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Scientific Review Article

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## **POLITICAL ECONOMY OF POPULISM**

**ABSTRACT:** This paper examines the political economy of populism, with a focus on Central and Eastern European (CEE) countries. Following the global financial crisis of 2008, Hungary and Poland developed distinct populist economic programs that have begun to influence other CEE countries, including Serbia. This paper explores the causes of populism, the transformation of post-crisis economic models, and the specific economic policies characterizing populist governments in the region. Through in-depth case studies of Hungary, Poland, and Serbia, the research highlights how these policies are underpinned by economic nationalism, workforce activation, natalism, and sovereignty. Furthermore, the paper investigates the impact of these policies on attracting new sources of foreign investment, particularly from authoritarian states in the East.

*Keywords:* political economy, populism, Central and Eastern Europe, developmental statism, economic nationalism, neoliberalism, financial crisis, authoritarianism

### **INTRODUCTION**

The rise of populism in the 21st century has become a defining feature of contemporary politics across the globe, impacting countries from Latin America to Europe, Asia, and beyond. While the term 'populism' is frequently used in political discourse, its meaning remains contested and multifaceted. At

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its core, populism is often understood as a 'thin-centered ideology' that divides society into two homogeneous and antagonistic groups: 'the pure people' versus 'the corrupt elite' (Mudde, 2004). However, this basic dichotomy can be adapted to various political, economic, and cultural contexts, making populism a highly flexible and adaptable political phenomenon (Moffitt, 2020).

Populism in Central and Eastern Europe (CEE) has gained significant traction over the last decade, particularly in the wake of the economic turbulence caused by the global financial crisis of 2008. Populism is often described as a 'thin-centered' ideology that can be flexibly combined with various political and economic agendas (Mudde, 2004). This adaptability allows populism to thrive in diverse contexts, aligning with different economic policies ranging from neoliberal to protectionist strategies (Moffitt, 2020).

In economic terms, populism can range from left-wing redistributive policies that emphasize social justice and wealth redistribution to right-wing economic nationalism that focuses on protecting domestic industries and reducing foreign influence. This dual nature allows populism to appeal to a broad spectrum of voters, often drawing support from those who feel left behind by globalization, economic liberalization, and rapid social change (Rodrik, 2019). The political economy of populism, therefore, is not monolithic; it varies depending on the historical, cultural, and economic context of each country or region.

This paper aims to dissect the economic dimensions of populism within CEE countries, focusing on how economic factors have shaped the rise and evolution of populist movements in Hungary, Poland, and Serbia. The paper addresses key questions: What are the economic foundations of populism in CEE countries? How have economic crises influenced the adoption of populist policies? And what are the long-term implications of these policies for the economic development and political stability of these countries?

### **Defining Populism: Ideological and Economic Dimensions**

To better understand the political economy of populism, it is essential to examine its ideological underpinnings and economic dimensions. Populism is typically characterized by its opposition to the established political order, often manifesting as a critique of political corruption, economic inequality, and the perceived disconnect between political elites and ordinary citizens (Kazin, 1998). In this sense, populism can be seen as a reaction against the failures of representative democracy, particularly in societies where political institutions are perceived as being unresponsive to the needs and desires of the general populace (Canovan, 1999). Economically, populism can take multiple

forms. In some contexts, it aligns with left-wing economic policies that advocate for state intervention in the economy, higher taxes on the wealthy, and expanded social welfare programs. In other contexts, populism aligns with right-wing policies that emphasize economic nationalism, protectionism, and restrictions on immigration (Inglehart & Norris, 2016). Regardless of its specific economic orientation, populism often capitalizes on economic grievances and promises to restore economic sovereignty and justice to 'the people'.

In Central and Eastern Europe (CEE), populism has often emerged as a response to the perceived failures of neoliberal economic policies implemented during the post-communist transition. These policies, which included mass privatization, deregulation, and integration into global markets, were intended to modernize economies and integrate them into the European and global economic systems. However, the rapid pace of these reforms led to significant social and economic disruptions, including high unemployment, rising inequality, and a sense of loss of control over national sovereignty (Appel & Orenstein, 2018). In this context, populist leaders have been able to mobilize support by positioning themselves as defenders of national interests against both domestic elites and external forces.

