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CREATIVITY IN TIMES OF WAR AND PANDEMICS

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Abstract. The paper analyzes issues of creativity in times of war and pandemics, its concepts, origins, and possible development, together with the techniques and features it can be characterized by. It describes the potential present in each of the examined cases brought by the times of unrest. The scope for defining creativity in times of war and pandemics is broad and results in many manifestations. The discussion turns around the concept of creativity in everyday life and its applicability. The authors investigate whether and how to prove the interrelation of creativity to war and pandemics. They also discuss the emergence of creativity in war and pandemics because of provoked human imagination and the urgent necessity to act.

Keywords: crisis; creativity; businesses; pandemics; war

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1. Introduction

According to Serbian Professor Emerita Milena Dragičević Šešić, our countries, meaning the ones that regained their independence in or around the 1990s, live in the "most turbulent and crisis-ridden" times (Dragičević Šešić & Sanjin Dragojević, 2005, p. 15). Her book is dedicated to the transformations in society at the dawn of the Millennium (Dragičević Šešić & Dragojević, 2005). However, it speaks about the political changes that were running before 2000 (with the hope that the "armed conflict and destruction" were gone), which is still relevant. Sadly enough, those crises in the Balkans had already left behind a "legacy of hatred, prejudice, and high levels of pathological social behaviour when the world confronted a new war." (Dragičević Šešić & Dragojević, 2005, p. 15). Those decades are now often called *turbulent times*, as every day we have reminded of a sort of a Hollywood movie: "Fasten your seat belts, it's going to be a bumpy night", as a character played by Bette Davis in "All About

Eve," says. (This famous line is spoken by Margo Channing, played by Hollywood actress Bette Davis, in the movie *All About Eve*, 1950, 20th Century Fox). Creativity is now envisioned as a panacea "for all the ills of the social system" (Dragičević Šešić & Dragojević, 2005, p. 15), including the most modern paradigm of the Ukrainian war. "In the case of the Balkans, even during times of war, creativity hubs were expected to go ahead with their transformation, despite the legal, political and economic systems to support the transformation in culture had not been established", professor Dragičević Šešić re-considers the issue (Dragičević Šešić, 2021). In turbulent circumstances, the creative industries/initiatives that, among other issues, suffered from the lockdown and the war are seen as the most vulnerable business. The recent article by Dragičević Šešić (2021) discusses the economic changes that occurred over the recent several years, which triggered the artistic initiatives. The artists complemented the world's "performance" with their creativity and demonstrated the surrender to the "turbulences".

Christopher Scanlon (2005) raises a valid question of whether creativity is a realm of exclusively artistic activities or is more of a generic origin. One thing is sure that we might say: these buzzwords "are much overused and abused nowadays" (Scanlon, 2005, p. 134). Indeed, he is correct that "creative" and "creativity" have recently become mantras in business texts.

As Scanlon mentions, "the increasing interest in creativity owes no small debt to Richard Florida, Professor of Public Policy at George Mason University." Florida is one of the most famous creativity gurus of the century and the author of numerous books on the importance of creativity to individuals, firms, cities, and regions. Florida put particular emphasis on the emergence of what he refers to as the "creative class", meaning the "individuals who work in jobs which require some form of personal input or expertise, which includes artists, writers, sculptors, software engineers, graphic designers, scientists, and academic researchers. Such people, according to Scanlon, show that Florida claims the mentioned jobs account for around one-third of the US workforce and are the key to generating economic value" (Scanlon, 2005, p. 134).

Among the major issues in the contemporary world that we confront in the multiple areas of human activities, Milena Dragičević Šešić mentions globalization, migrations, the COVID-19 crisis, new labour ethics, post-truth environment, climate change, global warming, and especially populism, authoritarianism, and dictatorship (Dragičević Šešić, 2021, p. 2).

Another author, Matthew Roberts, quoted by Scanlon (Scanlon, 2005, p. 134), thinks that creativity, design, and artwork can help a lot, often in ways you cannot always predict. Ukrainian creative frontline has become a significant force in repelling the Russian full-scale invasion of this peaceful country that is now fighting for its freedom and independence. The article's authors further examine the basic concepts of creativity and its transformations during war and pandemics.

The research aims to investigate the methods and particularities of creativity in times of war and pandemics.

Objectives of the research:

- to present the concept, benefits, and role of creativity in times of war and pandemics in scientific studies;
- to summarize the knowledge of creativity in times of war and pandemics;
- to apply the case study method relating it to creativity in practice in times of war and pandemics.

Methodology

The article uses the methods of theoretical analysis, empirical research, and case study analysis. The analysis of scientific literature is an academic research method. While reading, analyzing, and comparing, its essence is that the authors evaluate the previous scientific literature in a particular field and assess the current situation, solving a specific problem. This section provides the context of the study and demonstrates its importance to the study. The purpose of the analysis of scientific literature is to base the investigative and analytical part methodologically.

The empirical part is a periodical literature review of the chosen time, which is dedicated to quantitative changes in business during pandemics. Case studies are widely used in all areas of the social sciences. Case studies are used as a reliable research strategy. They are one of the most common methods for conducting qualitative research. In this article, the cases examine creativity applied in the humanities during the war.

The article consists of an introduction, a theoretical part, a research part, a discussion, and conclusions. The article's introduction describes the topic's relevance, the problem, the purpose of the research, tasks, methods, and methodology. The theoretical part of the article describes the concept of creativity and the practices of creativity during political unrest. The third part of the article analyzes cases of creativity during pandemics and war. A discussion and conclusions are presented.

The input of this study is to develop theoretical and empirical arguments about the use of creativity in the case of pandemics and war. In addition, the possibilities of promoting creativity in pandemics and war are examined in detail, using the issues of Lithuania and Ukraine.

2. Theoretical background of creativity in times of war and pandemics

2.1. Creativity concept

Creativity is the ability to develop new ideas, think independently, non-stereotypically, orientate quickly in a difficult situation, and solve it efficiently and atypically. In addition, creativity is the ability to create new things, products, and services. In addition, creativity is the ability to look at an event or phenomenon in a way others need to learn, manage, or understand.

According to Jalan and Kleiner (1995) creativity is best described as the degree to which an employee demonstrates new ideas or adaptations to activities and solutions at work. There are obstacles to fully developing the creative potential of both organizations and individuals. These obstacles can be overcome with the help of exercises offered by psychologists.

Cook (1998) mentions that the success of product and service innovation depends on creativity, which is a crucial factor. With a healthy and constant supply of ideas, most organizations would continue to exist. The critical challenge facing leaders in the 21st century is how to capitalize on personal potential and harness it to create organizational innovation and excellence.

Martins and Terblanche (2003) mention that values, norms, and beliefs that play an essential role in creativity and innovation can support or inhibit creativity and innovation, depending on how they affect individual and group behaviour.

Gomez (2007) examines these different definitions of creativity, the link between creativity and intelligence and those factors that affect creativity, such as convergent and divergent thinking. In addition, the article examines the importance of computer technology, testing ideas, thoughtful review, and evaluation of thoughts.

Yar Hamidi et al. (2008) notice that creativity needs are to be taken into account in entrepreneurial intent models. However, using intentions as a dependent variable has drawbacks, as it may not distinguish between 'dreamers' and 'doers'.

Zenker (2009) mentions that the creative class as a target group is trendy in local marketing. This paper discusses the needs and preferences of this target group and the need to define the creative style more precisely.

Klijn et al. (2010) notice that a lot of varied research has been conducted on creativity in organizations, but a comprehensive review document on organizational creativity still needs to be added. This document satisfies the need for a survey. The findings of this paper provide a well-documented framework for addressing measures to enhance creativity in an organizational setting. In addition, it could provide suggestions for further research and be a good starting point for newcomers to this field of study.

Martens (2011) states that most literature on creativity and the physical workplace is about communication. Creativity research is broad and recognizes that culture, process, and activity are moments of creative thinking and insight that can be supported in the physical workplace.

Runco and Jaeger (2012) mention creativity needs originality and efficiency. Are those two criteria so necessary? Indeed, novelty is required. It is often labelled an innovation, no matter the label, if nothing unusual, new, or unique is ordinary, every day, or regular. It is not original, so it needs to be more creative. Efficiency can take the form of value. This label is well-defined in economic research on creativity; it describes how original and valuable products and ideas depend on the current market or, more precisely, the costs and benefits. Creativity prerequisites are both originality and efficiency.

