new technologies, previous comparative advantages of destinations have been changing – resources are no longer only natural, but also cultural and traditional; they include infrastructure, accessibility and exclusivity (Ross, Hur, Hoffman, 2019, Tomljenović, Ateljević, 2017, Coccosis, Tsartas, Gkrimpa, 2010, Soulard et. al. 2021). The optimal transformation of an individual is the one that continues also in their places of residence. The application of technology is crucial especially for digital nomads who want fast feedback. Today's important information are such as respect for sustainability principles and encouragement of the positive behaviour among other travellers, which improves the business models, marketing and conservation of the protected areas (Wolf, Ainsworth, Crowley, 2017).

The knowledge so far (Skift Megatrend, 2018) reveals that the idea of transformative travel extends to all segments of the tourism industry. *Skift Megatrends* (2018) research identified growing stimulating trends among travellers, where 52% of surveyed travellers confirmed that, with the passage of time, they pay increased attention to transformative travel.

The type of travellers who practice transformative travel after the primary motivation for travel (Amadeus “Future Traveller Tribes 2020”) has been fulfilled, can be divided into the following groups: Active seniors (between 50 and 75 years of age), Global clans (bonding with family/relatives), Cosmopolitan travellers (suitable location, easy booking and fast check-ins), Global managers (senior managers, used to top, luxurious experiences).

Based on the chronological review of up to date theoretical and practical knowledge related to the analysed problem area, we can conclude that a combination of connection, authenticity and personalisation defines how important is the act of travel in a travellers' life. On the basis of the conducted analysis of current theoretical knowledge and world agencies' research on trends in travel, it is concluded that travel changes the ways in which people perceive the world around them. They still prefer staying in local communities and using public transport, by penetrating into the cultural customs of the environment, but with a versatile spectrum of "live" technology experiences that are also thoroughly and essentially changing.

3. DIGITAL NATIVES

Further in the text, the Digital native market features are described, as well as the adaptation of the offer and the possibility the synergy of transformative travellers (even those predominantly digital) with the local communities.

3.1. MARKET FEATURES

With the emergence of Web 2.0, the so-called Digital natives also appear, predominantly the Z generation, but also the millennials, i.e. the Y generation, who have grown up in the digital era (Kamboj, Sharma, 2016). Their attention is maximally directed towards visual media, such as pictures and video recordings. They may be digital nomads but they are not necessarily. While the natives are young people who can work in the office without traveling, digital nomads are different ages, move and work around the world. Still, digital natives cover most of the digital travel market (Statista). This market segment is just an intermediate step though towards even more flexible structures (Winkelhake, 2017). Creative tourism is one of the most in-demand tourist attractions by digital natives (Astor et. al., 2021). Both groups are not easily impressed (…) and will mean big changes for higher education, cities, employers, and for institutions and organizations of every kind (Mohler, 2010).

The digital travellers' characteristics will have a powerful impact on the tourism industry and market, and they will considerably affect the future of the sector and the developmental strategies of the tourist companies, which wish to successfully survive the market (*PeclersParis*, 2021). As a result, the techniques of traveller segmentation in transformative travel had already changed in 2020 and, in 2021, the accent is on the high level of personalisation in one part of them. However, a future trend is emerging – personalisation potentially may get in the way of a travellers' experience.

In the new generation of travellers, permanent interaction in the digital environment stimulates their expectations. The answer to an enquiry must be instantaneous, without delay, as they are accustomed to immediate information in the palm of their hand and have extremely high standards regarding the speed of the reply. Without the innovation of certain segments of business operations, or adjustment of the entire business model, tourist companies will not be able to maintain their competition in the global market in the future.

Digital natives differ from digital immigrants, i.e. they are individuals who have not grown with technology, but who learned how to use it throughout their adult age. It is equally important, research-wise, to follow them so that tourism companies can better adapt considering their needs.

3.2. ADAPTATION OF TOURISM OFFER

According to Skavronskaya, L. et. (2019) tourism is a network of key elements in the creation of a mental vision of the future destination (from destination vision to transformative experience). The network of elements in the creation of a mental vision of future travel shows that it is crucial to understand human needs in interaction with other factors, such as motivation and expectations. Following a trip, travellers retrospectively form memory of the experience from which they create a new future vision which again, circularly, affects their further motivation and actions. To achieve positive user-generated content, companies must create an extremely high-level offer and ensure fulfilment of needs of almost every guest to the maximum. Failing to do so might result in negative reviews and decreased number of guests.

The last two decades have brought many achievements for the tourism industry. Convincingly most significant are those relating to the contribution of tourism to sustainable development and reduction of poverty at the global level. There is an increasing need for a holistic approach in the industry, especially within the context of an individual's lifestyle, not only in travel, but also generally speaking. Tour operators develop the product of experiences on travel, directed to personal health and wellbeing of an individual as a tourist, according to new trends. Hereinafter, a review follows of new trends in tourism that create transformation, i.e. analysis of global, demographic and market trends. Digital natives look for personalised service by using intuitive search tools according to their travel tastes and styles. In this way, tour operators and agencies assume an advisory role and, to stay in the market, they have to present new and original offers for travel, focused on events and experiences. Physical sale points and offices are becoming less important, while smart mobile technologies facilitate keeping in close touch with travellers (Sučić Čevra, Gržinić, 2020). As a new generation of consumers, digital natives focus their attention on individual needs and the community to which they travel (Bajramović Hajdarović, 2021).

The use of mobile technologies is one of the key trends for the development of the tourism industry in the future. Technology users want to be able to book, change and check their travel data at any time on the Internet or by means of their mobile phones. The technological tools which will be devised in order to meet the demand are those that assist identity management, in other words, they make life easier, find the best price, widen the contact networks, communicate in real time, help to get by easier and ensure "an augmented reality" for the purposes of attracting arrivals to the destination (Table 4.3). The collaborative economy has brought us: the system of product offer in the form of services, the allocation market and the common lifestyle (Bremner, 2013). People with similar needs or interests share and exchange goods, such as time, space, skills and money. *Peer-to-peer* companies use three elements that can determine the success of the system: people, processes and technology (Suryono, Purwandari, Budi, 2019). The market flourished between the years 2008 and 2010, following a big financial crisis. Although it is relatively early to form final conclusions, there are implications that this system is not just a trend, but that it would, in the long term, lead to the prevention of an excessive use of resources and unnecessary consumption.

In the future, tourist companies must develop data distribution networks to create digital advantages for travellers. Tour operators and agencies should exchange the tourist service providers' identities for those of the partners and advisors who facilitate access to different travel options and create a possibility of information provision at any time.

Table 4.3

Technology influence on tourism demand

Technology development and Digital natives	**Demand trends**	**Recommendation for tourist service providers**
Identity management	The needs for the creation of one's own identity (websites and social networks).	To position oneself in the market as unique "tourist partners".
Making life easier	Constant access to Internet and 24-hour availability.	Offer *online* advisors, available 24 hours a day, with a web personal space for customers.
Finding the best price	Last-minute bookings, travel outside the high season and purchase of low budget tickets.	Provide competitive offers in real time.
Widening of contact networks	Social media play an extremely big role (changed the media, service, communication and advertising market areas).	Create links with social networks and enable Internet users to create contents on the companies' websites.
Real time communication	Messengers, forums and other information transfers like Flickr for photographs, Facebook for friends, LinkedIn for professional contacts, etc.	Create links with social networks and enable Internet users to create contents on the companies' websites, Impression of social contact and online experience.
Partnership with the community	Barcodes, QR codes, tags and similar offers.	Create partnerships for marked routes on trips.
Augmented reality	Smartphone applications.	Create partnerships and enable travellers to access information.

Source: preparation and conclusions by the author according to Amadeus (2021)

3.3. SYNERGY BETWEEN DIGITAL TRAVELLERS AND LOCAL POPULATION

Until recently, the number of travellers who wished to go through authentic experiences was in a minority, which conditioned the local hosts to "sell" their culture and environment. As the number of mindful travellers has been increasing, the hosts have been accepted in the travel experience and take part in the creation of a new transformative movement. Reisinger (2015) sees transformative tourism as a change of thinking and behaviour in travel and tourism through the creation of ideas and values together with the local hosts. Therewith, he confirms the current knowledge related to the importance of linking travellers and the local population in the realisation of those aims. Creation of a complementary relationship between the new generation of travellers and the local population leads to a greater understanding and respect. Transformative travel leads to long-term advantages for both the local population and travellers, as is proven by the Lyons and Wearing's (2008) and Palacios (2018) in a study case of transformation as a prerequisite for the creation of the synergy between travellers and the local population (Table 4.4).

Table 4.4

Tourism transformation in destinations

Transformation typology	**Level of partnership (travellers and local population)**
Transformations as a cultural exchange	Cultural routes (virtual/real), volunteer tourism.
Formation of a relationship	Reccomendations about destinations, entertainment, safety measures, local customs.
Personal improvement	Emotional and mental health, sustainability, preferred plans and experiences.

Source: authors' adapted according to Lyons, Wearing's (2008), Palacios (2018)

Digital natives will be obsessed by the virtual world but will also create impressions based on experiences in local communities.

Transformative travel enables individuals to enhance their emotional and mental health, re-evaluate their personal priorities, improve their physical health through active holidays, therapeutical travel, look for new passions, find solutions to their personal problems, distance themselves from bad relationships and regain control. New trends are created through the offer of virtual routes, volunteer tourism, internet kiosks, digital maps.

CONCLUSION

Today's digital travellers travel with a vision of their next travel, created in advance, on the grounds of which they make their decisions. Their motivators are no longer only a visit to the town, family, a business trip or a simple holiday, but they are deepening themselves, creating a delicate relationship between external and internal factors which affect the decision on travel. In this research, it has been proven that digital natives have encouraged changes in tourism offer. Future research of this problem area should be focused on the development of virtual travel by tourism stakeholders (tour operators, tourism offices, IT companies and others) and the relationship between the achievement of visitors' personal transformation by application of new technological strategies and business models.

Acknowledgement: This paper is a result of scientific project Tourism development and destination impacts supported by the Faculty of Economics and Tourism "Dr. Mijo Mirković", Juraj Dobrila University of Pula, Croatia.

References:

1. *Amadeus Dynamic Travel documents, "Future Traveller Tribes 2020", 02.08.2021, www.amadeus.com/portfolio/documents*
2. *Astor, Y. et al. (2021). "The Role of Technology and Innovation in Creative Tourism: The Digital Native Perspective". 2nd International Seminar of Science and Applied Technology (ISSAT 2021), DOI:10.2991/aer.k.211106.106*
3. *Bajramović Hajdarović, S. (2021). New motives of passengers and impacts of transformations in tourism, Graduate thesis, Juraj Dobrila University of Pula, Croatia.*
4. *Bremner, C. (2013). "Understanding the 21st Century Traveller", Euromonitor International, https://fullboard.info/wp-content/uploads/2013/12/Understanding-the-21st-Century-Traveller.pdf, 12.08.2021.*

5. *Coccosis, H., Tsartas, P., Gkrimpa, E.l. (2010). Special interest tourism: demand and supply of new tourism products, Kritiki, Athens (Greek).*
6. *Gelter, H. (2010). "Total experience management: a conceptual model for transformational experiences within tourism", The Nordic conference on experience: research, education and practice in media, conference proceedings, Sol-Britt Arnolds-Granlund; Peter Björk, Vaasa (eds.), Tritonia, p. 46-78.*
7. *Gržinić, J. (2021). "Generation Y travel expectations and challenges for travel agents", Interdisciplinary management research XVII, Balković, Dražen et al. (ed.), Međunarodna znanstvena konferencija, Sveučilište Josipa Jurja Strossmayera u Osijeku, Ekonomski fakultet u Osijeku i Pforzheim University, Business School, u suradnji s Hrvatskom akademijom znanosti i umjetnosti, str. 1018-1035, ISSN 1847-0408*
8. *Kamboj, R., Sharma, P. (2016). "Tourism for Tomorrow: Travel Trends across Generations: From Baby Boomers to Millennials", Amity Research Journal of Tourism, Aviation and Hospitality, 1(2): 70-83. https://amity.edu/arjtah/pdf/vol1-2/9.pdf*
9. *Kottler, J. (1998). Travel That can Change Your Life, John Wiley and Sons*
10. *Lean, G.L. (2009). "Transformative travel, Inspiring Sustainability", in Wellness and Tourism: Mind, Body, Spirit, Place, Robyn Bushell, Pauline J. Sheldon, (eds.), Cognizant: New York.*
11. *Lyons, K., Wearing, S. (2008). Journeys of Discovery in Volunteer Tourism: International Case Study Perspective, CABI publishing.*
12. *Mc Leod, S. (2007). Maslow's Hierarchy of Needs, craigbarlow.co.uk*
13. *Merriam, S., and Caffarella, R. (1999). Learning in Adulthood: A Comprehensive Guide. San Francisco: Jossey-Bass.*
14. *Mohler, A. (2010). Digital Natives and Digital Nomads – New Tribes of the Internet Age. https://digital.library.sbts.edu/bitstream/handle/10392/1230/2008-03-30.pdf*
15. *Palacios C. (2018). "Volunteer Tourism, Development and Education in a Postcolonial World: Conceiving Global Connections Beyond Aid", Journal of Sustainable Tourism, 18(7): 861-878, https://doi.org/10.1080/09669581003782739.*
16. *Pearce P.L., (2005). Tourist behaviour, Channel View Publications.*
17. *Peclers Paris, The leading agency in creative strategy, 19.08.2021. https://www.peclersparis.com/en/*
18. *Reisinger, Y. (2015). Transformational Tourism – Host Perspectives, CABI Publishing. 10.1079/9781780643922.0000*
19. *Richardson, J., Grose, J., Allum, P. (2016). "Changing undergraduate*

paramedic students' attitudes towards sustainability and climate change", Journal of Paramedic Practice, 8(3): 130-136. https://doi.org/10.12968/jpar.2016.8.3.130.