### **Historical and Global Context of Populism**

The roots of modern populism can be traced back to the late 19th and early 20th centuries, with movements such as the People's Party in the United States and various agrarian movements in Europe. These early populist movements were primarily concerned with economic issues, such as land reform, monetary policy, and opposition to economic monopolies (Goodwyn, 1976). Over time, the concept of populism expanded to encompass a broader range of issues, including social justice, anti-colonialism, and nationalism.

In the post-World War II era, populism took on new forms as countries in Latin America, Africa, and Asia experienced decolonization and sought to develop independent national identities and economic policies. In Latin America, for example, populist leaders such as Juan Perón in Argentina and Getúlio Vargas in Brazil pursued economic policies that combined elements of state intervention, protectionism, and social welfare to mobilize mass support (Dornbusch & Edwards, 1991). These leaders often portrayed themselves as champions of the working class and opponents of foreign economic domination, a theme that resonates with contemporary populist movements in other parts of the world.

The current wave of populism, which began in the early 2000s and accelerated after the global financial crisis of 2008, has been characterized by its focus on issues such as immigration, national sovereignty, and economic

inequality. In Europe and the United States, right-wing populist parties and movements have gained traction by promising to protect national borders, reduce immigration, and restore economic opportunities for native-born citizens (Mounk, 2018). Meanwhile, left-wing populist movements in countries like Greece and Spain have emphasized anti-austerity measures, economic justice, and opposition to neoliberal economic policies (Stavrakakis & Katsambekis, 2014).

### **The Emergence of Populism in Central and Eastern Europe**

Populism in CEE is a relatively recent phenomenon, emerging primarily in the post-communist period as countries in the region transitioned from centrally planned economies to market economies. The rapid political and economic changes that accompanied this transition created significant social and economic dislocation, leading to widespread public disillusionment with both domestic political elites and international institutions (Bohle & Greskovits, 2012). This disillusionment was further exacerbated by the 2008 global financial crisis, which exposed the vulnerabilities of the neoliberal economic model and led to a wave of social protests and political instability across the region (Ther, 2016).

Populist leaders in CEE, such as Viktor Orbán in Hungary, Jarosław Kaczyński in Poland, and Aleksandar Vučić in Serbia, have capitalized on these grievances by promoting a form of economic nationalism that seeks to protect national industries, reduce foreign influence, and restore economic sovereignty. These leaders often use anti-elite and anti-globalization rhetoric to mobilize support, portraying themselves as defenders of national interests against both domestic and foreign threats (Krastev, 2014). In this context, populism serves as both a political strategy and an economic policy framework, allowing leaders to navigate the complexities of the post-communist transition while maintaining popular support.

### **Current Challenges and the Appeal of Populism in CEE**

Today, the appeal of populism in CEE is driven by a combination of economic insecurity, cultural anxiety, and political disillusionment. Economic insecurity remains a significant concern for many citizens, particularly in countries that have experienced slow growth, high unemployment, and rising inequality since the transition to a market economy (Inglehart & Norris, 2016). In this environment, populist leaders who promise to protect jobs, increase wages, and reduce economic inequality have found a receptive audience.

Cultural anxiety also plays a critical role in the rise of populism in CEE. Many citizens in the region feel threatened by rapid social changes,



including increased immigration, the spread of liberal values, and the perceived erosion of national identity. Populist leaders have tapped into these fears by promoting a vision of national renewal that emphasizes cultural homogeneity, traditional values, and resistance to foreign influences (Brubaker, 2017).

Political disillusionment further fuels the appeal of populism in CEE. Many citizens have lost faith in traditional political parties and institutions, which they perceive as corrupt, ineffective, and disconnected from the needs of ordinary people. Populist leaders, by contrast, present themselves as outsiders who are willing to challenge the status quo and fight for the interests of the 'common people' (Krastev & Holmes, 2019).