Mumford et al. (2012) noticed that creativity is not just a matter of generating ideas, although it can significantly affect creativity. Instead, creativity is defined as creating high-quality, original, and elegant solutions to problems. Three key things need to be kept in mind to harness the creativity and innovation of organizations. First, creativity and innovation are very complex phenomena at any level of analysis. Second, several phenomena exist at the individual, group, and organizational levels. Third, phenomena operating at one level are not necessarily well integrated or compatible with phenomena used at other levels.

Al-Ababne (2012) notices that creativity is defined in various ways. Creativity is defined as "devising novel, appropriate ideas in any field of human activity, from science to art education, business, everyday life", so ideas must be new and depend on the opportunity to solve a problem presented. Al-Ababne (2012) highlighted that creativity generates new, relevant ideas in any field of human activity, e.g., from science to artistic education.

Kandi and Kandi (2013) state that creativity is a combination of creativity, flexibility, and intense sensitivity to ideas, allowing the learner to think about different and generative results from the insensitive thinking outcomes that lead to personal satisfaction or perhaps the happiness of others.

Samašonok and Leškienė-Hussey (2015) envision creativity becoming the foundation of a prosperous professional career, improving career prospects and ensuring practical problem-solving; therefore, creative personality development is critical. Personal skills development to respond creatively to contemporary global challenges by training future professionals is one of the main improvement tasks in organizing the study process.

Raymundo (2020) notices that higher education institutions often need to see the importance of fostering students' creative thinking. A review of the prevailing practice in a fully online distance learning institution in higher

education has revealed a need for learning activities that encourage creativity. Kacerauskas (2020) emphasizes the role of a creative society in building a creative economy.

Speckbacher (2021) suggests that creativity is the starting point for innovation, which can be defined as the successful implementation of creative ideas. Innovation can come from creative ideas within or outside the organization.

Yang et al. (2021) notice that the leader's humour is positively related to the employees' creativity, and the relative energy mediated this influence. In addition, traditionality also reduced the relationship between leader humour and relationship energy and weakened the indirect connection between leader humour and employee creativity through relationship energy.

According to Piirto (2021), creativity can be taught and nurtured, and we can create classrooms where creativity thrives.

Childs et al. (2022) mention that twentieth-century contributions to creativity include the greater understanding that emerges in such areas as psychology and neuroscience. In the second and third decades of the 21st century, we have seen significant advances in automated and augmented creativity in data mining and artificial data mining intelligence (AI). A modern analogy is an online platform Patreon, a crowd-based service to support creators.

Turner et al. (2022) notice that creativity can also be identified as a team or organizational construct rather than just an individual-level construct. According to the abovementioned authors, creativity at the corporate level includes new product development. By identifying creativity as an individual, team and organizational construct, literature portrays creativity as a multilevel construct.

Botella et al. (2022) analyze that scientists have been studying how the creative process takes place and what factors influence it for many years. The scope of their studies is essential in the school context; students can develop their creativity and thus meet the needs of the society of the 21st century. The results of this research will allow modelling, better understanding, and identification of the creative process in students when they design and produce valuable objects in the context of education and training having ecological validity (real teaching context).

Marrone et al. (2022) mention that innovative products are measured by novelty and effectiveness, where novelty refers to a new or original idea or concept, and effectiveness refers to the ability of a product or solution to achieve a desired result. The process is defined as the cognitive mechanisms of creativity and is central to understanding what artificial intelligence can offer to create new and practical solutions to problems. Therefore, to encourage imagination and artificial intelligence, educators should consider the process of creating and the product of creative endeavours.

2.2. Assessing creativity in war and pandemics

Creativity is the power of innovation in various fields, which is necessary to create new products, services, and ideas and solve non-standard problems (Zsolnai & Illes, 2017). A creative person is a “white collar worker”, a musician, and a creator of new, innovative technologies with little knowledge of music. In addition, he/she is likely to be characterized by other qualities that usually accompany creativity, such as non-stereotypical, abstract thinking, having quick orientation, the ability to solve problems on their own and to create a new quality, as well as curiosity, motivation, imagination, and self-confidence. Creative people often self-realize themselves more

deeply in different fields than in one. Creativity can help you adapt to an ever-changing life, discovering new ways and means of working. Before the pandemic, this capability was considered one of the most important in the 21st century, but its importance has grown especially recently. Going through change, when there is a lot of anxiety and oppression, it is easy to succumb to a wave of resentment and denial. It is tough to think and plan your life, often filled with painful experiences and losses. Being creative can help us stop and look at our abilities and change reality from the sidelines and somewhat differently. Factors that promote employee creativity include leadership, organizational culture and climate that fosters creativity and innovation; a challenging and empowering context of work tasks; an inspiring physical work environment; innovative and creative thinking of employees and the ability to solve problems creatively, together with the employees who tend to be smart to take risks; employee well-being, job satisfaction, strong intrinsic motivation, or tendency to be creative. In a pandemic, some organizations face challenges in fostering and managing employees' creativity and are increasingly encouraged to look for creative challenges. Solutions, transition to innovative management practices, new strategies for developing and managing creativity and modern employability competencies for employees are related to creativity, leadership, and entrepreneurship.

According to the Office of the Equal Opportunities Ombudsman (2021), quarantine restrictions caused by the coronavirus pandemic have changed everyday living and working conditions. While telecommuting is not new, its scale has never been as significant as during the pandemic. Research reveals that this experience has transformed many workplaces, increased the flexibility needs of workers and opened opportunities to change the usual work culture fundamentally. According to Eurostat, in 2019, just before the pandemic, 14.7 per cent of workers worked from home occasionally or frequently. Lithuania's percentage was one of the lowest, comprising only 4.7 per cent. Before the pandemic, this form of work was most widely used in the significant computer-intensive sectors: information and communication technology and knowledge-based business services (consultancy, legal services, research, and analysis services). As a result, such work was most familiar to highly skilled workers and prevalent in countries with the largest market for such workers (for example, in Sweden, where 37 per cent of all workers worked from home often or occasionally in 2019).

Atthahira et al. (2021) noticed that COVID - 19 suddenly became a global problem and attracted attention and responses from surrounding policymakers around the world. There are various government policies, including one instructing the people how to do their homework, study and even pray at home. Application goals of social and physical isolation in Indonesia inhibit the COVID - 19 transmission chain. Organizational change is necessary during a pandemic to survive in these uncertain conditions. Organizations that adapt quickly to environmental change is an organization that survives. Change is needed development of creative ideas so that workflow continues to perform well during the COVID - 19 pandemic. The changes themselves are necessary for the organization changing times and societal needs constantly. COVID - 19 suddenly became a world problem and attracted the attention and responses of policymakers worldwide. The government has taken various policies, including instructing people to carry out their activities at home, such as working, studying, and even praying. The social and physical distancing in Indonesia aims to inhibit the chain of transmission of COVID - 19. Organizational change is necessary during a pandemic to survive in these uncertain conditions. Organizations that adapt quickly to environmental changes are the organizations that survive. The change requires the development of creative ideas, i.e., the workflow continues to run well amid the COVID-19 pandemic. Change itself is necessary for an organization, given society's changing times and needs, which transforms continuously.

Pérez-Sobrino et al. (2022) describe the models of metaphorical creativity, including creative realizations (oral and visual) of large-scale cartography, the use of single source domains, source domain valence shifts and the exploitation of source-specific source domains in discourse communities.

Tang et al. (2021) suggest creativity positively impacts social well-being. Due to the existence of sporadic and extreme 'lone geniuses' such as van Gogh, Tesla and Beethoven, the connection between loneliness and creativity

has become almost a cliché. However, although ubiquitous, this myth of a ‘lonely genius’ seems to have been disproved (Glăveanu, 2020). So far, it has not been scientifically studied. Research evaluating team creativity has shown that individuals who work well in teams and build close and positive relationships improve creativity (Reiter-Palmon & Paulus, 2020). In addition, recent work on creativity and social relationships has shown that developers and students have been more creative in maintaining better social relationships, such as romantic relationships or friendships (McKay et al., 2017; Lebuda & Csikszentmihalyi, 2020).