20. *Ross, G.F. (1994). "The Psychology of Tourism", Hospitality Press.*
21. *Ross, S. (2010). Transformative Travel: An Enjoyable Way to Foster Radical Change, ReVision, A Journal of Consciousness and Transformation, 32(1): 54-61, DOI:10.4298/REVN.32.1.54-62.*
22. *Ross, S., Hur, J., Hoffman, J. (2019). "Temple Stay as Transformative travel: An experience of the Buddhist Temple Stay Program in Korea", Journal of Tourism Insights, 9(1), 3. https://doi.org/10.9707/2328-0824.1090.*
23. *Saunders, R., Laing, J., Weiler, B. (2014). "Personal transformation through long-distance walking", in P. Pierce and S. Filep (eds.), Tourism Experience and Fulfilment: Insights from Positive Psychology, London: Routledge, p. 127-146.*
24. *Skift Megatrends; "Defining the Future of Travel" (2018), 10.08.2021., https://skift.com/wp-content/themes/skift/img/megatrends-2018/Skift-Megatrends-2018.pdf*
25. *Skavronskaya, L. et al. (2019). "The Psychology of Novelty in Memorable Tourism Experiences", Current Issues in Tourism, 23(907):1-16, DOI:10.1080/13683500.2019.1664422.*
26. *Sučić-Čevra, M., Gržinić, J. (2020). Global uncertainty and its effects to strategies of tour operators, Strategies, models and technologies of economic systems management in the context of international economic integration, Bezpartochnyi, Maksym; Riashchenko, Viktoriia; Linde, Nina (eds.), The Institute of Economics of the Latvian Academy of Sciences, Riga, Latvija.*
27. *Statista, 2014, The Statistical portal, www.statista.com*
28. *Suryono, R. R., Purwandari, B., Budi, I. (2019). "Peer to Peer (P2P) Lending Problems and Potential Solutions: A Systematic Literature Review", Procedia Computer Science, 161: 204–214., www.sciencedirect.com*
29. *Tomljenović, R. (2015). Transformative tourism: THEORETICAL AND METHODOLOGICAL REVIEW, An integrated approach for the study of transformative role of tourism in the 21st century, Institute for Tourism, Croatia, DOI:10.13140/RG.2.1.3986.8562.*
30. *Winkelhake, U. (2017). The digital transformation of the automotive industry, Catalysts, Roadmap, Practice, e-book, Springer.*
31. *Wolf, I.D., Ainsworth, G., Crowley, J. (2017). "Transformative travel as a sustainable market niche for protected areas: a new development, marketing and conservation model", Journal of Sustainable Tourism, 25(11): 1650-1673, https://doi.org/10.1080/09669582.2017.1302454*

Veslav Kuranovic
Lecturer
Aleksandr Polusin
Student
Department of Logistics and Transport Management
Faculty of Transport Engineering
Vilnius Gediminas Technical University
(Vilnius, Lithuania)

THE EVOLUTION OF SUPPLY AND VALUE CHAINS MANAGEMENT IN CHINESE LOGISTICS MARKET

Abstract
Prior to China's entry, foreign logistics participations were regulated in most logistics sectors. Chinese logistics industry had been divided into sub-sectors where logistics activities were strictly regulated. After entry to the WTO, China has committed to a deadline to open its logistics markets. The priority accorded to industry stunted services development – particularly in productivity terms – while the emphasis on physical investment constrained investment in human capital (Bosworth and Collins 2008).

Keywords: *value chains, logistics market, partnership, value, developed countries, labour.*

Introduction

In addition, China is expected to upgrade its technological capabilities by fostering a learning and research environment that encourages new ideas and lateral thinking and gradually making the pursuit of innovation more sensitive to market signals, with the government playing a more facilitating role (Schellekens, 2012a). Even if the United States remains a key player in world commodity markets, China has come to occupy a major position as well (Roache, 2012). Among the latter, metals and minerals might be more significantly affected by the slowdown in investment, even if continued residential construction demand, as well as demand for durable goods such as automobiles, limits some of that slowdown (Yu, 2011). In the absence of suitable institutions and policies, there is a risk that the pattern of specialization into commodities can result in negative side effects (Brahmbhatt & Canuto, 2010).

The driving forces of growth of logistics market in developed countries

These include the prospect of real exchange rate appreciation that may render the manufacturing sector uncompetitive, the risk of becoming trapped in low-value structures that limit the scope for vertical or horizontal links, and the possibility of heightened volatility due to commodity price fluctuations (Chandra, Lin, & Wang, 2012; IMF, 2011; De Cavalcanti, Mohaddes & Raissi, 2012). It is becoming increasingly evident that China has passed the Lewis turning point, where it is no longer possible to tap into a surplus pool of low-wage labor without raising wages (Lewis, 1954).

Capital-labor substitution

Thus, the fear is that China, being a vast country of multiple regions with varying endowments, is not only acquiring new comparative advantages, but also keeping its existing ones, whereby China would straddle the full span of technologies and labor intensities (Yusuf & Nabeshima, 2010). A further complication arises with respect to the collective ability of other countries to absorb the out-migration of manufacturing activities if it were to occur in full force. It may well be that China's specific development path provided the world with a unique and one-off opportunity to productively tap into vast pools of surplus labor (Chandra, Lin & Wang, 2012). The slow process of industrialization in Africa is used as an example by Chandra, Lin, and Wang (2012) and the literature is replete with country case studies on the question of whether China has crowded out domestic manufacturing industries through competitive pressure in home and international markets (Eichengreen, Rhee & Tong, 2004; Yusuf & Nabeshima, 2009; Arbach, 2011).

It may also lead to a healthy competition in policy frameworks among similarly endowed economies to ensure that business environments are conducive to and fully support private sector entrepreneurship and innovation (Schellekens, 2011; World Bank, 2011). They will be the ones that are able to sharpen their current comparative advantages and diversify sustainably into specialized niches of highend goods and services. Including the information flow, logistics includes a range of extensive activity which contains transformation and distribution from raw material source of goods to end market in which the goods are consumed (Rodrigue, 2012). According to the definition of Council of Supply Chain. From this aspect, logistics system is a topic related with organization of domestically movement and distribution of needful infrastructure and various flows (material, finance, informational, etc.) in a country (Navickas et al., 2011). While institutional infrastructure investments has currently remained not enough for load distribution, instead of this it is necessary that the investments should be made in a broader frame which includes logistics support activities (Rodrigue, 2012).

When the literature is analyzed, it is pointed out that a great majority of the studies analyzed China origin. Mody and Wang (1997) studied various determinants of economic growth using the data were collected from 23 industry sectors which are located in seven coastal regions of China for a period between 1985 and 1989. It was discovered in that study that development in transportation and telecommunication facilities was leading of the growth. Demurger (2001) researched relation between infrastructure investments and economic growth for 24 provinces in China. In this study which contains years between 1985 and 1998, it is found that investments on transportation and telecommunication have positive significant impact on economic growth. Chu (2010) studied relation between logistics and economic growth in 30 provinces of China for a period between 1998 and 2007.

However, the contribution of logistic investments for growth is higher for interior undeveloped provinces in comparison to coastal provinces. Wang (2010) analyzed the effect of logistics activities on regional economic growth for Anhui province in China. Cheng et al. (2010) investigated the effect of logistics sector on economic growth for Henan region in China in a period between 1978 and 2008, and they found that logistics sector has a significant role on economic growth. In Yuan and Kuang's (2010) study, the effect of developments in logistics sector on economic growth was studied for central, east, and west regions of China. Hu et al. (2012) analyzed the relation between logistics infrastructure investments and regional economic growth for the central China region. Banerjee et al. (2012)

studied the access of transportation network's impact on economic growth for various regions of China in a period between 1995 and 2010.

Value Stream solutions should focus on three areas

A value chain is comprised of the series of events surrounding the development, production, and delivery of a good or service desired by targeted consumers (EFFP, 2004; Dunne, 2001). This is achieved by ensuring that goods gain consumer-recognized value as they move through each step of the chain. The need to react more effectively to consumer demands than traditional approaches allow has come from the enormous changes that have occurred in the international trade of agricultural and food products, consumer tastes, and advances in production, transport and other supply chain technologies (Felfel, 2007). These changes have led to market fragmentation and a reduction in the competitiveness of many commodity-oriented organizations. They have also led to competitiveness increasingly being a function of business, rather than industry-related capabilities (Bonney et al, 2007; Dunne, 2001; Newton, 2000). As the ability to adapt stems largely from the existence of strategic relationships between complementary teams and businesses (Cohen & Levinthal, 1990), more effectively managing the value chain than traditional management approaches allow is becoming widely accepted as a strategic response businesses can use to increase their competitiveness (Bonney et al, 2007; Gooch, 2005; Dunne, 2001). Falling into the categories of "know why" and "know how", the key requirements for such a strategic coalition include shared vision and strategy, mutual respect, leadership, compatible culture, collaboration, commitment, win-win orientation, and mindsets suited to formalizing a business structure oriented toward maintaining strong relationships and creating value for consumers (Gooch, 2005; Min et al., 2005).

Particularly as changing individuals' behaviour and attitudes towards business practices, company policies, corporate values, production processes and relationships between partners it is a difficult and challenging process (Whipple & Frankel, 2000). Later sections detail factors that have been found to impede attempts to encourage individuals' to adopt the attitudes and behaviours necessary for embracing VCM approaches. The traditional definition of supply chain management is a situation where businesses focus on increasing the efficiency with which they utilise their current resources (Spekman et al, 1998; Tummala et al., 2006; Kannegiesser et al. 2008).

It is a process that may require the investment of considerable resources. It may also invoke significant risks if resistance to change is not managed correctly (Stuart & McCutcheon, 2000). Tummala et al. (2006) say that the risks posed by dissenting individuals who do not believe in the need for collaborative relationships can be most effectively handled by proactively addressing the concerns of each areas of business, those that will be most directly affected by any change in management approach. Otherwise, the partners will be unable to develop innovative solutions to problems that may have prevented them from exploiting market opportunities. Cohen and Levinthal (1990) showed that organizations must have considerable absorption capacity in order to recognize the value of internal and external information, assimilate it into meaningful packages, and apply it to commercial ends. Which provide businesses with the opportunity to simultaneously decrease costs and increase revenue (Tummala et al., 2006). A successful value chain will most likely have an ICT system that provides both transactional and analytical capabilities. Strategically managing material flows to reduce inventories, receive market signals sooner, and enables the cause of quality issues to be determined then addressed quickly and accurately. Performance measures should be objective-based, specific, measurable, and evaluated at regular intervals. They also need to be enforced (Tummala et al., 2006). Having in depth knowledge of consumer attitudes and drivers of behaviour also allows businesses to have greater influence over retailers' decisions, thereby balancing power in the chain (Marston, 2008). It also Consumer research can be performed within the chain, if the appropriate resources are available, or by an external partner. In fact, many industry policies and associated legislation have the potentially to severely limit the competitiveness of individual businesses (Mason, 2009; McDermott et al, 2008; Harris & Rae, 2004; Scrimgeour & Sheppard, 1998).

An unintended consequence of reactive versus proactive policies and regulations is the extent to which they motivate businesses to strengthen their competitiveness through embracing nontraditional means to adapt to a changing commercial environment (McDermott et al, 2008; Dunne, 2001). Outcomes of policy and legislation that have the greatest impact on behavior and competitiveness are those that influence the shaping of industry structure. A number of structural factors can severely impact the formation and management of closely-aligned value chains and, therefore, the competitiveness of agri-food businesses situated along the entire value chain (Mason, 2009; McDermott et al, 2008; Harris & Rae, 2004; Scrimgeour & Sheppard, 1998). Industry structure relates to physical as well as regulatory (legislated) characteristics that exist within the environment in which businesses conduct commercial operations.

As a general rule, the fewer organizations that directly influence the commercial decisions of businesses' operations, the more conducive the environment will be for enabling and motivating marketfocused innovation (McDermott et al, 2008; Tamilia & Charlebois, 2007; Harris & Rae, 2004; Scrimgeour & Sheppard, 1998). A commonly cited impact of regulated marketing is the extent to which it creates an industry structure that limits the motivation of the wider industry, and inhibits the ability of more progressive stakeholders, to capture greater value from the end market (McDermott et al, 2008; Harris & Rae, 2004; Scrimgeour & Sheppard, 1998). Marketing boards have been criticized for hampering product and process innovation (Tamilia & Charlebois, 2007; Scrimgeour & Sheppard, 1998). They have even been termed "agriculture's albatross" (Kerr, 1996) through their role in limiting competitiveness by encouraging the production of "largely unimaginative, undifferentiated products, with a small number of high-ends goods competing with small amounts of high-end foods allowed to be imported at relatively steep price" (Hart, 2005, p. 7). However, the legislation by which many market boards operate actually inhibits their being operated as a commercial entity. It can also restrict the ability and motivation of the commercial stakeholders they represent to innovate in relation to market demands (Scrimgeour & Sheppard, 1998). It can also discourage, or even prevent, the same sectors from working closely with the overall chain to improve their competitiveness through continually improving their effectiveness and efficiency (Curry, 2002; Kerr, 1996). However, more often than not, marketing boards have historically played a limited role in the development of agriculture and agri-food competitiveness (Tamilia & Charlebois, 2007; Hart, 2005; Scrimgeour & Sheppard, 1998).

For instance, it has been stated that the structure of the United Kingdom's grain industry enables commercial stakeholders to innovate at least five times faster than the Canadian industry (Beard, 2008). Non-harmonized provincial policies and standards can have an equally detrimental effect on businesses and industry competitiveness (Tamilia & Charlebois, 2007). The ability to successfully develop and manage closely-aligned value chains is the combined effect that policy, regulation and industry structure has on industry culture (McDermott et al, 2008; Tamilia & Charlebois, 2007; EFFP, 2004; Curry, 2002). The characteristics of an unfavorable culture are mistrust, lack of mutual respect, commodity-orientation, more focused on reacting to competitors' behaviour than proactively adapting to consumers' demands, discounting the possibility of win-win outcomes while striving to remain staunchly independent, lack or absence of communications, lacking or failure to fully utilize information technology, and no or little strategic planning. Mindsets are networks of ideas and assumptions based on prior experience and observations (Moon, 2004), and directly influence the willingness of individuals to entertain new ideas and concepts (Senge, Dow, Neath, 2006).

Failure to address any these factors will lead to individuals being risk averse and not being fully committed to the value chain (Marston, 2008; Bonney et al, 2007). Having the correct incentives in place is a crucial factor in determining the success of any value chain initiative (Beard, 2008; Marston, 2008). Further, if individuals are not able to be rewarded at a level that directly correlates to the value that they contribute to the chain from the consumers' perspective, it is likely that the chain's most valuable participants will choose to do business elsewhere (Marston, 2008; Stuart & McCutcheon, 2000). A highly-functioning value chain is able to generate profits based on developing, producing and communicating consumers-recognized value (Beard, 2008; Marston, 2008). Focusing on productivity, particularly at the farm level, without giving due attention to the overall value chain will negatively impact competitiveness. However, this is exactly the approach that much of agriculture has historically followed (McDermott et al, 2008; Beard, 2008; Hart, 2005; EFFP, 2004; Curry, 2002). This is particularly so as many current agricultural and agri-food industry policies, legislation and structures are not conducive to encouraging managers and businesses to more effectively adapt to rapidly changing business environments (Mason, 2009; McDermott et al, 2008; Tamilia & Charlebois, 2007; Harris & Rae, 2004; Hart, 2005; Curry, 2002). Since logistics advanced from 1950s, there were numerous researches focused on this area in different applications. Due to the trend of nationalisation and globalisation in recent decades, the importance of logistics management has been growing in various areas.