### **The Role of Populism in Shaping Economic Policy**

Populism in CEE has also had a profound impact on economic policy, leading to a shift away from neoliberal orthodoxy and towards a more interventionist and protectionist approach. In Hungary, for example, Viktor Orbán's government has pursued a policy of 'economic sovereignty,' which includes the renationalization of key industries, the imposition of new taxes on foreign corporations, and efforts to promote domestic entrepreneurship (Fabry, 2019). Similarly, in Poland, the Law and Justice (PiS) party has implemented a range of populist economic policies, including increased social spending, new taxes on banks and large corporations, and efforts to reduce foreign ownership in strategic sectors (Toplišek, 2019).

These policies have been justified on the grounds of protecting national interests and promoting social cohesion, but they have also raised concerns about their long-term economic viability and impact on democratic institutions. Critics argue that populist economic policies often lead to increased government intervention, reduced economic efficiency, and a greater risk of corruption and cronyism (Lendvai-Bainton & Szelewa, 2020). At the same time, there is evidence that these policies can deliver short-term economic benefits, such as lower unemployment and higher wages, which help to sustain popular support for populist leaders (Berend, 2019).

### **Global Implications and Future Directions**

The rise of populism in CEE has significant implications for the future of the European Union and the global political order. As populist leaders in the region challenge the liberal democratic norms and economic policies that have underpinned European integration, there is growing concern about the potential for democratic backsliding and increased political instability. At the same time, the success of populist movements in CEE may embolden similar

movements in other parts of the world, leading to further polarization and fragmentation of the global political landscape (Inglehart & Norris, 2016).

Understanding the economic foundations of populism in CEE is therefore crucial for assessing its long-term impact on regional and global politics. By examining the economic grievances that drive populist support, as well as the specific policies and strategies used by populist leaders to maintain power, this paper seeks to provide a comprehensive analysis of the political economy of populism in CEE. Through case studies of Hungary, Poland, and Serbia, the paper explores the complex interplay of economic, cultural, and political factors that shape the rise of populism in the region and offers insights into the potential future trajectories of this phenomenon.

### **Theoretical Framework**

To understand the rise of populism in CEE, this paper draws on two primary theoretical frameworks: cultural backlash theory and economic insecurity theory. Cultural backlash theory posits that populism is a reaction to rapid social and cultural changes perceived as threats to traditional values and social norms (Inglehart & Norris, 2016). Economic insecurity theory, on the other hand, argues that populism emerges as a response to economic anxieties, such as unemployment, wage stagnation, and austerity measures (Rodrik, 2019; Gidron & Hall, 2017).

Combining these theories, this paper suggests that the rise of populism in CEE is driven by a blend of cultural and economic factors, with economic crises acting as catalysts that amplify pre-existing social and cultural tensions (Eichengreen, 2018). This dual framework provides a comprehensive lens through which to analyze the multifaceted nature of populist movements in the region.

## **CAUSES OF POPULISM IN CENTRAL AND EASTERN EUROPE**

### **Economic Factors**

The economic transition from centrally planned to market-oriented economies in the early 1990s fundamentally reshaped the socioeconomic landscape of Central and Eastern European (CEE) countries. While these reforms aimed to modernize economies and integrate them into the global market, they were often implemented rapidly and without sufficient social safety nets, leading to significant socioeconomic dislocation. Mass privatization led to the closure of uncompetitive industries, resulting in

widespread job losses, particularly in traditional sectors such as manufacturing and mining (Stiglitz, 2002). The deindustrialization process disproportionately affected older workers and those with lower educational qualifications, who found it challenging to adapt to the new market realities. This economic displacement created a fertile ground for discontent, as many individuals felt betrayed by the promises of prosperity associated with market reforms.

In addition to structural unemployment and job insecurity, the post-transition period saw a marked increase in income inequality. The rapid privatization process often resulted in the concentration of wealth in the hands of a few, as political elites and well-connected individuals acquired state assets at undervalued prices (Kornai, 2006). This emergence of a new oligarchic class contrasted sharply with the economic hardships faced by the broader population, who were left to contend with reduced public services, stagnant wages, and the erosion of traditional social welfare programs (Milanovic, 1998). The perception of economic injustice fueled resentment against both domestic elites and international actors perceived as architects of neoliberal policies.