Tang et al. (2021) argue that the coronavirus disease pandemic (COVID - 19) has caused unprecedented uncertainty and challenges for the global economy and people's daily lives. Anecdotal and scientific evidence has confirmed a positive link between crisis experience and creativity. Although ubiquitous, the relationship between crisis, creativity and well-being has yet to be sufficiently explored in different countries using a sample of working adults. The recent study consisted of 1,420 workers from China (n = 489, where 40 per cent were women), Germany (n = 599, where 47 per cent were women) and the United States (n = 332, where 43 per cent were women) aiming at the examination of whether creativity can act as an effective means of overcoming the crisis and achieving prosperity and social well-being. Multidimensional analysis showed that the perceived impact of COVID-19 was positively related to involvement in creative processes and positively related to the creative growth of the workers themselves. Creative development has been associated with higher levels of prosperous well-being.

Zhai et al. (2021) assert that during the COVID-19 pandemic, individual emotional creativity was significantly positively correlated with a person's perceived social support, regulatory emotional self-efficacy, and PTG (further in the text – posttraumatic growth) and was significantly negatively associated with person's mental health problems (e.g., anxiety, depression, and somatization). This study confirmed that the predicted effects of emotional Creativity on PTG were due in part to perceived social support, regulatory emotional self-efficacy, and perceived social support together with regulated emotional self-efficacy; the predictable effects on anxiety and depression were due to perceived social support, regulated emotional self-efficacy, and perceived social support, also regulated emotional self-efficacy; and the predictable effect on somatization was due to perceived social support. The authors found that during the COVID-19 pandemic, individual emotional creativity was significantly positively correlated with individual perceived social support, regulatory emotional self-efficacy, and PTG, while it was significantly negatively associated with individual mental health problems (e.g., anxiety, depression, and somatization), which is consistent with previous studies. The findings by Zhai et al. (2021) correspond to the research of Orkibi and Ram-Vlasov (2019) that emotional creativity can positively predict PTG and negatively predict mental health problems.

Nobre (2020) thinks we must agree on approaches before analyzing the impact of the Coronavirus disease (COVID-19) crisis on the creative economy sectors and their ability to regenerate. First, there is no unique definition of the creative economy. Secondly, there are differences in which sectors make up the creative economy. Thirdly, we can confront a lot of critique of the concept, composition, and methodologies towards the creative economy.

Popa et al. (2021) notice that the COVID-19 pandemic has financial and operational consequences for many areas of human activity, including those related to the creative industries with their ability to survive by stopping all events in physical space. Long-term effects of the current health crisis are causing changes in cultural demand and supply and stressing our need to adapt and think about new ways of working. Based on this situation, the study mentioned earlier explores how Romania's creative sector adapts. The authors achieved this through 25 semi-structured interviews and case studies of two cities that are among the most culturally and culturally significant creative industries, Timisoara and Cluj-Napoca. They have identified people capable of acting in the short term to ensure the survival of some spaces; in the medium term through activating mechanisms that foster an entrepreneurial spirit and enable adaptation to any external shock. More about the COVID-19 pandemic has had

both economic and activity-related effects on several areas of activity, among which those involving the creative industries have proved to be weak in their capacity to survive the halting of all events held in physical spaces.

Vecco et al. (2022) confirm that COVID-19 is a major strategic challenge, disrupting demand and supply mechanisms and production capacity, increasing uncertainty and financial instability, and leading to scenarios that could not have been foreseen in the pre-crisis period. COVID-19 disrupted the market and business ecosystems the humans have traditionally known; on the other hand, it accelerated innovation and introduced the so-called 'imposed service innovation'. From the point of view of innovation management, it is fascinating that this acceleration of creation was not because organizations wanted to innovate but because they had to limit the harmful effects of the pandemic. In addition, this specific crisis has changed thinking and created business opportunities that would have never been considered under normal circumstances. The study of this 'imposed service innovation' is relevant in the context of the people experiencing a transition from a pandemic to an endemic and will increasingly face such phenomena in the future. There are usually two types of strategies used in a crisis: reactive or proactive. The scientists found in this study that all strategies developed over the period are reactive. To date, the creative industry or developer has yet to be able to implement a proactive approach because the scale and impact of this pandemic remain unpredictable.

3. Research on creativity in the world and Lithuania. The periodical press review demonstrates the quantitative response of businesses to the pandemic

3.1. Empirical research

As Christopher Scanlon (2005, p. 134), in his article dedicated to Richard Florida's concepts of the creative class, expresses his doubt whether creativity deals with all 'white collar' works or the ones with the artistic variable; therefore, the authors attempt spotting the relationship of the ingenuity and the 'turbulences' of the modern times.

Our methods designed to investigate the ways of the impact of COVID-19 on creativity deal with the examination of the press over the recent years, where one can find data on the business sector and society in general dealing with "turbulences" (Most citation is taken from the business publication "Verslo žinios weekly" (VZ).

According to Tom Jacobs, "War can inhibit creativity. Societies engaged in conflict have fewer resources to spend on art; they also often restrict the freedom artists require" (Jacobs, 2017).

Karol Jan Borowiecki, a University of Southern Denmark professor, reports that "overall, wars have been detrimental to the creative process" (Borowiecki, 2014, p. 105). However, he finds that it is particularly true for conflicts where the composer's home country is engaged in either a civil war or an armed conflict it initiated. In the meantime, artistic productivity goes up during defensive battles; Borowiecki says that it is probable that war makes an impact on the creator's emotional state, however, not directly, and "some wars may result in a psychological blockade of the creative process" (Borowiecki, 2014, p. 105).

Borowiecki and Hagan (2013) investigated the work of 115 prominent composers born between 1800 and 1910. According to the authors, this period encompasses many of the most influential composers and covers wars that significantly shaped most recent history. "The econometric analysis aims to compare composers' lifetime productivity in times of peace and during certain types of war. Based on point estimates age - productivity profiles for composers that have experienced peace or a specific kind of war each year during their careers are generated" (Borowiecki, 2014, p. 85).

The essential idea, which needs more attention, is that creativity is triggered in a particular way. It includes many indicators that might influence the complex, whereas they do not work if taken separately. "The findings of this

short study are quite conclusive. War, perhaps not unexpectedly, negatively impacts individual life-cycle creative output, despite some claims to the contrary. Perhaps the negative impact is not as large as one might expect though, thereby lending credence to the theories that link the stress and trauma of events such as war to an enhanced creative output” (Borowiecki & O’Hagan, 2013, p. 350).

A rich and relatively comprehensive Internet website dedicated to the issues of the inter-relation of war and creativity is The Correlates of War (COW) (<https://correlatesofwar.org/>). Correlates of War (COW) project homepage is an interactive tool by which the authors, as they declare it on the website, "seek to facilitate the collection, dissemination, and use of accurate and reliable quantitative data in international relations" (<https://correlatesofwar.org/>). The website says, “The Correlates of War Project was founded in 1963 by J. David Singer, a political scientist at the University of Michigan. The original and continuing goal of the project has been the systematic accumulation of scientific knowledge about war. Joined by historian Melvin Small, the project was initiated by assembling a more accurate data set on the incidence and extent of wars in the post-Napoleonic period. Singer and Small needed to resolve numerous difficult issues scientifically and operationally. Building upon the work of other pioneers such as Pitirim Sorokin, Lewis Frye Richardson, and Quincy Wright, Singer and Small published “The Wages of War in 1972”, a work that established a standard definition of war that has guided the research of hundreds of scholars” (<https://correlatesofwar.org/>). According to Borowiecki (2014), the project is committed to the free public release of data sets to the research community, to release data promptly after data collection is completed, to provide version numbers for data set and replication tracking, to provide appropriate dataset documentation, and to attempt to update, document, and distribute follow-on versions of datasets where possible.

The authors of the article have examined the website "as the centre of the data distribution efforts, to serve as a central site for collection of possible error information and questions, to provide a forum for interaction with users of Correlates of War data" (<https://correlatesofwar.org/>). The creators of the website express their belief that this is a good "way for the international relations community" to contribute to the further research.

Lithuanian press review. Quantitative dynamics. The reaction of businesses to the pandemic

The following chapter is based on the data published in the periodical "Verslo žinios weekly" over the recent year.