Conclusions

The West's View of China Given China's reliance on exports and particularly exports to the West, the way Chinese firms and their products are perceived by the West determines to a great extent how these firms can use their being Chinese as part of their international Reputation. Therefore, the COO will also affect the ability of firms to build an international reputation. In the case of China, one of the biggest challenges for Chinese firms is to overcome their low cost/quality image, which often is attributed to products originating from developing nations. But what is more of an issue from a reputation management perspective is that all of this controversy around China could create a negative predisposition among Western consumers, making it so much harder for Chinese firms to build solid international reputations.

References:

1. *Arbache, Jorge. 2011. "The Siren's Song: A Study of the Economic Relationship between Brazil and China." Working Paper, BNDES and University of Brasilia.*
2. *Bonney, L., Clark, R., Collins, R., Fearne, A. (2007). From Serendipity to Sustainable Competitive Advantage: Insights from Houston's Farm and Their Journey of Co-Innovation; Supply Chain Management: An International Journal; pp 395-399.*
3. *Bosworth, Barry, and Susan M. Collins. 2008. "Accounting for*

Growth: Comparing China and India." Journal of Economic Perspectives 22 (1) Winter.

4. *Chang, Y.H. (1998) Logistical Management. Hwa-Tai Bookstore Ltd., Taiwan.*
5. *Chandra, Vandana, Justin Yifu Lin, and Yan Wang. 2012. "Leading Dragons Phenomenon: New Opportunities for Catch-Up in Low-Income Countries." World Bank Policy Research Working Paper 6000, Washington, DC.*
6. *Cheng, G.P., Liu, W., Xie, C.W., Zhou, J. (2010), The Contribution of Logistics Industry to Economic Growth Based on Logis Model. International Conference of Information Science and Management Engineering.*
7. *Chu, Z. (2010), Logistics and economic growth: a panel data approach. The Annals of Regional Science, 49, 87-102. CSMP. (2013), Bylaws of CSCMP. p2. Available from: http://www.cscmp.org/sites/default/files/ user_uploads/footer/downloads/bylaws/ cscmp-bylaws-i.pdf.*
8. *Cohen, W. & Levinthal, D. (1990) Absorptive capacity: a new perspective on learning and innovation, Administrative Science Quarterly, no. 35: 128-52*
9. *Collins, R., Dunne, T. & O'Keeffe, M. (2002), The locus of value: a hallmark of chains that learn, Supply Chain Management, 7, 318-21.*
10. *Curry, D. (2002). Farming and Food, A Sustainable Future; Report of the Policy Commission on the Future of Farming and Food; Department for Environment Food and Rural Affairs (DEFRA); January 2002*
11. *De Cavalcanti, Tiago, Kamiar Mohaddes, and Mehdi Raissi. 2012. "Commodity Price Volatility and the Sources of Growth." IMF Working Paper 12/12, Washington, DC*
12. *Demurger, S. (2001), Infrastructure development and economic growth: an explanation for regional disparities in China? Journal of Comparative Economics, 29(1), 95-117.*
13. *Dunne, A. (2001). Supply Chain Management: Fad, Panacea or Opportunity? Downloaded from the website of the Australian Agribusiness Association on November 14th, 2004 http://www. agribusiness.asn.au/Publications_perspectives/Pub_pers_2001/dunne.h tm*
14. *Felfel, A. (2007). Impact of Developed Countries' Sanitary and Phytosanitary Measures on Developing Countries: Case Studies of Egyptian Potatoes and Groundnuts. Ph.D. thesis. The Department of Food, Agricultural and Resource Economics, the University of Guelph, Guelph, Ontario, Canada, 2007.*
15. *Gooch, M. (2005). Drivers, Benefits and Critical Success Factors of*

Developing Closely-Aligned Agri-Food Value Chains. George Morris Centre, Guelph, Ontario, Canada. . Downloaded from the George Morris Centre website on November 14, 2008: http://www.georgemorris.org/GMC/Publications/DomesticandInternationalMarketing.aspx#

16. *Handfield, R.B. and Nichols, E.L. (1999), Introduction to Supply Chain Management, PrenticeHall, Upper Saddle River, NJ.*
17. *Harris, D., Rae, A. (2004). Agricultural Policy Reform and Industry Adjustment in Australia and New Zealand; Paper presented to the International Agricultural Trade Research Consortium Symposium 'Adjusting to Domestic and International Policy Reform in Industrial Countries'; Philadelphia; June 6-7, 2004*
18. *Hart, M. (2005), "Great wine, better cheese: how Canada can escape the trap of agricultural supply management", No. 90, CD Howe, Backgrounder Toronto, April, available at: www.cdhowe.org*
19. *Hu, K., Gan, X.Q., Gao, K. (2012), Co-integration Model of Logistics Infrastructure Investment and Regional Economic Growth in Central China. Physics Procedia 33, 1036-1041.*
20. *Kannegiesser, M., Matthias, L.E., & Alexander, M. (2008). Performance Management in the Value Chain. In Ijioui, R., Emmerich, H., & Ceyp, M. (Eds.), Strategies and Tactics in Supply Chain Event Management, pp. 119–134. New York: Springer Berlin Heidelberg. MD, pp. 1-15*
21. *Kerr, R. (1996). Agriculture's Albatross: Producer Boards in the 1990s; New Zealand Strategic Management Society Leaders Breakfast; New Zealand Business Roundtable, 5 February 1996*
22. *Lewis, Arthur W. 1954. "Economic Development with Unlimited Supplies of Labour." The Manchester School 22 (2) May.*
23. *Marston, N. (2008). KG Fruits: The Benefits of Collaborating as a 'New Generation' Producer Cooperative; Value Chain Management (DVD); George Morris Centre;*
24. *Mason, G. (2009). Going For Gold: Prairie Agriculture At The Crossroads, Time For A New Policy; Canada West Foundation; http://www.cwf.ca/V2/files/GFG8_Mason.pdf*
25. *McDermott, A., Saunders, C., Zellman, E., Hope, T., Fisher, A. (2008). New Zealand Agribusiness: Structure, Conduct and Performance; Agribusiness Research and Education Network*
26. *Min, S., Roath, A., Daugherty, P., Genchev, S., Chen, H. and Arndt, A. (2005), Supply Chain Collaboration: What's Happing? International Journal of Logistics Management, Vol. 16 No. 2, PP. 237-256.*
27. *Mody, A., Wang, F.Y. (1997), Explaining industrial growth in coastal China: economic reforms and what else. World Bank Economic*

Review, 11(2), 293-325.

28. *Moon, J.A. (2004). A Handbook of Experiential and Reflective Learning: Theory and Practice; Abingdon, Oxon; RoutledgePalmer.*
29. *Navickas, V., Sujeta, L., Vojtovich, S. (2011), Logistics systems as a factor of country's competitiveness. Economics and Management, 16, 231-237.*
30. *Newton, D. (2000). Supply Chain Learning for Australian Agribusiness: Chain Reversal and Shared Learning for Global Competitiveness. Agriculture Fisheries and Forestry Australia, Canberra.*
31. *Porter, M. (1985) Competitive Advantage. Creating and Sustaining Superior Performance. New York: Free Press.*
32. *Roache, Shaun. 2012. "China's Impact on World Commodity Markets." IMF Working Paper 12/115, Washington, DC. The Economic Premise note series is intended to summarize good practices and key policy findings on topics related to economic policy. They are produced by the Poverty Reduction and Economic Management (PREM) Network Vice-Presidency of the World Bank. The views expressed here are those of the authors and do not necessarily reflect those of the World Bank. Available at: www.worldbank.org/economicpremise*
33. *Rodrigue, J.P. (2012), The Benefits of Logistics Investments: opportunities for Latin America and the Caribbean. Inter-American Development*
34. *Scrimgeour, F., Sheppard, R. (1998). An Economic Analysis of the Deregulation of Selected Israeli, South African, and South American Producer Boards; MAF Policy Information Paper Number 20; August 1998.*
35. *Senge, P., Dow, M., Neath, G. (2006). Learning Together: New Partnerships for New Times; Corporate Governance; Vol. 6 No.4 pp. 420-430.*
36. *Spekman, R.E., Kamauff Jr, J., Myhr, N. (1998), An empirical investigation into supply chain management: a perspective on partnerships, Supply chain management, Vol.3 No.2, 53-67.*
37. *Stuart, F.I. and McCutcheon, D.M. (2000), The manager's guide to supply chain management, Business Horizons, Vol. 43 No. 2, pp. 43-51.*
38. *Tamilia, R.D., Charlebois, S. (2007). The Importance of Marketing Boards in Canada: A Twenty-First Century Perspective; British Food Journal; Vol. 109 No.2, pp. 119-144*
39. *Thomas, D.J. and Griffin, P.M. (1996) Invited review coordinated supply chain management, European Journal of Operational Research, Vol. 94, 1-15.*

40. *Tummala, V.M., Phillips, C. And Johnson, M. (2006), Assessing Supply Chain Management Success Factors, Supply Chain Management, Vol.11 No. 2, pp. 179-192.*
41. *Wang Y. & Sun S. & Song Y. (2010): Chinese Luxury Consumers: Motivation, Attitude and Behavior. Journal of Promotion Management, 17:345–359, 2011.*
42. *Wang Z (2013) Development of the logistics industry in the period of major changes and opportunities. Modern Logistics Post, 2013-11-22*
43. *Whipple, J. and Frankel, R. (2000), "Strategic alliance success factors", Journal of Supply Chain Management, Vol. 36 No. 3, pp. 21-8.*
44. *Yu, Yongzhen. 2011. "Identifying the Linkages Between Major Mining Commodity Prices and China's Economic Growth— Implications for Latin America." IMF Working Paper 11/86, Washington, DC.*
45. *Yusuf, Shahid, and Kaoru Nabeshima. 2010. Changing the Industrial Geography in Asia: The Impact of China and India. Washington, DC: World Bank.*
46. *Yusuf, Shahid, and Kaoru Nabeshima. 2009. Tiger Economies Under Threat: A Comparative Analysis of Malaysia's Industrial Prospects and Policy Options. Washington, DC: World Bank.*

Chapter 5

ENTREPRENEURSHIP DEVELOPMENT IN THE CONTEXT OF GLOBAL TRANSFORMATIONS

Maksym Bezpartochnyi
Doctor of Economics, Professor
Department of Economics, Marketing and International Economic Relations
National Aerospace University named after N. Zhukovsky "Kharkiv Aviation Institute"
(Kharkiv, Ukraine)
ORCID: https://orcid.org/0000-0003-3765-7594

ECONOMIC RESULTS OF AGRICULTURAL ENTERPRISES OF UKRAINE IN THE CONTEXT OF FOOD SECURITY

Abstract
Ensuring food security in the country and the world depends on the economic results of agricultural enterprises. The study analyzed the volumes of activity, costs and profits of agricultural enterprises of Ukraine. Factors influencing the formation of positive economic results of agricultural enterprises of Ukraine are determined. It was established that during the research period, agricultural enterprises of Ukraine had positive dynamics of economic activity, which ensured food security.

Keywords: *production volume, production costs, turnover, profit, food security.*

Introduction

Agricultural enterprises in Ukraine exert a direct influence on ensuring food security not only in the country, but also in the world. Formation of the resource potential of agricultural enterprises is carried out under the influence of external and internal environment. Due to the effective formation and use of resource potential, agricultural enterprises carry out their own economic activities, satisfying the needs of various consumers in agricultural products. The resource potential of agricultural enterprises is formed at the expense of their own sources and attracts from outside. The vast majority of resources are our own – land, agricultural machinery, buildings and structures, seed material and animals, personnel, production technologies, etc. Consumers of products of agricultural enterprises are the population, industrial enterprises and various intermediaries. Economic indicators evidence the results of economic activity of agricultural enterprises. The economic results of agricultural enterprises depend on the cultivation of grain crops and the livestock sector. The plant complex of agricultural enterprises of Ukraine influenced by the factor of seasonality, quality of seed material, technologies of soil cultivation and crop cultivation. A significant part of the agricultural products of the crop production complex of agricultural enterprises has export potential and is sold abroad. The livestock complex of agricultural enterprises of Ukraine is more focused on raising animals that bring more profit, and the volume of sales is focused on the domestic market and export. In general, ensuring a stable volume of activity of agricultural enterprises of Ukraine and obtaining positive economic results directly affects the formation of the country's food security – the saturation of the domestic market with agricultural products and raw materials, as well as world food security – the development of the export potential of the agricultural market. The purpose of the study is to assess the economic results of agricultural enterprises of Ukraine and the impact on food security. The research hypothesis is the statement that the positive dynamics of the economic results of agricultural enterprises ensures food security.

Materials and Methods

The research used data from the State Statistics Service of Ukraine on the economic results of agricultural enterprises. The research period covers 5 years (2016-2020). The research used methods of economic analysis.

Results and Discussion

The functioning of agricultural enterprises in Ukraine is characterized by the variability of the external environment and the influence of a significant number of internal factors. During the period 2016-2020, the number of agricultural enterprises in Ukraine decreased (Figure 5.1). The negative dynamics of the decrease in number of agricultural enterprises has been observed since 2018. In 2020 compared to 2018, number of agricultural enterprises in Ukraine decreased by 3,225 farms or by 4.2%; compared to 2019 – by 2082 farms or by 2.8%, respectively. This trend is due to the transformation of the organizational-legal forms of ownership of agricultural enterprises (Bezpartochnyi et al., 2019), the unification of small agrarian formations and the creation of large agrarian holdings.

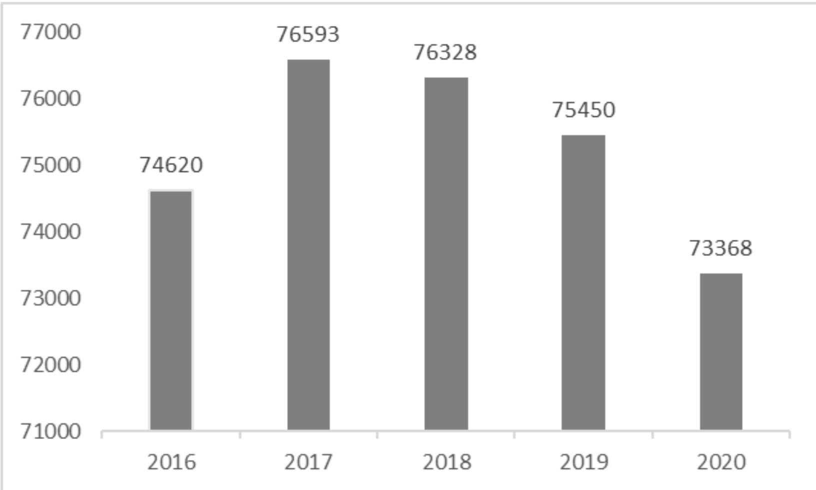

Figure 5.1 Number of agricultural enterprises in Ukraine, 2016-2020

Source: created by author based on State Statistics Service of Ukraine

Production value of agricultural enterprises in Ukraine increased by 43% during the studied period (Figure 5.2). The increase in production of agricultural products is due to favorable conditions for agricultural production, effective formation and use of resource potential, and the introduction of modern agricultural production technologies (Bezpartochna & Britchenko, (2020).