The global financial crisis of 2008 was a turning point that magnified existing economic grievances in the CEE region. As credit markets froze and foreign investments declined sharply, countries that had become heavily dependent on external financing faced severe economic contractions. For instance, in Latvia, the economy shrank by over 18% in 2009, prompting the government to implement harsh austerity measures that further deepened social discontent (Bohle & Greskovits, 2012). The crisis exposed the vulnerability of CEE economies to global market fluctuations and underscored the risks of over-reliance on foreign capital, prompting a reevaluation of the neoliberal development model that had been dominant in the post-transition period.

Furthermore, the financial crisis led to a surge in public and private debt, as governments and households struggled to cope with the economic downturn. In Hungary, the government's reliance on foreign-denominated debt led to a sharp depreciation of the national currency, exacerbating the debt burden on both the public sector and households with foreign-currency mortgages (Fabry, 2019). This economic strain contributed to a widespread sense of economic insecurity, particularly among middle-class households who had initially benefited from economic liberalization but now faced declining living standards and increased financial precarity.

### **Cultural and Political Factors**

Beyond economic factors, cultural and political dimensions have played a crucial role in the rise of populism in CEE. The rapid sociocultural

transformations following the collapse of communist regimes led to a period of identity reformation and cultural anxiety. As CEE countries opened up to the world and integrated into Western political and economic institutions such as the European Union (EU) and NATO, there was a concurrent diffusion of liberal values, including individualism, multiculturalism, and secularism (Brubaker, 2017). For many, these changes represented a departure from traditional values rooted in nationalism, collectivism, and religious identity. The sense of cultural displacement was compounded by the perception that EU membership came with strings attached, including compliance with Western norms and values that were often at odds with local traditions.

The expansion of the EU in 2004 and 2007 brought about not only economic opportunities but also cultural and political tensions. Increased mobility within the EU led to significant emigration from CEE countries, particularly among young, educated individuals seeking better economic opportunities in Western Europe (Koikkalainen, 2011). This brain drain exacerbated demographic challenges in the region, including population aging and declining birth rates, which further fueled nationalist and anti-immigrant sentiments (Fomina & Kucharczyk, 2016). Populist parties exploited these demographic anxieties by framing themselves as defenders of national identity against both internal and external threats, including immigration from non-European countries.

Politically, the legacy of authoritarianism and centralized control under communist regimes has left a lasting impact on the political culture of CEE countries. The transition to democracy in the early 1990s was often tumultuous, marked by political instability, corruption, and weak governance structures. In many cases, political parties and institutions were seen as extensions of old power structures rather than genuine representatives of democratic ideals (Ekiert, 2012). This lack of trust in political institutions created a fertile environment for populist leaders who promised to "clean up" politics and restore integrity to the government.

Moreover, the narrative of national victimhood—often perpetuated by historical grievances and experiences of foreign domination—has been a powerful tool for populist movements. By evoking memories of past injustices and framing current challenges as a continuation of historical struggles for sovereignty and independence, populist leaders have been able to rally support among voters who feel marginalized by the global order (Janowski, 2018). In Hungary, Viktor Orbán's invocation of the Treaty of Trianon and Poland's Law and Justice (PiS) party's emphasis on national sovereignty are prime examples of how historical narratives are used to galvanize support for populist agendas (Pech & Scheppele, 2017).

Additionally, the rise of digital media and social networks has provided populist parties with new tools to disseminate their messages and mobilize

support. Unlike traditional political parties that rely on established media channels, populist movements have effectively utilized social media platforms to bypass mainstream media, directly engaging with voters and amplifying their anti-establishment rhetoric (Krastev & Holmes, 2019). This direct communication strategy has enabled populist leaders to present themselves as authentic voices of the people, further undermining trust in conventional political elites and institutions.

## **POST-CRISIS TRANSFORMATOON: A SHIFT IN ECONOMIC MODELS**

### **From Neoliberalism to Economic Nationalism**

The global financial crisis of 2008 marked a significant turning point in the economic policies of many Central and Eastern European (CEE) countries. Before the crisis, the majority of CEE countries had embraced neoliberal economic policies as a pathway to modernization and integration into the global economy. These policies were characterized by mass privatization of state-owned enterprises, deregulation of markets, reduction of state intervention, and a strong emphasis on attracting foreign direct investment (FDI) to spur economic growth (Appel & Orenstein, 2018). However, the financial crisis revealed the vulnerabilities inherent in this neoliberal model, particularly its heavy reliance on foreign capital inflows and exports to drive economic expansion. The sudden halt in global credit and the withdrawal of foreign investments led to severe economic contractions across the region, prompting many countries to reconsider their economic strategies.