In Lithuania, business leaders also can adapt to changes, including war and pandemics, mainly specializing in industries; however, the authors have been interested in the business indicators affected by the pandemics, as the war in Ukraine started later when the article was in the primary state. The authors have examined a large amount of the local press and discovered a lot of proof of the dynamism of commercial activities during the pandemic.

During the second year of the pandemic, the most prominent Lithuanian companies proved their fantastic ability to adapt to difficult circumstances and overcome challenges – most of the leaders managed to increase sales revenue. However, the profits of a third of the top 1000 companies shrank, and not all of them successfully coped with the rising energy prices and inflation. Such trends were revealed by "Verslo žinios weekly" with the credit bureau "Creditinfo" based on the data by the most prominent Lithuanian companies following the 2021 income TOP 1000. The list included those companies that submitted their financial statements to the Register Center (RC) by May 31, 2021.

In 2021, 14 companies exceeded the sales revenue limit; six were retail or wholesale, and four were in production. In 2020, only 10 Lithuanian companies totalled half a billion euros or more. Biotechnologies even surpassed the business sector.

The novelty of 2021 appeared to be the modern biotechnology UAB "Thermo Fisher Scientific Baltics", which made one of the top positions in the list of the most prominent Lithuanian companies. The year's 2020 winner of the silver medal, retail trade UAB Maxima LT, took third place on the list in 2021. The income of Thermo Fisher Scientific Baltics grew by 53.7 per cent in 2020 to 1.94 billion euros; the turnover of Maxima LT in 2021 reached 1.76 billion euros and was 4.2 per cent higher than in 2020.

Orlen Lietuva, the only oil refiner in the Baltic States, saw 4.26 billion Euros in annual income (75.7 per cent higher than a year ago) and a relatively modest 78 million Euros pre-tax profit.

Companies traditionally dominated the TOP 1000 list from three main economic activities – wholesale and retail trade, added by manufacturing, transport and storage, and the first ten leaders were incredibly diverse.

In addition to the primary winners, the transport and logistics company "Girteka Logistics", the state energy company "Ignitis", the agricultural company "Linus Agro", the gas station network manager "Viada LT", and the wholesale company "Sanitex" entered the top ten in 2021, together with fertilizers producer "Achema" and retailer "Lidl Lietuva".

One-third of the businesses saw their profit shrinking. The performance results of a thousand of the most prominent Lithuanian companies vividly reveal challenges in 2021 and abilities to resist;- evaluates the results of the new TOP 1000 Aurimas Kačinskas, Director of Creditinfo Lietuva.

Other businesses also managed to reorient themselves. In the opinion of Tadas Povilaukas (VZ, 2022/07/14), an economist at SEB Bank, Lithuanian business leaders worked to achieve relatively good profitability indicators, which means that most of them were able to reorient themselves and take advantage of the favourable economic growth environment.

The Thermo Fisher phenomenon stands out in numbers. According to him, Thermo Fisher Scientific Baltics, the flagship of the Lithuanian high-tech industry, deserves a special mention in 2021 as well – its profit before taxes amounted to 1.3 per cent of the gross domestic product (GDP) of Lithuania. In addition, after adding costs for employees and intermediate consumption, the influence of this company alone on the country's GDP reaches about 2 per cent. "The main reason for the increase in income is the manufacturing of products directly related to the COVID-19 pandemic and their huge demand. When the pandemic started, Thermo Fisher Scientific was actively involved and made a huge effort to try to contain the pandemic. Products delivered by the company's companies are widely used for diagnostics of COVID-19, including reagents produced by the company in Vilnius" - this is how the biotechnology company bases its excellent achievements in its annual report. The press wrote that Thermo Fisher Scientific Baltics was not only able to take advantage of the pandemic situation, increasing capacity in a short time and offering a highly demanded product. First, the right direction was chosen – mRNA technology.

The commodity price component was identified as critical during the previous years.

According to T. Povilaukas, SEB financial analyst, the year 2021 was favourable for the income of the top thousand industries not only because of the development of the world and Lithuanian economy after the 2020 recession caused by the pandemic but also due to the rapid rise in raw material prices. "Therefore, those companies that extract, produce and trade in materials, raw materials, and energy products stand out in revenue growth," he points out. The economist explains that the leap mainly influenced the impressive 76 per cent revenue growth of "Orlen Lietuva" in the prices of sold products, as the amount of crude oil processed at the factory grew by just 1 per cent last year. The income of the electricity, gas, and renewable energy company "Ignitis", which took the 5th place in the list, increased by 70.4 per cent last year, reaching 862 million euros, and the increased prices of electricity and natural gas in the market contributed the most to this, T. Povilaukas points out. "Due to

increased prices, revenues in 2021 were in the list of the most growing companies; we find gas station operators, companies involved in the production of metals, crops, chemical products and wholesale trade”, says the SEB economist. “Compared to 2020, companies dealing in oil products did better in 2021. After 2020, after the pandemic crisis hit last year, the demand for fuel quickly recovered, trips increased, and therefore the results of most gas station networks improved, except for those with higher prices,” the head of Creditinfo Lithuania mentioned as an additional reason. In his opinion, more price-sensitive customers began to save more and look for cheaper fuel, so the largest gas station company Circle K experienced a decline in revenue (-4.8 per cent) and profit (-21.3 per cent). After receiving 538.9 million euros in income, it fell from 6th to 12th place in the TOP 1000 list of euros pre-tax profit.

Another trend was visible: the pandemic has benefited IT companies. According to Kačinskis (VZ daily, 2022/07/14) the increased demand for mobile IT solutions was a well-taken advantage of telecommunications companies, whose income grew from 5.5 to 15.5 per cent the previous year. “Out of them, the smaller operators gained their income faster, and their profitability was higher. In two years, employees of companies who have become accustomed to remote work would likely continue to use this opportunity – this should encourage the use of mobile Internet solutions by both business and private users. The popularization of e-commerce provides opportunities to earn more for telecommunications companies and IT companies”, assessed by Kačinskis.

Smart investments helped to sustain the market.

Povilauskas singles out industrial companies, whose growth was stimulated by earlier investments that allowed them to take advantage of favourable market conditions, into a separate group of fast-growing companies, including the already mentioned Thermo Fisher Scientific Baltics and furniture manufacturing companies. SBA Home grew by almost 22 per cent, 494 million Euros (15th place); IKEA Industry Lithuania grew by 19 per cent (110.6 million Euros, 91st place), and “Narbutas International” showed a 26 per cent growth (108.9 million Euros, 94th place). Yukon Advanced Optics Worldwide, a manufacturer of optical equipment, increased its revenue by 30 per cent (146 million euros, 62nd place). It is worth mentioning the industrial companies that came to Lithuania with their investments not so long ago and is rapidly increasing their volume here. “HELLA Lithuania” grew 173 per cent to 72.3 million Euros, and “Continental” 494 per cent to 48.6 million Euros), points out T. Povilauskas.

Manufacturers are experiencing challenges compared to other sectors.

However, from a general perspective, in the year 2021, producers had to overcome many challenges, reminds Mr Kačinskis: energy and transportation prices were rising, raw materials were expensive, and problems arose in supply chains. All this dampened the income growth of many manufacturing companies and hit their profitability even more complex – a significant number suffered losses last year.

Last year, fertilizer producers “Achema” reached a 590 million Euros turnover, 15.5 per cent less than a year ago was struck by the price of natural gas. According to the company’s announcement in 2021, in the second half of the year, the gas price started to increase drastically, and by the end of the year, its price was six times higher than in 2020. “Fertilizer buyers, hoping that the price of fertilizers would be temporary, were not inclined to take risks and did not buy fertilizers for the spring period. Due to the unfavourable market situation, “Achema” has not resumed part of its ammonia production capacity since September after scheduled maintenance. The factory finished the year working with one of the two ammonia workshops”, says Ramūnas Miliauskas, CEO of Achema.

Retailers’ profits were modest.

Last year, as before, large retail companies also showed an increase in income, although most of them, except for Lidl Lietuva, showed single-digit growth, notes SEB Bank’s economist. “At the beginning of last year, due to

trade restrictions, it was a favourable time for large merchants to receive a larger flow of customers, as some non-food stores were closed,” explains T. Povilauskas (VZ, *ibid*).