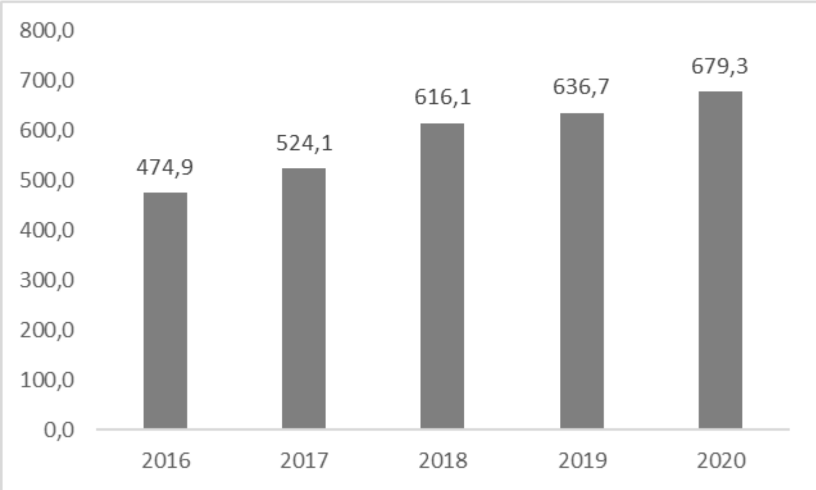

Figure 5.2 Production value of agricultural enterprises in Ukraine, 2016-2020, billions UAH

Source: created by author based on State Statistics Service of Ukraine

Costs affect the efficiency of production of agricultural enterprises in Ukraine (Figure 5.3). The assessment of the dynamics of agricultural production costs shows that agricultural enterprises in Ukraine effectively form and optimize the relevant cost elements.

In 2020, the largest specific weight in the structure of production costs of agricultural enterprises in Ukraine is material costs and cost of services used in production – 75.7% (Figure 5.4).

Turnover of agricultural enterprises in Ukraine increased by 50.5% during the studied period (Figure 5.5). The increase in turnover of agricultural products is due to favorable conditions for the development of exports and the external environment of agricultural products markets in the world (Bezpartochna et al., 2020). It should be noted that the price factor has a direct impact on turnover of agricultural enterprises in Ukraine. This is evidenced by the production value (Figure 5.2), which exceeds turnover. That is, there are changes in pricing in the domestic market of agricultural products, in particular, state regulation of prices and market regulation according to the supply and demand.

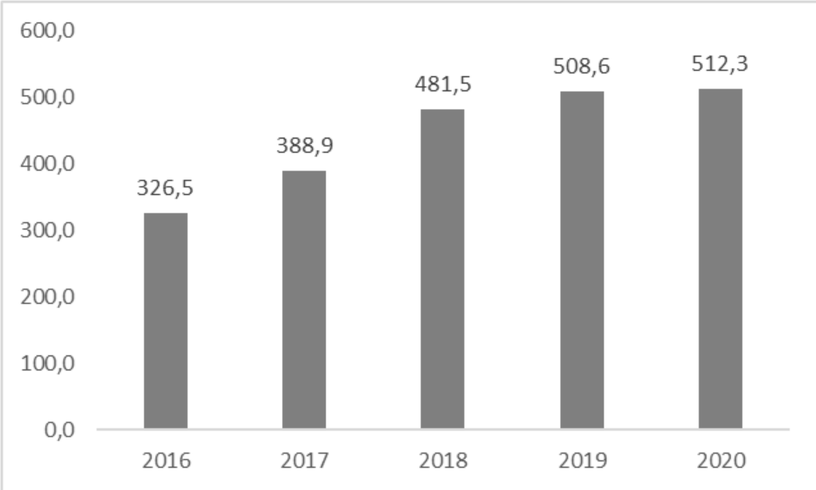

Figure 5.3 Cost of production of agricultural enterprises in Ukraine, 2016-2020, billions UAH

Source: created by author based on State Statistics Service of Ukraine

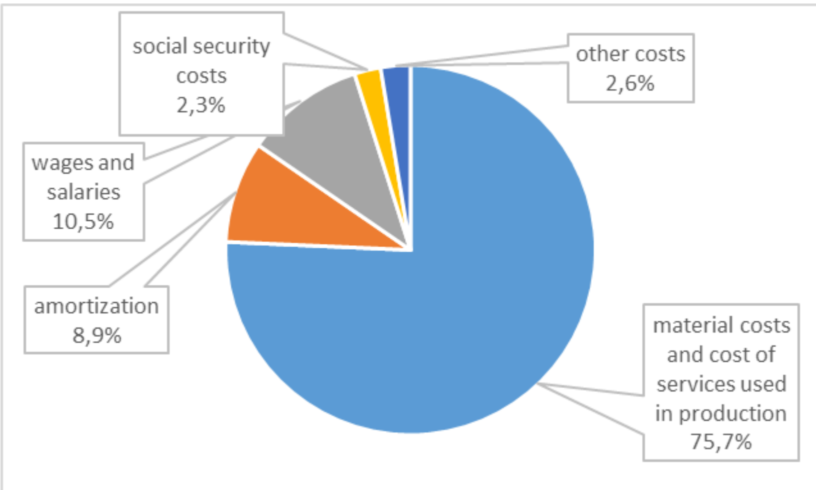

Figure 5.4 Structure of production costs of agricultural enterprises in Ukraine, 2020, %

Source: created by author based on State Statistics Service of Ukraine

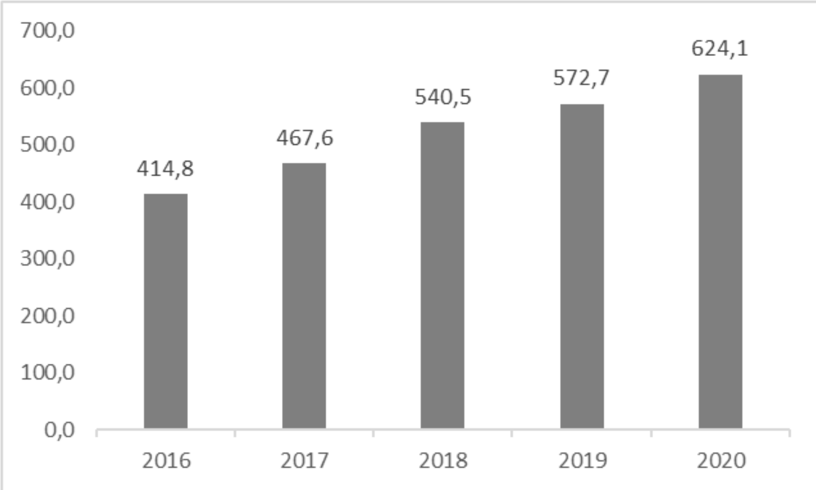

Figure 5.5 Turnover of agricultural enterprises in Ukraine, 2016-2020, billions UAH

Source: created by author based on State Statistics Service of Ukraine

On the foreign market of agricultural products, prices are always higher, however, agricultural enterprises, due to fluctuations in the exchange rate in Ukraine, may underachieve a profit (Bezpartochnyi et al., 2021).

Gross operating surplus of agricultural enterprises in Ukraine depends on operating income and expenses (Figure 5.6). During the period 2016-2019, it decreased (by 7.4%). In 2020, due to the increase in prices for agricultural products in the country and in the world, gross operating surplus of agricultural enterprises in Ukraine increased by 39% compared to 2019.

Profit before taxation of agricultural enterprises in Ukraine depends on other income and expenses (Figure 5.7). During the studied period, the indicator fluctuated, which was affected by such indicators as costs for renting land, payments for leasing agricultural equipment and interest payments to commercial banks on loans issued, etc. The highest level of profit before taxation of agricultural enterprises in Ukraine was achieved in 2019, and the lowest in 2017.

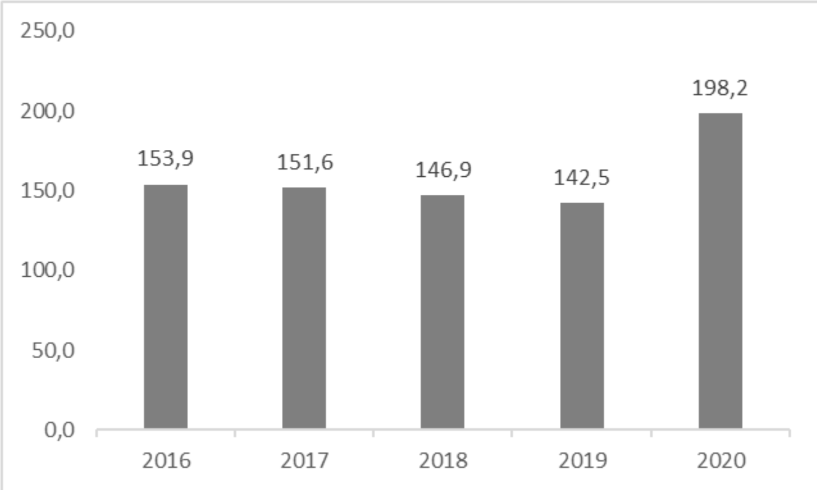

Figure 5.6 Gross operating surplus of agricultural enterprises in Ukraine, 2016-2020, billions UAH

Source: created by author based on State Statistics Service of Ukraine

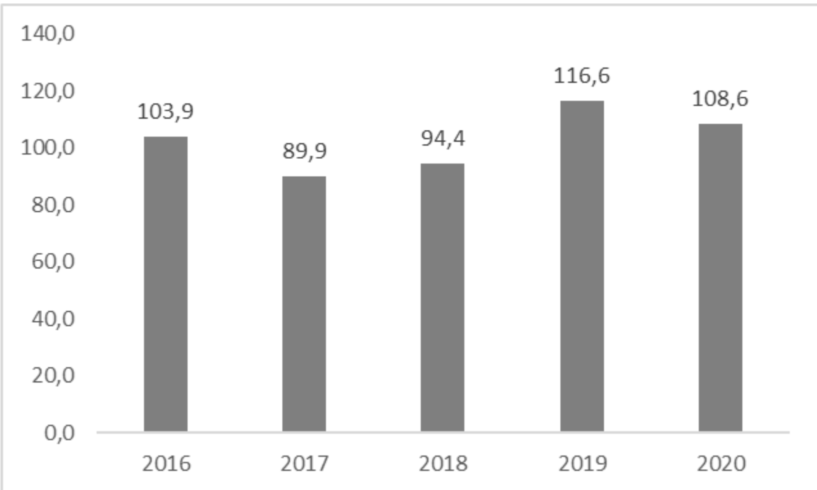

Figure 5.7 Profit before taxation of agricultural enterprises in Ukraine, 2016-2020, billions UAH

Source: created by author based on State Statistics Service of Ukraine

The taxation system of agricultural enterprises in Ukraine facilitates the conduct of economic activity, as entities can choose different taxation systems, depending on the volume of activity and the number of people employees.

Conclusions

The conducted studies of economic results of agricultural enterprises of Ukraine in the context of food security allow us to draw the following conclusions:

1) Despite the reduction in number of agricultural enterprises in Ukraine, the production volume and turnover has growth dynamics.
2) Agricultural enterprises in Ukraine effectively form their own resource potential and production costs.
3) Favorable conjuncture in the domestic and foreign markets of agricultural products contribute to the growth of turnover and the development of export potential.
4) The pricing system of agricultural products is influenced by state regulation and the conjuncture of foreign markets.
5) The formation of final economic results of agricultural enterprises in Ukraine is influenced by operating income and costs, other income and costs. Agricultural enterprises in Ukraine work profitably and can freely choose the taxation system.

In general, the positive dynamics of economic results of agricultural enterprises in Ukraine have a positive effect on food security both in the country – the saturation of the domestic market with agricultural products, and the external market – the development of export potential.

References:

1. *Allen, P. G. (1994). Economic forecasting in agriculture. International Journal of Forecasting, 10(1), 81-135.*
2. *Barrett, C. B. (2010). Measuring food insecurity. Science, 327(5967), 825-828. https://doi.org/10.1126/science.1182768*
3. *Bessler, D. A., Doefman, J. H., Holt, M. T., & LaFrance, J. T. (2010). Econometric developments in agricultural and resource economics: the first 100 years. American Journal of Agricultural Economics, 92(2), 571-589.*

4. *Bezpartochnyi, M., Britchenko, I., Bezpartochna, O., & Mikhel, V. (2019) Economic diagnostics as a tool for transformation of organizational-legal forms of economic activity in the field of agriculture. Management mechanisms and development strategies of economic entities in conditions of institutional transformations of the global environment: collective monograph, edited by M. Bezpartochnyi. ISMA University. Riga, «Landmark» SIA, Vol. 1, pp. 259-269.*
5. *Bezpartochna, O., & Britchenko, I. (2019) Study of etymology of concept "the economic diagnostics of agricultural enterprises". Strategies for sustainable socio-economic development and mechanisms their implementation in the global dimension: collective monograph, edited by M. Bezpartochnyi, in 3 Vol. Sofia. VUZF Publishing House "St. Grigorii Bogoslov", Vol. 1, pp. 16-32.*
6. *Bezpartochna, O., & Britchenko, I. (2020) Diagnostics the economic efficiency of agricultural enterprises. New trends in the economic systems management in the context of modern global challenges: collective monograph, scientific edited by M. Bezpartochnyi. Sofia. VUZF Publishing House "St. Grigorii Bogoslov", pp. 267-277.*
7. *Bezpartochna, O., Britchenko, I., & Bezpartochnyi, M. (2020). Foreign trade agricultural products of Ukraine during covid-19 pandemic. Сборник с доклади, представени на кръгла маса на тема „Външна търговия и пандемия“, 2 декември 2020 г., Висшето училище по застраховане и финанси и Лабораторията за научно-приложни изследвания, София, 155-164.*
8. *Bezpartochna, O. (2021). Forecasting the state of agricultural enterprises based on the results of economic diagnostics. VUZF review, 6(1), 3-11.*
9. *Bezpartochnyi, M., Britchenko, I., & Bezpartochna, O. (2021). Ensuring the financial safety of Ukrainian agricultural enterprises in the context of export products and the impact on macroeconomic indicators. VUZF review, 6(3), 186-195.*
10. *Bureau, J.-C., & Swinnen, J. F. M. (2018). EU policies and global food security. Global Food Security, 16, 106-115. https://doi.org/10.2139/ssrn.2961695*
11. *Martin, W., Perkin, K. (2016). Food safety and food security: Mapping relationships. Journal of Agriculture, Food Systems, and Community Development, 6(2), 13-24. https://doi.org/10.5304/jafscd.2016.062.001*
12. *Mitchell, N. H. (2011). Mathematical applications in agriculture. Boston: Cengage Learning, 297 p.*
13. *Norton, G. W., Alwang, J., & Masters, W. A. (2014). Economics of agricultural development: world food systems and resource use. New York: Routledge, 478 p.*

14. *Norwood, B., & Lusk, J. (2007). Agricultural marketing and price analysis. London: Pearson, 464 p.*
15. *State Statistics Service of Ukraine. (2021). Agriculture in Ukraine. Retrieved June 07, 2022, from http://www.ukrstat.gov.ua*
16. *Thornley, J. H. M., & France, J. (2007). Mathematical models in agriculture: quantitative methods for the plant, animal and ecological sciences. Trowbridge: CABI, 928 p.*

Rolandas Drejeris
PhD in Management, Professor
Vytautas Magnus University
(Kaunas, Lithuania)
ORCID: https://orcid.org/0000-0002-8104-363X

REALIZATION OF THE LEADERS' ENTREPRENEURSHIPS IN THE TECHNICAL SERVICE MARKET

1. Introduction

There are so many entrepreneurial people in the world and they embody this trait in their own way. Many young entrepreneur leaders in the field of technical and technological sciences complete their studies in high educational institutions and look for possibilities to start their own personal commercial activity. In some cases, can be even accepted Yitshaki and Kropp (2016) arguments, that passion rather than money is primary desire for some of them. Recently competition in technical service market is really high enough. The methods of starting a business presented are also quite numerous, but the field of technical services is disadvantaged in this respect. So, how enterprising leader can penetrate the today's enough complete technical service market? This question is relevant not only for every business initiator of such activity, but sometimes even for innovative business leaders' professionals in any competitive market country. Technical service refers as preparing relevant technical instructions, technical cooperation and technical trainings for the engineering design, any equipment supervision, repairing and installation, also debugging, acceptance, test, running and maintenance.