The crisis exposed the overdependence of CEE economies on foreign banks and investors, which controlled a substantial portion of the financial sector and had been key drivers of credit growth in the years leading up to the crisis. As global liquidity dried up, these foreign banks repatriated capital to stabilize their operations in their home countries, leaving CEE economies in a precarious position. This situation highlighted the dangers of excessive reliance on external financial markets and led to a growing sentiment that economic sovereignty needed to be reclaimed from international financial institutions and foreign investors (Ther, 2016).

In Hungary, Viktor Orbán's Fidesz party capitalized on this sentiment following their 2010 electoral victory. The Fidesz government quickly moved away from the neoliberal policies of its predecessors, implementing a series of economic measures aimed at reducing foreign influence and increasing state control over the economy. Key components of this new economic nationalism included the renationalization of several key industries, such as energy and

telecommunications, and the introduction of "crisis taxes" on sectors dominated by foreign companies, including banking, retail, and telecommunications (Fabry, 2019). These taxes were presented as a way to make foreign companies contribute more to the national economy and reduce the fiscal deficit without imposing additional burdens on the domestic population.

Orbán's "Eastern winds" approach was a deliberate strategy to pivot away from the Western neoliberal model towards a more state-controlled, Eastern-style economic policy inspired by countries like China and Russia, where state intervention and economic planning play significant roles (Csillag & Szelényi, 2015). This approach was also coupled with efforts to diversify Hungary's economic partnerships, including increasing economic ties with Eastern powers and reducing dependence on the European Union. The Hungarian government promoted this shift as a way to build a more resilient economy, less susceptible to external shocks and more capable of safeguarding national interests.

Poland, under the leadership of the PiS party, followed a somewhat similar path after coming to power in 2015. The PiS government implemented a series of populist economic policies aimed at redistributing wealth and increasing state control over strategic sectors of the economy. One of the hallmark policies of the PiS government was the Family 500+ program, which provided monthly cash transfers to families with two or more children. This program was designed not only to address demographic challenges by encouraging higher birth rates but also to reduce poverty and promote social cohesion (Rae, 2020). The policy effectively served as a form of economic populism, redistributing resources to the perceived "ordinary people" and positioning the government as a protector of national welfare.

In addition to social spending programs like Family 500+, the PiS government also moved to assert greater control over the economy by increasing state ownership in key sectors, such as banking and energy. For example, the government imposed new regulations to limit foreign ownership of agricultural land and sought to nationalize certain industries that were previously privatized (Bluhm & Varga, 2019). These moves were part of a broader strategy to regain economic sovereignty and reduce the influence of foreign investors, who were often portrayed in populist rhetoric as exploiters of Poland's economic resources.

The shift towards economic nationalism in both Hungary and Poland can be seen as a response to the perceived failures of neoliberalism to deliver broad-based economic benefits and social stability. In many CEE countries, the rapid implementation of neoliberal reforms led to economic disparities and social dislocation, creating fertile ground for populist leaders who promised to protect national interests against foreign and elite influence. By framing

economic nationalism as a way to reclaim sovereignty and protect the national economy from the excesses of global capitalism, populist governments were able to garner significant public support.

However, these policies also had significant implications for democratic governance and economic stability. In Hungary, for example, the concentration of economic power in the hands of the state and the close ties between the government and domestic oligarchs raised concerns about corruption and cronyism. The renationalization of industries often resulted in the transfer of assets to government-friendly business figures, undermining market competition and transparency (Bogaards, 2018). Similarly, in Poland, the PiS government's intervention in the economy, including attempts to exert control over the judiciary and media, was seen as a threat to democratic norms and institutions (Pech & Scheppele, 2017).