According to A. Kačinskas (VZ, *ibid*), the income of retail chains in the TOP 1000 list grew by 4-10 per cent last year, but most retailers earned a much less pre-tax profit last year than a year ago. “Retailer profits were hit the hardest by rapidly rising operating costs, as last year’s surge in inflation prompted some consumers to review their grocery basket,” he explains. “Maxima LT” wrote in its report that “2021 had the greatest impact on the decline in profitability.” Increased operating costs, especially the cost of transportation of goods and utility services. Last year, the basic salaries of most of Maxima’s employees were raised, with an additional 8 million Euros allocated to the wage fund. Incentive bonuses of EUR. In total, the average salary of “Maxima” grew by a tenth last year.”

E-commerce jumped faster. Povilauskas points out that the TOP 1000 also reflects that e-commerce grew faster than retail – this is illustrated by Pigu.lt jumped from 80th to 66th place on the list. The company’s turnover increased by 35 per cent last year, up to 144 million euros.

“We can also see the drastic jump of Vinted UAB, which allowed it to enter the 50 largest Lithuanian companies. “Vinted’s losses increased last year, but we expect the company’s investments in marketing and employees will ensure no less income growth this year,” says Povilauskas. In this year’s TOP 1000, Vinted rose from 54th to 34th place; its turnover increased by 63 per cent to 245 million euros, and the company suffered 105 mln. Euros pre-tax losses. Povilauskas singles out one more group of companies in the thousand, for which is 2020, the pandemic and quarantines had a significant negative impact, and in 2021 after the easing of quarantine restrictions, they were already able to return to average activity volumes. One of the more prominent examples is the travel organizer Novaturas, whose sales volume last year was two times higher than the year before and reached almost 60 million Euros.

The year 2022 was expected to be more difficult. According to the SEB economist, it is likely that the TOP 1000 companies will continue to grow their income this year – but for many of them, this will only be a consequence of general price growth. “The income of those companies that extract, produce and trade raw materials or energy products will grow more because raw materials are costly. Therefore, this year we expect strong growth in the income of oil refining, crops, chemicals, metals, and food wholesalers”, the economist predicts.

The income of some wholesalers may be severely cut by the decline in re-exports to Russia and Belarus caused by the war in Ukraine.

“Due to rising prices, industrialists who do not have sales in Russia or Ukraine should earn higher incomes this year. Of course, if only in the second half of the year, Western and Northern Europe will not be hit by a more serious recession”, predicted T. Povilauskas. In his estimation, the turnover growth of retail trade companies should slow down, despite inflation that is significantly higher than in previous years. After the excellent last year for traders, retail trade growth in the second half of this year is likely to be negative. “This is also influenced by the return of consumers to services this year, which is why the income of service companies that have suffered from the pandemic and quarantines in the past two years should grow strongly this year – from catering, travel arrangements, etc. sectors”, predicts T. Povilauskas.

In his opinion, construction companies are unlikely to show good results this year, and some companies in the transport sector related to railway transportation or loading at the seaport will record worse changes in income. And because of the war in Ukraine, companies are exposed to innovation.

According to A. Kačinskas, when the TOP 1000 would have been compiled according to the 2022 performance results in the coming year, there might have been fewer, perhaps more, changes than this year. “Companies’

financial results will undoubtedly reflect business ties, suspension of operations and lost markets due to Russia's war in Ukraine," he says; the companies themselves stated this.

Here are the furniture manufacturing companies belonging to the SBA group in 2022 that sold products for 96.5 million euros in the first quarter – 30 per cent more than at the same time last year, when sales reached 74 million euros. However, Egidijus Valentinavičius (VZ, *ibid*), vice president of the SBA, says that the war could significantly affect the annual results of manufacturers. "The first quarter of the year should have given a strong impetus to the whole year's results, but everything is fundamentally changed by the war in Ukraine and its direct and indirect effects. Our most important goal is to secure the necessary raw materials so companies can work at full strength. The team works hard to find suppliers in new markets and create efficient logistics chains. The changed geopolitical situation also affects the prices of energy, raw materials, and components, which will affect the profitability of companies", says E. Valentinavičius (VZ, *ibid*).

The head of Creditinfo Lietuva says he remains an optimist, believing in the resilience and vitality of Lithuanian business. "Lithuanian business in difficult 2020 and 2021. Perfectly demonstrated the ability to adapt to new circumstances. Therefore, we hope that his strength will also bring positive results in 2022.

Humour helps the reported notice. "The paradox of creativity and efficiency is that we must constantly look for new things, new ways to communicate accurately. Efficiency is synonymous with novelty, that's why we want to talk about the "new language" in marketing", said Tomas Ramanauskas (VZ, 2022/05/09), creative director of creative advertising agency "New!", at the "Password 2022" conference organized by "Verslo žinios weekly". "Humor is probably the cheapest and easiest highway to hearts, the easiest way to reach emotion. We have too many serious brands", notes T. Ramanauskas. Another trend is the era of brand openness. "We must understand that in the era of social networks, you can't hide, and it's better to tell the truth, even if it's not convenient. What you try to hide eventually, and probably shortly, will come to the surface. It is better to stand up and say: we've had a rough time, and it's better to say it yourself than others will. No one wants to hear excuses anymore. Openness and sincerity create trust. It is better to admit the bitter truth yourself than to hope to slip away," T. Ramanauskas has no doubts. Change boundaries and rules, the consultants say.

Equally crucial for brands is the ability to transcend the boundaries of their category, sometimes even through the seemingly silly. "Stupid things also provoke emotions; such brands could be called "immature". At the same time, seriousness is still overrated in the world of brands, and playfulness is lacking," T. Ramanauskas is convinced. For example, he gives a brand of water called "Liquid death." "If we look at the water category, the specific brands of this segment, we would see blue plastic bottles, in the names that mark the area or combinations of the word water (aqua). At that time, "Liquid death" took a radically different path: it created labels that are more like those of a tattoo parlour than of water, it chose aluminium can packaging, as if it were a beer manufacturer, it rebels in advertisements," says T. Ramanauskas.

Further, let us follow how the advertising message changed. According to T. Ramanauskas, looking at the history and evolution of advertising, certain stages can be distinguished: a century ago, the purpose of advertising was to deceive the consumer because there was almost no regulation, and presidents smoked cigarettes in advertising posters. Later, deception changed to embellished lies. The most effective advertising was reiterating without stopping so the consumer will always remember the brand or service seen in the advertisement. Around the 1960s, we saw a creative revolution where advertising sought to surprise. Later, as social norms loosened, advertising tried to shock. After that, we still had the era of supermodels, where advertising tempted and enticed, then – ironized, says T. Ramanauskas. Finally, he says, the last decade has seen a phase of awareness in advertising. "We are still in it now. We are becoming more conscious in all aspects: how we produce, how we sell, how we consume, and how we communicate. At the same time, the usual ways of talking to the audience are getting old", emphasizes T. Ramanauskas. According to him, "smart" brands react, transform, move with the audience and habits, follow changes, and look at what is happening in people's lives. At that time, stupid brands wave their

hands at it, thinking that it is a temporary fad – it will pass; they only think about sales and discounts. Therefore, if we talked primarily about the product in the “new language” earlier in the advertisement, it would be appropriate to emphasize the emotion.

3.2. Case studies. Art in Wartime: Both Therapy and Weapon

In Lithuania, there is a feeling that art should be apolitical. “But when the situation gets worse, we shouldn’t be apolitical,” art historian and critic prof. Rasa Žukienė thinks (Lietuvos Rytas daily, 2014/05/01).

According to art historians, not only beauty and harmony are reflected in the artworks; aggression accompanied humanity from the beginning of the times. According to researchers willing to know our predecessors better, studying the carvings of wars and countless bloody conflicts on the “body” of art is necessary to understand the difficulties of human history. The Roman proverb that when the guns clang, the muses are silent is false, according to Rasa Žukienė, because in wartime, artistic life takes place, and art becomes both therapy and weapon. The study of art reveals something beyond the scope of researchers of political and social history (Lietuvos Rytas daily, 2014/05/01). Art, just like paintings on pre-historic murals, reflects upon the mood of society very sensitively.

From the history of Western European art, it has long been known that war is an inspiration for the avant-garde. For example, post-World War I artists gave birth to the Dada movement. It was a reaction of the young generation to what was happening at the front. In addition, P. Picasso painted “Guernica” in 1937 after hearing about the war in Spain. This was his protest as a Spaniard. “Though this work was intended for a world exhibition, he said that the work would be returned to Spain when peace prevails”, recalls R. Žukienė (Lietuvos Rytas daily, 2014/05/01).