However, how need to start, how to choose better strategy, which would be the most suitable for this specific activity of technical service, what the first actions need to execute? These questions are not fully answered in detail yet, and such circumstances are regarded as a **problem** of the paper. Solution of this problem would help not only for entrepreneur leaders, but also for many of technical service business companies to behave more boldly in the competitive struggle and achieve possible better results. Scientific and special literature contains much information about the new product penetration strategies, but most of the research is purely theoretical, is not linked to practical possibilities, these issues are discussed in a fragmentary, information is usually scattered, unjustified and is not explained content and consistency of the procedures required to perform, even though such information is relevant and necessary not only for business incumbents, but also for pioneers of the technical service business. Only Drejeris, Drejerienė (2017) presented the research about market penetration, but their study is aimed exclusively at the penetration of maintenance services, and the model they provide cannot be applied to all technical services with a much larger range listed. Knowledge about mature market penetration is especially relevant for smaller and intending to expand businesses, but also even more for the leaders and initiators of their own business. **The aim** of the research is to propose procedural model of the market penetration actions, customized for technical service providers.

In order to create the model a lot of scientific information on issues of market penetration is analysed with a purpose to find solution of penetration. Keywords as “penetration”, “market”, “mature market”, “technical service”, “complete market and even “service customers’ satisfaction” were used. Then information was systematized according themes of product and services penetration actions. The lack of a research addressed for the especially technical service field encouraged investigation of possibilities to use product penetration actions in the technical service sector. It means that results have to be structured according their possibilities to be used in service business and even more precisely synthesized for determining the sequence of actions after its assessment by logic, feasibility, business integrity approach and possibilities to adapt for technical service sector. Moreover, in order to ascertain the suitability of the model, which is submitted in the paper, questionnaire survey of the consumers was carried out under determined components of the model and analysis of information, which was found in the different websites, was analyzed, and conclusions are based on these mentioned data. Creation process of theoretical model was followed by applying of practical action. This research methodology has been marked with success: created model was suitable for real business conditions.

So, the **object** of the current research is process of market penetration. The study analyzed technical services of computing companies. These services usually include installation of computers and software, network maintenance during computer exploitation, repairing of computers also. There may be additionally services of such activity: consulting, personnel training, maintenance an electrical supply networks.

2. Analysis requirements for the model of penetration into mature technical service market

Penetration strategy really differentiates by some aspects in the classical marketing literature: according to the nature of the markets, according to the speed of penetration, according to the product's innovativeness degree. For example, Freeman (2010) discuss about strategy questions and cites Ansoff, also Nevzorova, Karakaya (2020) claiming that the services penetration into mature market has to be deeper, through more aggressive marketing techniques. Necessary is customers' impact try to express by the increasing a frequency of purchases, and making greater efforts to attract the customers. Furthermore, also possible to search product sales opportunities in some new markets, or to choose a consumer segment that has not yet decided the desired service provider. In many considered to be as a classical literatures distinguished slow penetration into the market (at a high price and low support expenses) and the rapid penetration (low price and high support expenses) and offered different methods for implementation global innovations and only little modified new products (Cho et al, 2009; Drejeris, Drejeriene, 2019). This means that the model should be flexible, e.g. applying would enable evaluate a variety of business situations.

Meyer, **Yen Thi Thu Tran (2006)** emphasized that penetration techniques depends on the country's culture and traditions. That view can certainly be accepted. It means that it is important to investigate both the consumer culture specific aspects and some cultural traits of service providers. Results of this study should reflect also in the model of penetration into the technical service market. A goods and services market situation is similar as a whole in sport. In order to win, always need to achieve the best results (DiRenzo et. Al, 2016). This means the need to defeat the leader of the market, or to achieve the results although similar to a market leadership in service quality.

So, as mentioned above, the first steps for finding a niche in an existing market, should be clearly directed into identification of the market participants. It means understand the market specifics and features. A deeper understanding of these issues may completely discourage commercial activity. These procedures need to execute in order of assessing the possibilities to better meet the needs of existing users. Understanding the market is very important criteria the company understanding to its customer and its competitors gives the company the best way to attract customers and provide a competitive service and having a bigger share of the market, understanding the market will allow the company to know what are the services the customers are lack of and if the competitors are able to provide it or not which will give the company the opportunity to be unique in the market. The purpose of getting to know the market is trying to understand whether the planned activity is suitable for the personality, because, for example, starting a commercial activity will require spending much more time and other expenditure in this activity, perhaps even all the time left from the time for meeting physiological needs.

These issues will continue to be examined, provided that the market situation does not discourage wish for commercial activity. If the situation proves to be repulsive or inappropriate, then the investigation is terminated.

So, Results from the study about the market participants and understanding the real situation in the market will allow determining the market leader and adjust the performance of further studies, because orientation to the market leader defines service quality according certain aspects and will make possible not only to understand the market leadership position, but also to measure company possibilities to achieve the better quality of services. In order to find out ability to provide services better than a leader must be to find out some of the leading service quality parameters by consumers' survey (Tax at al., 2013). So, the next step would be to specify the quality of service indicators by point of consumers' satisfaction view and try to discern existing gaps in competitors' activity to satisfy the users' needs and possibility to improve the quality of services and to predict customer needs change direction in order for better than the competitors to meet the needs of customers in the near future. In this study, it is also appropriate to distinguish the market segment in which current market participants at least meets the needs of the customers. The following information would help to indicate the direction for opportunities to better meet the needs of this market segment and thus formed market penetration actions. Kotler and Armstrong (2012) further specify the proposed actions of this stage and argue that it is appropriate to focus on the market leader and strive to provide a service better than the market leaders and thus beginning to take even the smallest market share, the gradual increasing the provision of increasingly diverse and better quality services. This approach is particularly relevant for a technical services business, in which stabilizes the long-term relationship between the service provider and the customer.

Implementation of new services and offering better quality existing service Runge (2013) and Tax et al. (2013) also identified as an opportunity of mature market penetration. They also noted the need for segmentation of the market. It is obvious that development of new services for increasing company's competitiveness and better consumer satisfaction potentially create preconditions to penetrate the market. By the way, not only completely new installation services can facilitate a new entrant to penetrate the mature market, but also the services provided by a slight modification of some service settings to highlight a certain segment of consumers whose needs are met by better modified or changed parameters services. Results of the users' satisfaction study should show whether it is appropriate to choose a completely different segment of the clients (i.e., expand circle of users, to serve those customers who do not use the leaders' services) or by using the promotion instruments to attract at least a part of other service business organizations customers, it means not the market leader's customers.

Kotler and Armstrong (2012) as well Bohli, Sorge, with Wesgoff (2009) as a classical instrument to penetrate the market also offer product sales at lower prices. Possibility of obtaining services at a lower price is particularly relevant for technical services customers, because of such kind services to be procured according generally long-term contracts, so the lower price would lead to savings, and this is particularly important for new companies, which do not have enough funds yet. Thus, the proposal to reduce the prices of provided services and to encourage the purchasing of services (ie, at least some of the services to sell cheaper than the market leader) is worthy of attention and is appropriate for the new entrant to analyze the possibilities in this way to try stimulating consumer interest for the proposed product. Relatively low pricing of new services can accelerate process of market penetration (Drejeris, Drejeriene, 2019; Nikolaidis, Bakouros, 2009).

Level of users' needs satisfaction is usually determined according their surveys (Tax et al., 2013). The results of the questionnaire survey, after their processing by mathematical-statistical methods shows a more objective picture of the consumer's needs and leads to more solid conclusions (Vlachos et. Al., 2011). It is appropriate applying to a specialized market research companies that carry out such studies for service providers that do not have any chance to do customer surveys by themselves.

Liu, McClure (2001) consumers' culture divide into individualistic, collectivist and western and eastern customers. In an individualistic culture are more likely to voice their complaints than those in a collectivist culture; moreover, customers in a collectivist culture are more likely to express private responses than those in an individualistic culture. According them another purposeful research direction is an online space analysis of complaints and comments about the quality of technical services. Not all users prefer to express their opinion about a service quality both in verbally or in writing way, for some clients sometimes expressing their opinions for service provider, and feeling anger for a possible failure or improper action is directly better in more secure environment. Often these service users 'empties' with writing complaints in the home environment, where they feel more daring (safer), though such complaints may be completely not objective. In addition, users not only complain in a virtual environment, but also like to discuss and about other aspects of the service, consult, ask for advice, make suggestions, maybe even dreaming, e.g. shared not only by negative experiences. A large number national websites can be used for that purpose. So, the analysis of web space can also help to feel the thread, which can indicate direction for improving a quality of services, and which may be worth to turn for a market newcomer. All complaints and suggestions of consumers for improving quality of service are appropriate to group, systematize, sometimes even synthetize and such analysis results to use for further decisions.

Another classical tool for sales promotion, which often can be find in scientific literature, is sponsorship activity that is appropriate to apply for a new entrant, which seeking possibilities to penetrate into market. New product advertising needs as one of the support tools are confirmed by Sood, James, and Tellis (2009) and in the many others researchers' works. Kotler and Armstrong (2012) also Oke (2007), this opinion further purify that and other support measures (personal selling, public relations) could also encourage the level of sales. Likewise, those authors state that is purposeful to use more intensified and comparability measures for a new products advertising and to look for opportunities for doing it better than others competitors, and only such use of advertising would make it easier to penetrate into mature market.

According Sood, James, and Tellis (2009) advertising as well is identified as one of the main and the most effective support measures of the service sector. After exploring options to provide services cheaper and after determination of the purposefulness for implementation of new services, the sponsorship methods and justification of their need must be clean-cut. One of the most appropriate measures for new service market penetration is an attractive advertising (2010). It can be noted that and many other authors an appropriate advertising treated as a traditional instrument of sales promotion and state new product advertising intensity is a factor, which influences speed of market penetration.

Proper results of accomplished analysis have to show penetration ways into even completed market for a new technical service company, and will help preparing the best business strategy corresponding to the current conditions and the competitive situation.

3. Forming the model of penetration actions into mature technical service market

Required procedures, their content and need, also logical justification of the consistency have crystallized in minds after analysis special and scientific literature of business pioneer penetrating into the market, which is presented in above sections. The model of actions for the new entrants' market penetration, which is applicable for the technical services sector, is given in Figure 5.8. Each of necessary actions based on the above-mentioned scientific research results, and the sequence of actions is substantiated by logic in accordance with service properties. Every of the necessary actions are expressed in the model components.

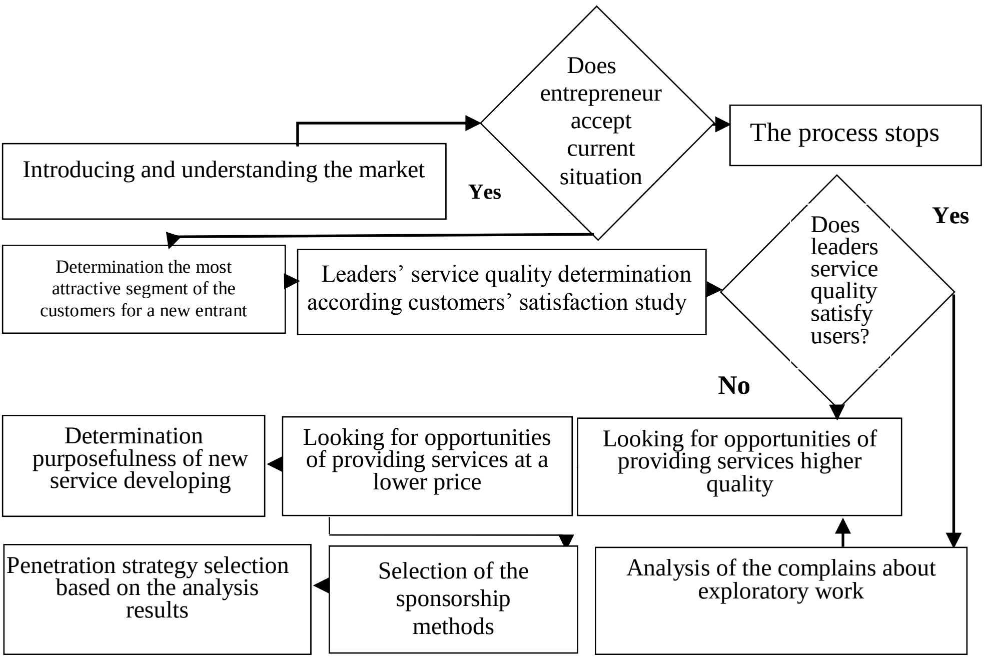

Figure 5.8 Processs model for the technical service market penetration

The proposed model is flexible construction, as it provides the steps for different potential solutions that are dependent on the business situation and environmental conditions. It is appropriate to accept and Sujin Choi (2011) findings, who state that the proper use of the market analysis results, execution well-planned and coordinated actions also allows newcomers to penetrate the mature market and even enough market filled and successfully develop the service business.