In the same way, after the Second World War, European culture was given a big boost by existentialism. This philosophy was born out of people’s despair after realizing what war was and how it threatened helpless people. A man was lonely in the world. Bob Dylan’s songs were significantly affected by the war.

Art influenced by existentialism is characterized by anxiety, alienation, absurdity, metamorphoses, and concern. “For example, the work of Alberto Giacometti or the paintings of other sculptors, even of another generation, which includes Lucian Freud or Francis Bacon – all these expressions were of war experiences. In one case, a person is like a chaplet. It is a visual motif chosen in Giacometti’s work. Otherwise, with L. Freud, the concept that a person is only a body comes into play. There is no spirit in it. This is also a result of nihilistic thinking in art,” the art critic thinks (Lietuvos Rytas daily, 2014/05/01).

The October Revolution in 1917 initially gave a very positive impulse to Russian art and Western Europe. Artists like Kazimierz Malevich or Mark Chagall thought they would create new art for a new state. Unfortunately, it did not last long. “They were looking for new paths, and they discovered constructivism, abstraction,” says R. Žukienė (Lietuvos Rytas daily, 2014/05/01). However, the October Revolution turned into a prison for the creative class, and M. Chagall and many others managed to emigrate. The Russian avant-garde was not even shown in the halls,” says the art critic (Lietuvos Rytas daily, 2014/05/01).

As it is well known, developing the imagination is dangerous because critical, educated people begin to question the lies and demagoguery spread by totalitarian systems. The Russian avant-garde experienced the peak of creativity and popularity from the October Revolution in 1917 to 1922. Then, it was suffocated by socialist realism promoted by the state because any art above average understanding is dangerous. “Danger rests in that such art speaks of a higher human being, especially when constructivists or abstractionists express themselves in abstract forms: this was an impossible thing in a socialist country because its basis is materialism and a physical

understanding of reality. As a result, during the Soviet era, all abstraction was unwanted in Lithuania”, says R. Žukienė (Lietuvos Rytas daily, 2014/05/01).

Going to the Lithuanian Center of Chicago, you will see many photographs from our refugee camps, where they make things and even jewellery. You may be amazed that “the post-war people, who were expelled from their country, were highly cheerful, had many humour magazines, and made fun of themselves,” says R. Žukienė (Lietuvos Rytas daily, 2014/05/01). This fact testifies to the effort not to give in to the crushing reality. A phenomenon is the cultural activity of former citizens of the Baltic countries, displaced persons from Germany after the Second World War. Having lost their homeland due to the Soviet occupation, they became lawless and unwanted in war-torn Germany, but they organized art exhibitions and concerts, staged operas, and published books. National cultural representations have become vivid signs of the cultural distinctiveness of the Baltic nations (Ibid.).

Warfare, mass extermination of civilians, population displacement and occupations resulted in the 20th century, and Lithuania lost a third of its population. The war years' suffering, deaths, survival, exile, and post-war renewal have become central themes in the country's culture and its expatriates. Studying war and culture in Lithuania requires a comparative, multilingual and cross-national analysis. These studies could give us a better understanding of history to prevent it from happening again.

In Kaunas, the Capital of the European Capital of Culture 2022, the Project “In the Dark” was another example of how the war could inspire creative persons to establish artistic initiatives. Reporter Beatričė Laurinavičienė (Verslo Žinios) depicts the exhibition “From the Darkness”, a reflection on WW II displayed this year on August 4 in Kaunas, in the building next to the Historical Presidency of the Republic of Lithuania (Gimnazijos str. 4), the exhibition “From the Darkness” created by a Litvak female artist Jenny Kagan. The artist, who grew up in the United Kingdom, returns to Kaunas, the childhood city of her parents, Kaunas natives J. Kagan and M. Štromaitė, with an authentic story that she often heard in her childhood - about the Holocaust they experienced. The story touches upon a very close family of the Lithuanian Holocaust victim, already deceased professor Irena Veisaite.

The idea of J. Kagan's project “From the Darkness”, which was part of “Kaunas - European Capital of Culture 2022”, was born 15 years ago. After starting to study drawing, the artist and her mother decided to draw a “box”, remembering the emotional and symbolic history of the family. The idea of a “box” created with her family over several years turned into the author's attempt to find out the fragments of the story to bring them into a broader context. “In 1941, on October 28, all Kaunas ghetto residents get up before dawn. Most of them were awake. They pour out of their houses in an unnatural and solemn silence, some carrying candles to light the way, shrouded by their exhaled air in the cold night. Did it snow that morning? I can't tell you” - extracts from letters and diaries written by Ms Kagan herself based on the stories of her parents remind us of life in the ghetto. Followed by images, music, projections and saved fragments of stories, the audience has been invited to feel a personal and, at the same time, relevant story. The stories of the exhibition remind us that even in the darkest situations, light can be found; the stories reveal friendships, love, help, and kindness. “This is a story of oppression and persecution, incomprehensible loss and horror, but above all, it is a story of love and survival,” says the artist. According to the exhibition organizers, “From the Darkness” is a memory of the lost residents of Kaunas and an opportunity to measure our values - how would we act in the face of light and darkness? How sensitive we are to others is especially important in front of the war in Ukraine. “This exhibition arose out of the desire to talk about bright and dark pages of the history of Kaunas. It was born out of the realization that thousands of citizens, who lived here and made their plans, are no longer in the city today. Together with them, part of the identity of Kaunas disappeared forever. The other part - with the memories torn from here - scattered in different corners of the world - the United States, Israel, South Africa, the United Kingdom, Poland,” said the exhibition organizers. (Verslo Žinios weekly, 2022/08/03). Creativity allows the materializing of memories.

Case I. The case of Ukraine

We can find more examples from the war zone in the current Ukrainian press. One of the initiatives that serve as an excellent example of how creativity can increase a nation's spirits is modern Ukraine's arts and crafts.

According to the Drum publication (Ormesher, 2022), Ukraine is well-known within the industry for its solid digital workforce and burgeoning creative scene. Willing to support the industry professionals impacted by the conflict in Ukraine, Talenthouse has developed a platform that assists in cooperating with the creative forces of Ukraine. They say that the best response of creative people to hard times is their creativity. Regardless of the sounds of guns, Ukraine continues making music. How did Ukraine react to winning Eurovision? Ukraine's government tweeted on its official account: "You have melted our hearts, friends," adding that the win "matters the world to us during this time." On social media, Ukrainians cheered a victory that Kalush Orchestra's frontman, Oleh Psiuk, called a win for all Ukrainians gained on May 15, 2022.

Washington Post reporter recalls: "The reaction to Ukraine's Eurovision win underscored the political undertones of the quirky musical event, from which Russia was excluded after it invaded Ukraine. Officials in Kyiv portrayed the win as a sign of success in Ukraine's war with Russia. Kalush Orchestra used the Eurovision stage to call for help for Mariupol and the soldiers inside the Azovstal steel plant. On Sunday, the band released a music video for "Stefania," the song that helped secure its first-place Eurovision finish, filmed in war-torn areas of Ukraine (Washington Post 2022/05/15). For many Ukrainians, the contest was a rare chance to have fun and think about something other than the war.

Next year, in 2023, Ukraine is expected to host the competition, an occasion that Zelensky said he believes will not be the last. The president hoped that one day Kyiv could "host the participants and guests of Eurovision in Ukrainian Mariupol" — the southern port city shattered by Russian forces."

Case II. One more case is the representation of Russian actress Chulpan Khamatova.

Khamatova, who is exceptionally well known in her homeland, came to Latvia in the spring after the Russian invasion of Ukraine and joined the troupe of the New Riga Theater. There, together with the director Alvis Hermanis, a solo performance, "Post Scriptum", was created for her as a commentary "on Russia's (and not only) consciousness, conscience and subconsciousness in the context of recent events" (the programme of the production says).

Case III. Why were the windows of the buildings of the Vilnius Academy of Arts taped?

This art installation was completed by Valentyn Odnoviun, a graduate of the academy, a PhD student and a Ukrainian teacher, and the creation of which the academy's community contributed to show a sign of solidarity and support for the struggling Ukraine and its courageous people. People remember January 1991 in Lithuania and how the windows of institutions and apartment buildings looked. During explosions and cannon volleys, such tapes were supposed to soften the shock waves and protect windowpanes and people from glass shards.