The following sections will contain practical application of proposed model in real business conditions

4. Empirical analysis of computer maintenance service market penetration

Computer maintenance is a particularly competitive field, as in today's world, not only do all companies use computers, but all people use computer equipment for one purpose or another. And such market research and actions according to their results of the technical services market penetration is characterized not only for Lithuania, but results (methodology) can be used everywhere. They can help to penetrate into the technical service market of any country, in which is a market economy and legitimized competition. VDU IT graduate, an excellent specialist, a real leader sought to start computer maintenance activities.

4.1 Introducing and understanding the market

Getting to know the computer maintenance market has yielded positive results. It allowed to get acquainted with the organization of work in some computer maintenance companies, to find out the opinion of employees about the features of group work, the distribution of responsibilities. After that acquaintance, the desire to own a commercial computer maintenance company only intensified. Customers in this market are: individuals (the most of cases they need only one-time repair) and organizations (a long-term contract can be concluded with them).

4.2 Determination of the market leader(s)

As mentioned above, the investigation should be launched by the identification of potential competitors, their market share and by identification of market leaders. Results from this study and the activity of market leaders will have a possible impact to the order of further research. According information of Kaunas Municipality at the 2021 there were registered and active 88 computer maintenance enterprises in the city.

Then were determined, that three companies have a 25% market share (and they were recognized as market leaders), because all other firms occupied about 3-4 % of market share only. These results were confirmed by investigations of sales volumes; this can be found in the Statistical department of republics. It was also found that those companies are computers sellers. Further analysis should show need for improvement activities that determine the ways to attract consumers: ones who exercise the services provided by competitors and absolutely new customers. Investigation has shown that the popularity of other companies, in comparison with existing market leaders is much lower, so it is appropriate during further studies to pay more attention into some aspects of their services quality, find out the degree of customer satisfaction in order to look for opportunities to penetrate the market, possibly attracting potential market share leaders' and other companies' service users, through better quality and a wider range of services.

So, for the more precise clarification of the situation in the existing market have been interviewed computers companies. The study showed, that coordinated market penetration actions carried only a few of the surveyed computer maintenance and repairing companies, and majority of them noted, that they would expand their activity, if know real steps and order of penetration.

Further is discussed the content of the other components of the submitted model.

4.2 Determination of the most attractive users segment for the market novice

Purpose of this analysis is to ascertain satisfaction of the different segments of service users for perceiving the best possible business development directs, which are acceptable for the new market entrant in order to identify opportunities for better than the existing market participants to meet any exceptional needs of the consumers. Managers or other responsible personnel of a companies were directly asked. The questions submitted were exclusively related to computers repairs and maintenance field. It is observed that the quality of service more does not meet requirements of the organizations' employees. The question about the quality of maintenance hardware warranty service time even 14 % of respondents said that the companies-sellers of the equipment's fails to comply with personnel (technicians) arrival terms, 5 percent argued that during hardware warranty service time repairing of equipment was poor quality, as after repairing it quickly again malfunctioned. Heads of asked organizations warranty service quality satisfied a little bit better. Asked whether is forced to seek help due to equipment failure to other organizations, 19% of respondents answered positively. According these studies, it can be concluded that the existing computers servicing market participants are more interested to serve organizations' computers, and improvement service in this market segment. Further computers sellers were interviewed about the quality of the technical service. These companies' managers emphasized excellent quality of their work, but also not surrendered the desire to transmit strictly technical support functions to any other economic structure, which would be able to carry out these works excellence. Thus, the opinions about a technical quality of service users and service providers appeared to partially contradictory. According results of this study can be made these generalizations:

It is appropriate for the new entrant to offer executing warranty service, i.e. to operate on behalf of computers's sellers, to fulfill the obligations for clients of maintenance technical services better and higher quality than sellers, to provide certain fixed arrival terms into any organization and fixed repair or maintenance work completion time, which strictly followed and prices, payment conditions and order. Such an approach would also facilitate the work and should be of interest to computers sellers who should not take care of the additional service, ie computers repairing and its maintenance, thus would allow focusing more to the increasing sales of computers (it means focusing to a main activity).

After evaluation services' quality of existing market participants, can be obviously observed shortages of the reliability that technicians would be arrive on time. This element of the technical service should be improved. Furthermore, it is purposeful to offer technical services for the organizations.

4.3 Analysis of the options for improving the quality of computers repairing and maintenance services

Quality improvement is one of the most important directions of penetration into the mature market, so the results should show the areas of the services quality, which are not quite satisfied existing customers, and such analysis can help to find a niche in the market for the new entrance, whose better service quality would interest for existing customers. Computers repairing and maintenance service users were asked about the classical technical service quality indicators that could encourage change of the service provider. Results of the survey presented in Table 5.1.

According to results of 67 organizations survey can be concluded that the quality of existing services basically satisfied, because most of the companies interested in better services for less. However, it is appropriate to note that the speedier arrival of technicians (IT engineers) still would encourage 26.1% asked organizations to change service provider, then after finding opportunities come faster (earlier) than those provided of existing contracts, a new market entrant can expect a positive decision on the agreement to change the disappointing quality of these existing service providers work. By the way, that is correlated with flexibility increasing of working time, so a new entrant must look for opportunities to improve activity in this area also. The analysis results showed that the computers repair time reductions are also a niche, that allows market penetration, as 9.4% of the surveyed companies are not satisfied with the quality of services according this aspect. The value of the indicator correlates with the satisfaction of staff qualifications, and a new entrants' services provision should be shorter and time reduction can be achieved by hiring more highly skilled personnel, or by adjusting the organizational aspects of this activity.

Therefore, can be decided that the influence of support measures to choose a new provider will not be high, as well-established market equilibrium basically satisfied with existing users of these services and market penetration strategy is better using only appropriate form of service quality improvement.

Table 5.1

Quality indicators that may encourage technical service consumers to change service provider

Assessments	Absolutely would discourage (%)	Would discourage (%)	Would neither courage, neither discourage (%)	Would courage (%)	Would absolutely courage (%)
Time shortening of computers repair	21.1	21	48.5	4.8	4.6
Improving (shortening) timeliness of technician (IT engineer) arrival	22.2	21.1	54.6	1.5	1.6
Service price reduction, while maintaining the appropriate level of quality	11.1	23.3	40.9	14.5	10.2
Improvement of technicians (IT engineers) working culture	16.1	26	49.6	6.3	2.0
Competence development of personnel	22.2	13.3	57.3	2.6	4.6
Increasing flexibility of servicing staff working hours.	12.2	14.3	67.5	3.0	3.0
Increasing accessibility of advertising	55.1	30.8	11.9	1.1	1.1
Increasing an availability of information about services	16.1	29.9	48.9	2.7	2.4

4.4 The need analysis of computers repair and maintenance companies to provide services at a lower price

The results of investigation have showed that the price reduction would be serious presumption to penetrate into mature market, because even 24.7 percent of respondents answered that would change existing service provider into which can offer adequate quality computers repair and maintenance services at a lower price. Purposefully question was worded as follows categorically, because answers ambiguity can only distort the results (Sujin Choi, 2011), in addition such a question formulation respondents can better understand.

It is purposeful to use price differentiation, which would increase the flexibility of activity and the ability to penetrate into the current market of technical service providing. Reducing the price of the service could occur and resourceful shares (two for the price of one, 2 or 3 rd time – free of charge, part of the service free of charge, discounts for loyal customers' discounts for young people or new users or others). Thus, market newcomer of the activities in question (technical services) certainly should look for opportunities in this case to offer services at a lower price than they are supported by existing market players, because excellent quality (and high price) of service users are not interested much. Results of the study clearly expresses that the reduction of the cost of services as the possibility of penetration into the current market.

4.5 Determination purposefulness of new service developing

In the absence of opportunities to provide services cheaper than they are provided by the market leader and other market participants in a given period, it is appropriate to use another opportunity to penetrate the market, ie, try to provide new services. Often can be obtained satisfactory results of business activity, when the market novices begin to deliver new services closed by their nature to market leaders provided only with certain modifications, which appropriateness are showed according the market research results. Drejeris et al., 2013 the current situation and conditions examined in detail, therefore they made realistic proposals (methodology) for the existing market participants about determining of new services purposefulness based on the application of quantitative methods.

According to mentioned methodology it was found that the best direction for development is trying to expand well-known services, not a new.

4.6 Selection of the sponsorship methods and justification of their need

Accent of a new entrant sponsorship measures use should be directed only to improve the quality of the offering product. The most commonly applicable and appropriate technical and organizational tool for sales activate is creating and application the recommendations system, which involves usage tools that make satisficed clients to recommend the service to other potential users of this service. Such advertising manifested both formal and informal verbal communication between service users, which is based on information about the company or its services and dissemination of good practice. Choose equipment repair service provider even is recommended on the basis of other catering companies positive experience (Jose, Goldfried, 2008). A good image of the company is also important aspect of success, especially for a market newcomer, so trying as to create and to start providing new services in this case is necessary. A favorable image is formed only by providing high-quality services that meet the users requirements, representing a selected segment of the market. Services provided by appropriate advertising are an integral part of a positive image and the success of the business. The study on the availability of advertising shows that advertising does not have a significant impact on the choice of service providers. Therefore, the intensity should not be too large, and its accent should be directed to only the high quality of service.

4.7 Formation of penetration strategy

The study showed that the possession of the penetration strategy can activate technical services companies. Penetration strategy is developed according to each of the research results, which use will allow furthering determining the potential business niche, clearly showing the direction in which the business subject must develop in order to penetrate the mature market. Each endpoint was to discover possibilities to penetrate the current market, the implementation of which should draw strategic activity guidance in order to achieve the organization’s objectives. Penetration actions are modeled in accordance with logic and knowledge of the principles of business reality, this fact and the positive results of the proposed model application is undoubtedly confirmed the strategies forming the relevance and the model with certain non-essential corrections for the peculiarity of services activity can be used to form the technical services market penetration strategy, which can be used by small and big business companies.

According to the results for each investigation actions, which are presented in submitted model (listed above), appropriate market penetration strategy is formed, therefore penetration strategy actives have allowed a new entrant successfully to penetrate the existing market. Actions of penetration strategy formation are selected in accordance with the technical services peculiarities and reflect the Lithuanian business specifics at the current time.

Conclusions

1. The information analysis of scientific and special literature on the market penetration showed, that there is lack knowledge about penetration actions, that the proposed models and methods have no practical application examples, and there is not data on the penetration of the processes addressed especially for the companies of technical services mature market.

2. Flexible structure model is formed, which consist of 9 components: introducing with the market, determination of market leader(s), customers' satisfaction study according quality of leaders' service, analysis of complains about exploratory work, looking for opportunities of providing services higher quality, looking for opportunities of providing services at a lower price, determination purposefulness of new service developing, selection of the sponsorship methods, penetration strategy selection based on the analysis results.

3. According to the actions of the proposed model components empirical research has been conducted on real business conditions, the results indicate existing possible instruments the real mature market penetration under specific conditions and circumstances of business technical services, so, a new entrant successfully penetrated in the existing market. Suitable result of model use showed that proposed actions clearly enough to form a successful market penetration strategy, actions consistency and appropriateness of content was confirmed.

4. The use of the proposed model will allow service companies to

plan and structurally justify the market penetration actions and that fact will reduce the possible risk of market penetration failure and that provide an opportunity to achieve better economic results for technical service business.

References:

1. *Yitshaki, R.; Kropp, F. (2016). Entrepreneurial passions and identities in different contexts: a comparison between hightech and social entrepreneurs. // Entrepreneurship & Regional Development. An International Journal. 28, 3-4(2016), pp. 206-233.*
2. *Bohli, J. M.; Sorge, Ch.; Wesgoff, D. 2009. Initial observations on economics, pricing, and penetration of the internet of things market. // ACM SIGCOMM Computer Communication Review. 39, 2(2009) pp. 50-55.*
3. *DiRenzo, M. S.; Weingarden, S. M.; Resick, C. J. Following the Leader in Sports: a Targeted Review and a Rally for Extended Research, in Claudia Peus , Susanne Braun , Birgit Schyns (ed.) Leadership Lessons from Compelling Contexts (Monographs in Leadership and Management), 8, 2016, pp. 67-93. Emerald Group Publishing Limited.*
4. *Drejeris, R., & Drejerienė, E. (2019). Procedural model for maintenance service penetration into the mature market: the case of Lithuania. Tehnički vjesnik, 26(1), 72-79.*
5. *Drejeris, R.; Bivainis, J.; Tunčikienė, Ž.; Drejerienė, E. 2013. Determining the purposefulness of new services on the grounds of the results of quantitative analysis. // Journal of business economics and management. 14, 4(2013), pp. 791-805.*
6. *Freeman R. E. Strategic management: a stakeholder approach. Cambridge University Press, New York, 2010.*
7. *Cho, S.; Mathiassen, L.; Gallivan, M. Crossing the diffusion chasm: from invention to penetration of a telehealth innovation. // Information Technology & People. 22, 4(2009), pp. 351-366.*
8. *Indounas, K.; Avlonitis, G. New industrial service pricing strategies and their antecedents: empirical evidence from two industrial sectors. // Journal of Business & Industrial Marketing. 26, 1(2011), pp. 26-33.*
9. *Jose, A., Goldfried, M. Transtheoretical Approach to Case Formulation. // Cognitive and Behavioral Practice. 15, 2(2008), pp. 212-222.*
10. *Kotler, P.; Armstrong, G. Principles of Marketing (14th Edition). Prentice Hall, New Jersey, 2012.*
11. *Liu, R. R.; McClure, P. Recognizing cross-cultural differences in consumer complaint behavior and intentions: an empirical examination. // Journal of Consumer Marketing. 18, 1(2001), pp. 54-75.*

12. *Meyer, K. E.; Yen Thi Thu Tran (2006). Market Penetration and Acquisition Strategies for Emerging Economies. // Long Range Planning. 39, 2(2006), pp. 177-197.*
13. *Munford, R. and Sanders, J. Understanding service engagement: young people's experience of service use. // Journal of Social Work. 16, 3(2016), pp. 283-302.*
14. *Nevzorova, T., & Karakaya, E. (2020). Explaining the drivers of technological innovation systems: The case of biogas technologies in mature markets. Journal of Cleaner Production, 259, 120819.*
15. *Nikolaidis, Y.; Bakouros, Y. Innovation penetration into a region with specific features: the case of Crete, Greece. // International Journal of Entrepreneurship and Innovation Management. 9, 1-2(2009), pp. 118-138.*
16. *Oke, S. A. Six Sigma: a literature review. // South African Journal of Industrial Engineering. 18, 2(2007), pp. 109-129.*
17. *Rungie, C., M.; Uncles, M.; Laurent, G. Integrating consumer characteristics into the stochastic modelling of purchase loyalty. // European Journal of Marketing. 47, 10(2013), pp. 1667-1690.*
18. *Sood, A., G.; James, M.; Tellis, G. J. (2009). Functional regression: a new model for predicting market penetration of new products. // Marketing Science. 28, 1(2009), pp. 36–51.*
19. *Sujin Choi. Facilities to service based competition, not service to facilities based, for broad band penetration: a comparative study between the United States and South Korea. // Telecommunications Policy. 35, 9-10(2011), pp. 804–817.*
20. *Swami, S.; Dutta, A. Advertising strategies for new product diffusion in emerging markets: Propositions and analysis.// European Journal of Operational Research. 204, 3, 1 (2010) pp. 648-661.*
21. *Tax, S., S,; McCutcheon, D.; Wilkinson, I., F. The service delivery network (SDN) a customer-centric perspective of the customer journey. // Journal of service research. 16(4): 454-470.*
22. *Vlachos, P.; Giaglis, G.; Lee, I.; Vrechopoulos, A. Perceived electronic service quality: some preliminary results from a cross-national study in mobile internet services. // International Journal of Human-Computer Interaction. 27, 3(2011), pp. 217-244.*

Veslav Kuranovic
Lecturer
Aleksandr Polusin
Student
Department of Logistics and Transport Management
Faculty of Transport Engineering
Vilnius Gediminas Technical University
(Vilnius, Lithuania)

THE EVOLUTION OF CORPORATE REPUTATION AND SUPPLY CHAIN MANAGEMENT IN CHINESE LOGISTICS MARKET

Abstract
The idea of a value chain was first suggested by Michael Porter (1985) to depict how customer value accumulates along a chain of activities that lead to an end product or service. Porter describes the value chain as the internal processes or activities a company performs "to design, produce, market, deliver and support its product". He further states that "a firm's value chain and the way it performs individual activities are a reflection of its history, its strategy, its approach to implementing its strategy, and the underlying economics of the activities themselves". These are generally also the line activities of the organization. They include: inbound logistics – material handling and warehousing; operations – transforming inputs into the final product; outbound logistics – order processing and distribution; marketing and sales – communication, pricing and channel management; and service – installation, repair and parts.

Keywords: *value chain, corporate reputation, logistics, value, market, industry, economics.*

Introduction

According to Shank and Govindarajan, the industry value chain starts with the value-creating processes of suppliers, who provide the basic raw materials and components. It continues with the value-creating processes of different classes of buyers or end-use consumers, and culminates in the disposal and recycling of materials. A good corporate reputation is "a top-level factor for achieving sustained competitive advantage for the organization" (Sanchez &

Sotorrio, 2007, p. 337) to bring about benefits of demanding a higher price premium for company offerings. Company reputation serves as a signal for the underlying quality of a firm's products and services; the payment of lower prices in its purchases due to lower contracting and monitoring costs; attracting more qualified people in the labor market because of the association of good corporate reputation with high self-esteem; greater loyalty from employees because employees prefer working for high-reputation firms; greater loyalty from customers because customers value associations and transactions with high-reputation firms (Roberts & Dowling, 2002).

The concept of corporate reputation has attracted the attention of companies and scholars during the past few years. Clive (1997, p. 19) argues that the subject of corporate reputation used to hardly make a list of subjects for a top management before 1997. He adds that with a presence of several driving forces like people's hunger for information or an economic competition, the significance of corporate reputation is changing rapidly (Clive, 1997, p. 19). Despite the increasing momentum of the corporate reputation concept, Barnett et al. (2006, p. 26) argue that the commonly agreed definition is lacking.

In early literature, Fombrun and Riel (1997, p. 5) argued that corporate reputations remained relatively understudied; they attributed this lack of a systematic attention of corporate reputation to diversity of relevant academic literatures. In their research, Fombrun and Riel (1997, p. 5) analyzed the diversity of academic disciplines that actively contribute to knowledge in this area, whether grounded in strategic management, an organization theory, economics, marketing, communications, accounting or finance.

1.1 The basis of theory of value in economics

The word value, it is to be observed, has two different meanings, and sometimes expresses the utility of some particularobject, and sometimes the power of purchasing other goods which the possession of that object conveys. The one may be called "value in use"; the other, "value in exchange". The things, which have the greatest value in use, have frequently little or no value in exchange; and on the contrary, those, which have the greatest value in exchange, have frequently little or no value in use. The objective classical theory of value dates from the mid- to late seventeenth century, reflecting increased interest in the production of commodities and reduced emphasis on the circumstances of their exchange. It was the cornerstone of classical political economy (Dobb, 1973; O'Brien, 2004).

1.2 The major values on which the Chinese culture rests upon

While China is home to the world's oldest and most continuous culture, it has also been subject to massive institutional changes since the nation-wide establishment of the Communist regime in 1949. It is indicative that Hickson and Pugh (1995) chose to subtitle their review of the field 'The Impact of Societal Culture on Organizations around the Globe'. Even before Hofstede's seminal work (1980), international studies of organization generally regarded culture as the key explanatory factor for cross-national differences, as reviews such as Roberts (1970) make clear. Key institutions are the state, the legal system, the financial system and the family. n turn the norms and rules of such systems impact importantly on corporate and managerial behaviour. It has to be admitted that although the institutional perspective draws on a long sociological tradition, there is still not much agreement about, or understanding of, the processes whereby institutions are formed and in turn impact on organizations (Tolbert & Zucker, 1996). There is, however, more consensus about the potential analytical power that the perspective offers.

In China, for example, the foundation of Chinese respect for hierarchy and the family social collective is based upon the relational norms expounded by Confucius and legal codes such as those developed during the Tang Dynasty (Gernet, 1982). This institutionalized relational logic has shaped a society whose transactional order rests on social obligation to higher authority and to the family rather than on rules oriented to protecting the individual. Chinese capitalism is seen to be intrinsically different from Western capitalism because of this contrast in institutional framing over a long period of time (Gerth & Mills, 1946; Weber, 1964). The hierarchical and collective orientation it has produced has become today commonly regarded as an inherent characteristic of Chinese culture. As 'same culture, different system' examples like Mainland China and Hong Kong illustrate, the impact of institutional differences is sufficient for Hong Kong managers to regard managing operations in the Mainland as problematic (Child et al., 2000).

1.3 Divergent perception of value on Chinese vs. European markets

Efficient markets permit the gains from the specialization of labor and increasing returns to be realized. In addition, free markets are evidently also a key channel that permits innovations to be transformed into productivity and output growth and to find its best use, creating gains not only from static efficiency, but also from a self-regenerating process of innovation and invention (Baumol, 2002) Empirical studies of contemporary cross-sectional growth seem to confirm that a country's stance towards openness is positively correlated with subsequent growth (Frankel & Romer, 1999).

According to Douglas North and Robert Paul Thomas, the west succeeded in overcoming the institutional blockages, weak property rights, and other barriers that caused economies throughout history to become lodged in places where incentives could not flow towards specialization and division of labor (North & Thomas, 1973).

The last three decades also saw a transformation from a command-based economy to a more decentralized and market-based system. The priority accorded to industry stunted services development – particularly in productivity terms – while the emphasis on physical investment constrained investment in human capital (Bosworth & Collins, 2008). While the traditional driving forces of growth are far from exhausted, many signs suggest that they are likely to gradually weaken over time (Eichengreen, Park, & Shin, 2011). Yet workers will become more productive as the physical and human capital stock per worker continues to rise. These demographic changes should have a sizable impact on the rate of potential growth (Cai & Lu, 2013). In addition, China's expanding education system and large supply of workers with science and engineering skills bode well for the future (Schellekens, 2012a).

In addition, China is expected to upgrade its technological capabilities by fostering a learning and research environment that encourages new ideas and lateral thinking and gradually making the pursuit of innovation more sensitive to market signals, with the government playing a more facilitating role (Schellekens, 2012a).

1.4 The determinants of growth and the structure of Chinese logistics market

China started its reform and open policy in 1978. Since then, the country has been transforming itself from a centrally planned economy to a market economy. The concept of 'logistics' was imported into China in the 1990s. Since then, logistics in China has witnessed a huge growth along with its fast growing economy. Logistics in China has accelerated since China's entry to the WTO in November 2001. The first group came from former subsidiaries of relevant ministries, for instance, Sinotrans came from the Ministry of Foreign Trade. The second group is made up of the foreign logistics companies such as DHL.

1.5 The developement of value chains and partnership on logistics market

Capturing the value generated along the chain is the new approach taken by many management strategists.

Creating value in any stage of a virtual value chain involves a sequence of five activities:

- Gathering,
- Organizing,
- Selecting,
- Synthesizing,
- Distributing information.

The value stream customer has certain desires, and the value stream consists of work activities dedicated to serving that customer. Value streams and their customers cannot be separated: The focus on customer gives the value stream its purpose. Value Stream: An end-to-end collection of activities that create a result for a customer, who may be the ultimate customer or who may be an internal “end user” of the value stream.

1.6 The relation of corporate reputation to image, identity and organizational culture

Nevertheless, the events of the past decade – reputational crisis of well-known organizations (for instance, the fall of Arthur Andersen in 2002), the demise of huge corporations, such as Enron, due to fraudulent practices, rising sophistication of stakeholders, globalization and information flows, changing business and competitive environment, growing demand for corporate transparency and social responsibility, etc. – encouraged renaissance of caring and striving for good reputation. The first fundamental academic book on corporate reputation was published by Fombrum, in 1996 and can be considered to be a starting point in the development of reputation management as a separate academic discipline and research field (Fombrum, 1996). Corporate reputation is a concept with exceptional multidisciplinary richness, which brought about increase in the number of scholars researching corporate reputation as well as growing sophistication in definition of corporate reputation. Corporate reputation essentially relate to – competition or comparing a company (its past actions, performance results, etc.) with its rivals. In order word, corporate reputation represents a company’s status among employees and external stakeholders compared to its rivals (Fombrum, 1996, 2001).

Chinese semantic comparative theoretical analysis

Guanxi:

Also, a good establishment and maintenance of guanxi are perceived as Chinese art of relation management.Unlike the western interpretation of relationship, Chinese guanxi is different from it in several ways:

Seen from the core basis of these two concepts, western culture perceives and explains relationship (personal and social) based on social exchange theory, which emphasizes a balanced model between giving and receiving. In this sense, western understanding of relationship is fundamentally predicated on a just and equitable status, which led by rational calculation; whereas in China, guanxi basically comes from Confucian theory, and forms the practice of its ideology.

Renqing:

As we have already discussed about the concept of guanx in in

Chinese culture, it becomes inevitable to understand another two key elements of renqing and mianzi which are embedded and shaped by Chinese guanxi and playing such an essential role in it. In this part, we will mainly focus on the definition of renqing. Compared with guanxi, renqing tend to include both of the personal and social characteristics. In order to give a comprehensive understanding of renqing, it is going to explore and define it from its three meanings in Chinese culture:

From a very fundamental and traditional level, renqing indicates the personal and emotional responses of one who is facing different situations of the day-to-day life.It has been written in Li-Ji that the so-called renqing contains happiness, anger, sadness, fear, love, hatred, and desire; they are all acquired as the person was born. One would be identified as sophisticated in renqing provided he or she is fully equipped with empathy.

Mianzi:

If we consider renqing as an important medium of social exchange for establishing and sustaining guanxi in Chinese culture, then mianzi would be an indicator of how much social guanxi and power an individual could yield and manipulate within Chinese society. One of the other essential elements in Chinese culture, mianzi connotesone's social status or prestige, obtained through successfully performing certain social role (s) that is(are) publicly recognized by other members of the society. The derivative concept "face work" indicates the presentation of self-image management, and aims at shaping and infusing a favorable impression into other people's minds.It is widely acknowledged that people could read and infer a person's social position and prestige in one's social network by perceiving how much his or her mianzi is, from which people could have a rough or sometimes a pretty accurate idea of individual's a) status gained by personal qualities of knowledge, strength, ability, and so on; b) position obtained through social or non-personal factors of wealth, authority, social connections, etc.

Ji:

This Chinese word is Ji. Of total thirteen chapters contained in his Art of War. Sun Tzu begins with the Chapter of li in which the art of war is pictured as “he art of deception”. However, the word li which forms part of the title of Sun Tzu’s very first chapter was not introduced in its original form in any official foreign translations which can be traced by the author. Although the Art of War was first published in the In Chinese, Jj means (1) to count, compute, calculate, number (as a verb); (2) meter, gauge (as a noun); and (3) idea, ruse, stratagem, plan (as a noun). The English translation of li in the various available English versions of Art of War is found divergent among translators. For example, li is translated as “estimates” and “strategy” by Griffith, and as “estimation”, “strategy”, “tactics”, and “strategic plan” by Sawyer. Recently, Jj was formally translated into English as Stratagem and into German as Strategeme by several scholars in connection with their introduction to the West of a compendium of ancient Chinese wisdom entitled The Thirtv-Six Stratagems (36 li).

Bao:

Yang Liansheng is one of the first scholars to study bao (pao) 14 related to social exchange and social relations in the 1950s. Yang L. found a good starting point for understanding the Chinese meaning of reciprocity from the Confucian classic the Book of Rites and in common sayings. They touch upon the quality of return, e.g. to recompense injury with kindness or injury, and quantity in exchange relationships, e.g. a person should return either lots more or nothing, or a little bit more, or the same amount of things to those people who have helped or presented gifts to him, etc. This treatment of exchange relationships can be more or less fitted into Sahlins’s reciprocity typology. Yang L. lists bao’s wide range of meanings: report, respond, repay, retaliate, and retribution, response, return, etc., and claims that bao as a verb refers to the action of exchange, and that bao is also a basis of social relations and principle of reciprocity. However, I will argue that bao is not a proper Chinese term for reciprocity.

Chaxugeju:

Based on Chinese classic texts and villagers’ everyday life in Yunnan Province, Fei Xiaotong established the existence of ego-centered social relationships of chaxugeju. This notion is a figure of speech for Chinese social structure which involves certain principles. On the one hand, Fei explains that Chinese social structure looks like the picture created by throwing a stone into a pond.

An individual's ego is at the centre of his social world, and all other people have different distances around him. Social relationships (shehui guanxi) are a network (wangluo) formed by increasable personal connections (siren lianxi). On the other hand, Fei explains that the xu of chaxugeju is based on Confucius' lun, which relates to ten types of relationships. Fei claims the starting point of a moral system in chaxugeju is to cultivate oneself according to li and the whole set of personal relationships maintained by de. In other words, restraint, by self-cultivation (keji xiushen) based on li, is the most important principle to build up one's personal networks (siren guanxi). Fei also compared li, de and law in people's life.