Figure 1. Vilniaus dailės akademija. VDA fotomedijos katedra.

<https://www.facebook.com/vdafotomedija/photos/a.277103719034116/4969512673126507/?type=3>

Those stripes on the windows helped us fight and win. We believe that it will be the same in Ukraine! Odnoviun states in his FB account. “We invite other organizations and residents to join this artistic installation of solidarity”, the post ends.

4. Discussion

Creativity is the voice that tells us to rebel, be original, produce, and design. It can be instrumental for anything from science to political strategies; nothing new could be invented without it. Creativity and innovation are humanity's most vital resources, and they are something innately within us that cannot be taken away. As the authors write these words, the war in Ukraine has been going on for over eleven months. The Ukrainian people didn't take long to mobilize and start volunteering, gathering donations, and signing up to go to the frontline – even Ukrainian ex-pats in other countries moved back home to add their contribution to the cause.

The Ukrainian marketing agency, the SAPHIRA team (Saphira Agency, n.d.), cannot forget the power of advertising and branding in a time of war. War and propaganda go hand in hand. World War I and II saw a barrage of motivational posters, slogans, songs and poems that still live in people's minds today and continue to serve as a source of inspiration and pride, the SAPHIRA (Saphira Agency, n.d.) says in their website. In times of sorrow and defeat, these campaigns remind people of their resilience, strength, and the better times ahead.

What is important, creativity is a term that needs to be clarified. You do not need to be a professional painter or a renowned musician to express yourself creatively. Creativity is a show of human ingenuity, inherent in us as a species, an expression of our will: the human desire to strive, to fight, to survive, to explore – to live fully, the Ukrainian creative team purposes.

Creativity allows us to evolve, adapt and thrive – and in the 21st century, even as war, disease and natural disasters rampage the world as we know it, humans continue to fight for independence, freedom, and a complete and dignified life. Whether we use our ingenuity to devise fighting tactics against the invader forces or create hauntingly beautiful art that brings us all together in a crisis, the world has never been more creative than today (Saphira Agency, n.d.). Thus, we can state a vital observation: if COVID-19 generally caused a lot of confusion, destruction, and disintegration in society, only the most critical businesses managed to survive, demonstrating the reactive strategies. The statistical data proves that the most innovative companies win in the circumstances of COVID-19. Regarding the artistic initiatives, those *turbulences* (such as war) trigger even stronger patriotic feelings in the fighting sides and bare a character of proactive strategies. Those insights are novel and contribute to scientific knowledge in the creative field.

Conclusions

1. Creativity is the ability to develop new ideas, think independently, non-stereotypically, quickly orientate in a problematic situation, and solve easily and atypically. In addition, creativity is the ability to create new things. Creativity is also the ability to look at an event or phenomenon in a way others cannot or do not want to.
2. Businesses need more time to make creative decisions in the face of uncertainty when a pandemic hits or a war breaks out. It is equally difficult for everyone to predict the future, and collecting as much information as possible on it is essential because there is no absolute unknown – everyone still knows something. During the quarantine, new devices were created, funds were collected, drones were used, and creativity was in great demand.
3. From the point of view of innovation management, it is particularly interesting that this acceleration of innovation did not occur because of the organizations who wanted to innovate but because they had to limit the negative effects of the pandemic and war. Moreover, this crisis has changed people's thinking and created business opportunities that would never have been considered under what we call the 'normal new'. Furthermore, studying the idea of the "imposed service innovation" is essential in the context of people experiencing the transition from pandemic to endemic and will perhaps increasingly encounter such phenomena in the future.
4. The authors prove that reactive or proactive strategies are usually applied during *turbulent times*. The authors say that most techniques developed over recent events are reactive. However, in some areas of activities, a creative industry or developer has yet to be able to implement a proactive strategy because the scale and impact of this pandemic remain unpredictable. In contrast, the war inspires people to undertake many initiatives and behave more proactively.
5. The information on quantitative and qualitative changes of the war and pandemics needs to be more systematic and is hard to find.

References

- Al-Ababne, M., M. (2012). The concept of creativity: definitions and theories. *International Journal of Tourism & Hotel Business Management (IJTHBM)*, 2 (1), 245-249.
- Atthahira, N., A., Eliyana, A., Joesah, N., Sudarsono, Tarigan, B., Ahmad, M., A. (2021). Change Management and Creativity during Pandemic Covid-19 in Indonesia. *Sys Rev Pharm*, 12(1), 953-959.
- Approval Studio <https://approval.studio/blog/art-vs-war-in-ukraine-iii1>
- Borowiecki, K. J., & O'Hagan, J. W. (2013). Impact of war on individual life-cycle creativity: tentative evidence in relation to composers. *Journal of Cultural Economics*, 37(3), 347-358. <https://doi.org/10.1007/s10824-012-9187-1>
- Borowiecki, K.J. (2014). Artistic creativity and extreme events: The heterogeneous impact of war on composers' production. *Poetics*, 47, 83-105. <https://doi.org/10.1016/j.poetic.2014.10.005>
- Botella, M., Didier, J., Lambert, M.-D., & Attanasio, R. (2022). The Creative Process and Emotions of Pupils in a Training Context with a Design Project. *Journal of Intelligence*, 10, 108. <https://doi.org/10.3390/jintelligence10040108>
- Childs, P., Han, J., Chen, L., Jiang, P., Wang, P., Park, D., Yin, Y., Dieckmann, E., & Vilanova, I. (2022). The Creativity Diamond—A Framework to Aid Creativity. *Journal of Intelligence*, 10, 73. <https://doi.org/10.3390/jintelligence10040073>
- Cook, P. (1998). The creativity advantage - is your organization the leader of the pack? *Industrial and Commercial Training*, 30(5), 179-184. <https://doi.org/10.1108/00197859810225652>

Correlates of War. Available at: <https://correlatesofwar.org/>

Glăveanu, V. P. (2020). A sociocultural theory of creativity: bridging the social, the material, and the psychological. *Rev. Gen. Psychol.*, 24, 335-354. <https://doi.org/10.1177/1089268020961763>

Dragičević Šešić, M., & Dragojević, S. (2005). Arts management in turbulent times. *Adaptable Quality Management. Navigating the arts through the winds of change.* Amsterdam. European Cultural Foundation. Boekmanstudies. <https://www.opensocietyfoundations.org/publications/arts-management-turbulent-times-adaptable-quality-management>

Dragičević Šešić, M. (2021) Art Organizations during the Pandemic – Catalyser for Best and Worst. Conference: 14th International Conference on Culture and Creativity, University of Vilnius, Faculty of Kaunas.

Gomez, J., G. (2007). What Do We Know About Creativity? *The Journal of Effective Teaching*, 7(1), 31-43.

International Times: <https://internationaltimes.it/gerda-taro/> <https://artpil.com/robert-capo/>

Jacobs, T. 2017. War can both inspire and inhibit artistic creativity. Online: <https://psmag.com/social-justice/war-can-inspire-inhibit-artistic-creativity-95823>

Jalan, A. & Kleiner, B.H. (1995). New developments in developing creativity. *Journal of Managerial Psychology*, 10(8), 20-23. <https://doi.org/10.1108/02683949510100750>

Kacerauskas, T. (2020). Creative economy and the idea of the creative society. *Transformations in Business & Economics*, Vol. 19, No 1 (49), pp.43-52.

Kandi, M., & Kandi, M. (2013). The Role of Creativity in Education and Solving Educational Barriers. *Research Journal of Applied Sciences, Engineering and Technology*, 6(13), 2386-2394. <https://doi.org/10.19026/rjaset.6.3712>

Klijn, M., & Tomic, W. (2010). A review of creativity within organizations from a psychological perspective. *Journal of Management Development*, 29(4), 322-343. <https://doi.org/10.1108/02621711011039141>

Lebuda, I., & Csikszentmihalyi, M. (2020). All you need is love: the importance of partner and family relations to highly creative individuals' well-being and success. *J. Creat. Behav.*, 54, 100-114. <https://doi.org/10.1002/jocb.348>

Lietuvos Rytas daily, 2014/05/01 <https://www.lrytas.lt/kultura/istorija/2014/05/01/news/menas-karo-metu-ir-terapija-ir-ginklas-4666874>

Marrone, R., Taddeo, V., & Hill, G. (2022). Creativity and Artificial Intelligence—A Student Perspective. *J. Intell.* 10, 65. <https://doi.org/10.3390/jintelligence10030065>

Martens, Y. (2011). Creative workplace: instrumental and symbolic support for creativity. *Facilities*, 29(1/2), 63-79. <https://doi.org/10.1108/02632771111101331>

Martins, E.C., & Terblanche, F. (2003). Building Organizational culture that stimulates creativity and innovation, *European Journal of Innovation Management*, 6(1), 64-74. <https://doi.org/10.1108/14601060310456337>

McKay, A. S., Grygiel, P., & Karwowski, M. (2017). Connected to create: a social network analysis of friendship ties and creativity. *Psychol. Aesthet. Creat. Arts*, 11, 284-294. <https://doi.org/10.1037/aca0000117>

Mumford, M.D., HesterIssac, K.S., & Robledo, C. (2012). Chapter 1 – Creativity in Organizations: Importance and Approaches. *Handbook of Organizational Creativity*, 3-16. <https://doi.org/10.1016/B978-0-12-374714-3.00001-X>

Piirto, J. (2021). Organic Creativity for 21st Century Skills. *Educ. Sci.*, 11, 680. <https://doi.org/10.3390/educsci11110680>

Runco, M.A., & Jaeger, G.A. (2012). The Standard Definition of Creativity, *Creativity Research Journal*, 24(1), 92-96, <http://dx.doi.org/10.1080/10400419.2012.6500>

Nobre, G. F. (2020). Creative Economy and Covid-19: technology, automation and the new economy. Project: Creative Economy, <https://doi.org/10.13140/RG.2.2.16293.04326/1>

Office of the Equal Opportunities Ombudsman (2021). How do teleworking change jobs during quarantine? <https://www.lygybe.lt/lt/nuotolinis-darbas-pandemijos-metu>

Orkibi, H., & Ram-Vlasov, N. (2019). Linking trauma to posttraumatic growth and mental health through emotional and cognitive creativity. *Psychol. Aesth. Creat. Arts*, 13, 416-430. <https://doi.org/10.1037/aca0000193>

Ormesher, H. (2022). Ukraine and the information war: Creativity in times of conflict. <https://www.thedrum.com/news/2022/03/24/ukraine-and-the-information-war-creativity-times-conflict>

Pérez-Sobrino, P., Semino, E., Ibarretxe-Antuñano, I., Koller, V. & Olza, I. (2022) Acting like a Hedgehog in Times of Pandemic: Metaphorical Creativity in the #reframecovid Collection. *Metaphor and Symbol*, 37(2), 127-139. <https://doi.org/10.1080/10926488.2021.1949599>

Popa, N., Pop, A.-M., Marian-Potra, A.-C., Cocean, P., Hognogi, G.-G., & David, N.A. T. (2021). The Impact of the COVID-19 Pandemic on Independent Creative Activities in Two Large Cities in Romania. *Int. J. Environ. Res. Public Health*, 18, 7674. <https://doi.org/10.3390/ijerph18147674>

Raymundo, M.R.D.R. (2020). Fostering creativity through online creative collaborative group projects. *Asian Association of Open Universities Journal*, 15(1), 97-113. <https://doi.org/10.1108/AAOUJ-10-2019-0048>

Reiter-Palmon, R., & Paulus, P. (2020). Cognitive and social processes in team creativity" in creativity and innovation in organizations. Eds. M. D. Mumford and E. M. Todd (New York: Routledge), 161-190. <https://doi.org/10.4324/9781315192598-8>

Samašonok, K., & Leškienė-Hussey, B. (2015). Creativity Development: Theoretical and Practical Aspects. *Journal of Creativity and Business Innovation*, 1, 19-34. <http://www.journalcbi.com/creativity-development.html>

Speckbacher, G. (2021). Does performance evaluation kill creativity? A (re)interpretation of existing literature. *Pacific Accounting Review*, 33(1), 6-19. <https://doi.org/10.1108/PAR-09-2020-0150>

Scanlon, Ch. (2005). Richard Florida's Cities and the Creative Class [Book Review]. *Journal. Local-Global: Identity, Security, Community*, 1, 134-139. ISSN: 1832-6919 <https://search.informit.org/doi/10.3316/informit.176000767527988>

Stubbs, B. (2022). Creative and non-fiction writing during isolation and confinement. Imaginative Travel, Prison, Shipwrecks, Pandemics, and War. ISBN 9781032152516 Published June 16, 2022 by Routledge 144 Pages 8 B/W Illustration

Time <https://time.com/6167254/ukraine-photographers-doc...>

Tang, M., Hofreiter, S., Reiter-Palmon, R., Bai, X., & Murugavel, V., R. (2021), Creativity as a Means to Well-Being in Times of COVID-19 Pandemic: Results of a Cross-Cultural Study. *Front. Psychol.* <https://doi.org/10.3389/fpsyg.2021.601389>

Turner, J.R., Baker, R., & Thurlow, N. (2022). Creativity and Innovative Processes: Assemblages and Lines of Flight. *Systems*, 10, 168. <https://doi.org/10.3390/systems10050168>

Yang, C., Yang, F., & Ding, C. (2021). Linking leader humour to employee creativity: the roles of relational energy and traditionality. *Journal of Managerial Psychology*, 36(7), 548-561. <https://doi.org/10.1108/JMP-06-2020-0300>

Yar Hamidi, D., Wennberg, K., & Berglund, H. (2008). Creativity in entrepreneurship education. *Journal of Small Business and Enterprise Development*, 15(2), 304-320. <https://doi.org/10.1108/14626000810871691>

Vecco, M., Clarke, M., Vroonhof, P., de Weerd, E., Ivkovic, E., Minichova, S., & Nazarejova, M. (2022). The impact of the COVID-19 pandemic on creative industries, cultural institutions, education and research. WIPO. https://www.wipo.int/edocs/mdocs/copyright/en/wipo_cr_covid_19_ge_22/wipo_cr_covid_19_ge_22_study.pdf

Zaborona <https://zaborona.com/en/ukrainian-artists-show-the...>

Zenker, S. (2009). "Who's your target? The creative class as a target group for place branding. *Journal of Place Management and Development*, 2(1), 23-32. <https://doi.org/10.1108/17538330910942771>

Zsolnai, L., & Illes, K. (2017). Spiritually inspired creativity in business. *International Journal of Social Economics*, 44(2), 195-205. <https://doi.org/10.1108/IJSE-06-2015-0172>

Saphira Agency: From Marketing to Military Strategies, <https://saphira.agency/blog/how-wars-unleash-creativity/> Article by Baska Ganbaatar

Verslo Žinios weekly, 2022/05/09 <https://www.vz.lt/rinkodara/2022/05/09/t-ramanauskas-emocijos-triuskina-racionaluma-arba-naujakalbe-reklamoje#ixzz7j7qh33Iz>

Verslo Žinios weekly, 2022/07/14 <https://www.vz.lt/finansai-apskaita/2022/07/14/top-1000-verslo-lyderiai-prisitaikė-prie-pandemijos-taikosi-prie-infliacijos#ixzz7j7kzEI1s>

Verslo žinios weekly, 2022/08/03, J. Kagan paroda “Iš tamsos” – apie meilę ir išlikimą. <https://www.vz.lt/laisvalaikis/pomegiai/2022/08/03/j-kagan-paroda-is-tamsos--apie-meile-ir-islikima>

Vilniaus dailės akademija. VDA fotomedijos katedra. <https://www.facebook.com/vdafotomedija/photos/a.277103719034116/4969512673126507/?type=3>

Washington Post 2022/05/15, Ukrainians react to Eurovision 2022 win with 'happiness' and 'tears of joy', by Annabelle Timsit and Rachel Pannett <https://www.washingtonpost.com/world/2022/05/15/eurovision-2022-ukraine-kalush-orchestra-reaction/>

Zhai, H.K., Li, Q., Hu, Y.X., Cui, Y.X., Wei Wei, X., & Zhou, X. (2021). Emotional Creativity Improves Posttraumatic Growth and Mental Health During the COVID-19 Pandemic. *Front. Psychol.* <https://doi.org/10.3389/fpsyg.2021.600798>

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