Yuan and fu:

Fei introduced two related terms xueyuan (ties of blood, consanguinity and blood relationships) and diyuan (people born in the same land) in studying rural Chinese society. They correspond to xueyuan shehui (blood and marriage tied society) and xiangtu shehui (native and popular society). They formed personal networks: xueyuan for relationships based on ties of blood, qinyuan for kinship relationships, diyuan for fellow-townsmen relationships, yeyuan for colleagues' relationships and youyuan for friendship etc. The Chinese version of Buddhism accepted the idea that people should deal with relationships according to lunli.

Bao (pao):

Yang L. found a good starting point for understanding the Chinese meaning of reciprocity from the Confucian classic the Book of Rites and in common sayings. They touch upon the quality of return, e.g. to recompense injury with kindness or injury, and quantity in exchange relationships, e.g. a person should return either lots more or nothing, or a little bit more, or the same amount of things to those people who have helped or presented gifts to him, etc. This treatment of exchange relationships can be more or less fitted into Sahlins's reciprocity typology. Yang L. lists bao's wide range of meanings: report, respond, repay, retaliate, and retribution, response, return, etc., and claims that bao as a verb refers to the action of exchange, and that bao is also a basis of social relations and principle of reciprocity.

Hufui:

They are huizeng (return), yibei hucheng (address to each other between different generations), quanli yiwu duideng guanxi (rights and obligations on a reciprocal basis), pingdeng huhui (balanced reciprocity), yuanshishi wuwu jiaohuan (generalised reciprocity), and budengjia jiaohuan (negative reciprocity). Instead of huhui Wang Mingming also uses huhui jiaohuan for reciprocity and gaihua jiaohuan for Mauss's generalised exchange. Strangely enough, Wang did not mention at all Sahlins's different types of reciprocity in his general introductions of anthropology and his related studies of social support. In Yan Yun xiang's Chinese version of The flow of gifts, reciprocity was used in two ways.

Conclusions

Based on theoretical and empirical research, author has created, the scientific philosophic theorem model of corporate reputation in value chain management on Chinese logistics market. There is presented a base of Chinese corporate reputation and value chain management as composing whole structure of Chinese business philosophical harmony has always been a highly valuated virtue. Harmony is at the core of Chinese traditional business culture. Equilibrium and harmony were highly valued by Chinese corporate reputation. "Pursuing harmony" refers to moderation, fitting, balance and harmony. Chinese harmony is based on these principal factors as guanxi, renqing, mianzi, ji, bao (pao), chaxugeju, yuan and fu, huhui.

References:

1. *Barnett, M. L., Jermier, J. M. and Lafferty, B. A. 2006. Corporate reputation: The definitional landscape. Corporate Reputation Review, 9 (1), pp. 26--38.*
2. *Baumol, William J. The Free-Market Innovation Machine, Analyzing the Growth Miracle of Capitalism. Princeton: Princeton University Press, 2002.*
3. *Bosworth, Barry, and Susan M. Collins. 2008. "Accounting for Growth: Comparing China and India." Journal of Economic*

Perspectives 22 (1) Winter.

4. *Cai, Fang, and Yang Lu. 2013. "Population Change and Resulting Slowdown in Potential GDP Growth in China." China and the World Economy. Special Issue: Demographic Dividend and SocioEconomic Development 21 (2) March-April*
5. *Child, J., Chung, L., Davies, H. and Ng, S-H. (2000). Managing Business in China. Hong Kong: Hong Kong General Chamber of Commerce.*
6. *Clive, C. 1997. Part I: Corporate Reputation as a Strategic Asset: Corporate Reputation and the Bottom Line. Corporate Reputation Review, 1 (1), pp. 19--23.*
7. *Dobb, M. H. 1973. Theories of Value and Distribution since Adam Smith: Ideology and Economic Theory, Cambridge: Cambridge University Press.*
8. *Eichengreen, Barry, Yeongseop Rhee, and Hui Tong. 2004. "The Impact of China on the Exports of Other Asian Countries." NBER Working Paper No. 10768, Cambridge, MA. IMF (International Monetary Fund).*
9. *Gernet, J. (1982). A History of Chinese Civilization. Cambridge: Cambridge University Press.*
10. *Gerth, H.H. and Mills, C.W. [eds.] (1946). >From Max Weber: Essays in Sociology. New York: Oxford University Press.*
11. *Fombrun, C.J. (2001), Corporate Reputation – Its Measurement and Management, in: Thexis, 4/2001, pp. 23–26.*
12. *Fombrun, C, S 1996, Reputation: Realizing Value from the corporate linage, Boston: Harvard Business School Press.*
13. *Fombrun, C. and Riel, C. B. M. 1997. The reputational landscape. Corporate reputation review, pp. 1-16.*
14. *Frankel, Jeffrey A. and David Romer. "Does Trade Cause Growth?" American Economic Review, 89(3), June 1999, pp. 379-99.*
15. *Hickson, D. J. and Pugh, D. S. (1995). Management Worldwide: The Impact of Social Culture on Organizations Around the Globe. London: Penguin*
16. *Hofstede, G. (1980). Cultures' consequences: International differences in workrelated values, Sage: Beverley Hills CA. International Herald Tribune, (2006) http://www.iht.com/articles/2006/06/29/bloomberg/sxcarlyle.php*
17. *Porter, M. (1985) Competitive Advantage. Creating and Sustaining Superior Performance. New York: Free Press*
18. *Sanchez, J. and L. Sotorrio: 2007, 'The Creation of Value through Corporate Reputation', Journal of Business Ethics 76, 335–346.*
19. *Schellekens, Philip. 2012a. Sustaining Growth. China Quarterly*

Update Series. Beijing: World Bank.

20. *O' Brien, D.P. 2004. The Classical Economists Revisited. Oxford: Oxford University Press.*
21. *Roberts, P. W. and G. R. Dowling: 2002, 'Corporate Reputation and Sustained Superior Financial Performance', Strategic Management Journal 23, 1077–1093.*
22. *Roberts, K. H. (1970). On Looking at an Elephant: An Evaluation of Cross-cultural Research Related to Organizations. Psychological Bulletin, 74: 327-350.*
23. *Tolbert, P.S. and Zucker, L.G. (1996). The Institutionalization of Institutional Theory.*
24. *Weber, M. (1964). The Theory of Social and Economic Organization. Trans. By A.M. Henderson and T. Parsons. New York: Free Press.*

CONCLUSION

The era of global transformations proclaims, on the one hand, the voluntary participation of all countries of the world in globalization, and, on the other hand, the objective necessity to participate in it. The current stage of global transformations has a paradoxical character and is accompanied by both anticipated consequences and unexpected manifestations of its specificity. Global transformations actively affect economic processes at all levels – from economic entities to the international economic environment.

The main contradictions of global economic transformations are: between the social nature of production and the private nature of the appropriation of its results; between physical and mental work; between limited resources and constantly growing needs for them; between a high level of technical development and an insufficient level of education and qualification of employees; between the achieved level of production concentration and insufficiently developed specialization; between separate types and forms of ownership; between democratic and authoritarian management methods; between market and state levers of economic regulation.

A clear manifestation and indisputable sign of the paradox of modern global transformations in the economy is the fact that the future of humanity is associated with the rejection of the institution of national statehood, the limitation of national sovereignty through the development of supranational and transnational economic institutions and organizations. Accordingly, economic systems must undergo a corresponding transformation, or adapt to new economic conditions, or unite and create new economic structures. At the same time, it is important to preserve resource potential, accumulate it and achieve synergy, implement strategic management, marketing strategies, finance and investment management systems, and form new business structures.

The results of the authors' research in the scientific monograph are devoted to solving the problems of forming a new methodology of strategic management, marketing support for the functioning of economic entities, the introduction of modern models and technologies of financial management and mechanisms of entrepreneurship development in the conditions of global economic transformation.

An important component of the scientific monograph is the development of new models of anti-crisis management, business risk management, supply chain management, digital transformation in tourism and the introduction of leadership entrepreneurship.

The results of the research presented in the scientific monograph reflect the theoretical, methodological and practical aspects of diagnosing the financial stability of business, knowledge and education management, the formation of the corporate culture of logistics companies, advertising development, the differentiation of state revenues, the impact of investments in energy saving.

It has been established that globalization stimulates the revision of the principles of economic systems management at both the national and supranational levels. In order to satisfy human needs through the advantage of competitive markets, with clear rules and political and geographical boundaries, management at the specified levels should become more efficient and coordinated.

At the same time, the trends of undivided dominance of the politics of international organizations that support global markets over the activities of economic systems that care about the provision of public goods, in particular the preservation of peace, environmental protection, protection of human rights, the fight against poverty, health care development, culture, education, etc.

Global transformations are also caused by a new wave of technological innovations, as well as the development of a person, the elevation and diversification of his needs and creative possibilities. These transformational processes have a systemic nature and lead to the formation of qualitatively new structural characteristics of the global economy, which collectively mean the formation of a new technological and socio-economic way of life for humankind. These changes will have a fundamental impact on all economic systems, ways of organizing business, priorities and methods of regulating and ensuring economic growth and development.

It has been established that economic entities are objectively involved in international integration processes, which leads to the need for the development of an effective and appropriate to modern conditions potential management mechanism, capable of adapting the processes of formation and direction of available resources in accordance with the changing and unpredictable situation of the global economy. Ensuring the investment attractiveness and competitiveness of economic entities motivates modern theory and practice to master the adaptive toolkit of effective management of the processes of formation, reproduction and realization of potential to ensure the future trends of the country's economic development, establishing priority opportunities for attracting existing production, natural resources, human and other types of potentials and financial capital, balance of branches of the national economy and sectoral production and economic systems.

In the conducted research, the problem of reproduction of potential at the level of macro- and microeconomic economic systems, development of effective concepts of balanced structure and rational use of potential as the main factor of acquiring the ability of the economic system for competitiveness and self-development were reflected in practice. Current paradigms of the theory of the potential of economic systems are formulated mainly on the conceptual basis of strategic management based on the basic principles of systemic and functional potential management. Conceptual trends became the basis for the development of theoretical paradigms of potential, the latest systems of balanced development of structural elements of economic resources of material and non-material types.

Taking into account the dynamic changes of the global and national socio-economic environment, the trend to change the world financial architecture, a new justification of approaches to determining the productivity and competitiveness of the potential of modern economic systems is needed, a change of view on the significance and importance of certain elements in its aggregate value.

The results of research on the imperatives of development of management and marketing in economic systems indicate that global transformations have changed approaches and tools to the marketing and management system. Globalization of market processes, development of innovations and economic processes, changes in social values, social priorities and competitive advantages became the determining factors influencing the process of transformation of management and marketing tools. Globalization processes were significantly influenced by the rapid development of technology markets, comprehensive informatization and the spread of computer technologies in the world. The development of economic systems in the conditions of global transformations was influenced by the internationalization of the economy and the consumer market, the transition to the post-industrial stage of development, the increase in the level of innovative activity of product manufacturers and the quality of products. Taking into account the rapid development of digital technologies and digitization, it is possible to predict the emergence of a new communication system that characterized by the integration of various means and its interactive potential.

It is proved that the transformation of the paradigm of financial and investment management of economic systems reflects the need for the formation of adapted views on modern financial and investment management processes, and ensures the identification of a number of prerequisites aimed at the development of effective financial mechanisms. Ensuring the financial stability of economic systems in the context of global transformations depends on their ability to generate financial flows and attract the necessary amount of investment. Financial flows of economic systems are interconnected with material and informational flows, which reflects the expediency of their synchronized management and determines the economic result. Financial management in logistics systems must necessarily be based on taking into account both the financial and logistical aspects, and therefore must be aimed at forming the value of the logistics chain, which will create conditions for the growth of economic systems. Scientific provisions laid down in the integral logistics paradigm for financial management of economic systems are capable of turning conflicts, problems, disparity of relations into an opportunity to obtain the effect from harmonization of interests and full cooperation throughout the logistics chain.

The development of entrepreneurship in the context of global transformations is carried out due to the emergence of new promising forms of entrepreneurship, adaptation to changes in the conditions of the functioning of economic entities, joint activities and maintenance of large economic systems, optimization of economic activities and the taxation system, expansion of regional boundaries of cooperation between economic entities , flexibility in prospective markets and penetration into the field of informatization and innovation.

In general, the authors of the scientific monograph are convinced that in the conditions of global transformations, in order to improve, create and effectively function the current management system of economic entities, it is necessary to develop and implement new strategies for development and adaptation to changing economic conditions, models of strategic management and marketing support, the use of information technologies and the introduction of innovations, to improve the management system of finances and investments not only of individual economic entities, but also of state finances in the context of decentralization, to widely apply digitalization in the economic systems management and adaptation mechanisms when economic conditions change, to implement better practices of economic systems management in crisis situations.

THE INSTITUTE OF ECONOMICS OF THE LATVIAN ACADEMY OF SCIENCES

The Institute of Economics of the Latvian Academy of Sciences is registered in the Register of Scientific institutes of the Ministry for Education and Science of the Republic of Latvia as a scientific and research institution. The action and activities of the Institute are oriented to studying economic problems significant for Latvia and Europe, seeking and creating innovative and scientifically-based solutions.

The mission of the Institute is to facilitate the development of Latvian economy in the regions and in the country as a whole, preparing based on researches, competent assessments and opinions on ongoing processes in the economy of Latvia, Baltics and Europe, as well as elaborating recommendations related to development opportunities of economy.

The activities done by the Institute are the following:

- creation of scientific research methods in social sciences;
- financial market analysis;
- scientific consultations on the development of research works, publications and dissertation theses;
- EU project development and implementation;
- development of policy recommendations to policy-makers;
- round-table discussions and expert meetings organization;
- annual International Economic Forum organization.

Areas of studies of the Institute include:

- investment attraction and entrepreneurship development;
- reduction of differences in the entrepreneurial environment for improving the investment climate;
- priority sectors of Latvian export;
- interaction of economics, education and culture to create knowledge-based society;
- opportunities for the development of tourism;
- regional development;
- social entrepreneurship;
- human capital development;
- study of the entrepreneurial environment in the Baltic States;
- increases in energy efficiency of different industrial processes;
- studies on national economic development, etc.

Contact us:
Phone No.: +371 20207092
E-mail address: ei@lza.lv
Web address: https://www.eilza.lv
Address: Akadēmijas laukums 1, Rīga, Latvija, LV-1050

Strategic imperatives of economic systems management in the context of global transformations

Scientific monograph
edited by Dr.oec. Prof. Maksym Bezpartochnyi,
Dr.oec. Prof. Viktoriia Riashchenko,
Dr.paed. Nina Linde

compiled by Olesia Bezpartochna

Format 60x84/16
Circulation: 100 copies
11,36 p.s.

Institute of Economics of the Latvian Academy of Sciences
Riga, 2021

ISBN 978-9984-774-32-9 (print)
ISBN 978-9984-774-31-2 (PDF)