In both countries, the turn towards economic nationalism has also led to tensions with the European Union. EU leaders criticized the policies of Hungary and Poland as incompatible with the principles of the single market and the rule of law. The EU launched infringement procedures against both countries, citing concerns over judicial independence, media freedom, and respect for fundamental rights (Bánkuti et al., 2012). These actions have strained relations between Brussels and the populist governments in Budapest and Warsaw, leading to broader debates about the future of European integration and the resilience of liberal democratic norms in the region.

Despite these challenges, the populist shift towards economic nationalism has been popular among significant segments of the population in Hungary and Poland, who view these policies as necessary for protecting national interests and ensuring economic security. The ability of populist leaders to combine economic policies with nationalist rhetoric has been a key factor in their electoral success and continued support (Pappas, 2019). By positioning themselves as defenders of the nation against both domestic and foreign elites, populist leaders have tapped into deep-seated anxieties about economic sovereignty, cultural identity, and social cohesion.

### **Broader Implications for Central and Eastern Europe**

The move away from neoliberalism and towards economic nationalism in CEE is not limited to Hungary and Poland. Other countries in the region have also experimented with similar policies, reflecting a broader trend towards state intervention and protectionism. For example, in Romania and Bulgaria, governments have adopted measures to protect strategic industries and limit foreign ownership of natural resources. In the Czech Republic, political leaders have called for greater economic self-sufficiency and reduced reliance on foreign capital, particularly in the wake of the COVID-19

pandemic, which exposed the vulnerabilities of global supply chains (Orenstein, 2019).

The shift towards economic nationalism in CEE raises important questions about the future of economic policy and political stability in the region. While these policies may provide short-term economic gains and political support, they also pose risks to long-term growth and democratic governance. Increased state intervention and protectionism can undermine market efficiency, reduce foreign investment, and lead to economic isolation. Moreover, the concentration of economic power in the hands of the state and domestic elites can foster corruption and weaken democratic institutions, posing a threat to the rule of law and political pluralism (Orenstein & Appel, 2018).

In conclusion, the post-crisis transformation of economic models in CEE reflects a complex interplay of economic, political, and cultural factors. The turn towards economic nationalism and away from neoliberalism has been driven by a desire to protect national sovereignty and address economic grievances, but it also presents significant challenges for the region's integration into the global economy and the preservation of democratic norms. As CEE countries continue to navigate these challenges, the future of economic policy and political stability in the region remains uncertain, with potential implications for the broader European and global order.

## **SERBIA'S ECONOMIC POPULISM: BALANCING BETWEEN EAST AND WEST**

### **Introduction to Serbia's Economic Populism**

Serbia's journey towards economic populism reflects a unique blend of political maneuvering and strategic economic reforms. Under the leadership of President Aleksandar Vučić, Serbia has positioned itself as a pivotal player in the Western Balkans, navigating complex relationships with both the European Union and non-Western powers such as Russia and China. Vučić's economic policies have been described as populist, combining elements of neoliberalism with state intervention and protectionist measures aimed at boosting national sovereignty and economic independence.

Since coming to power in 2014, Vučić has leveraged his political platform to enact a series of economic reforms that appeal to both domestic and foreign audiences. These reforms include austerity measures aimed at fiscal consolidation, investment in infrastructure, and efforts to attract foreign direct investment (FDI) from diverse sources. At the same time, Vučić has



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maintained nationalist rhetoric that resonates with a domestic audience weary of Western influence and eager for economic stability and growth.

### **Economic Strategies and Reforms**

The economic reforms in Serbia under Vučić have been multifaceted, targeting several areas crucial for economic recovery and growth. A cornerstone of Vučić's strategy has been fiscal consolidation, involving significant cuts to public spending, pension reforms, and efforts to reduce the budget deficit. These austerity measures, while unpopular among some segments of the population, have been credited with stabilizing the Serbian economy and achieving a budget surplus in 2017 for the first time in decades (Pavlović, 2019).

To complement these austerity measures, Vučić has aggressively pursued foreign investment, particularly from China, Russia, and the European Union. Serbia has positioned itself as a hub for Chinese investment in the Balkans, benefiting from Beijing's Belt and Road Initiative. Key investments include the modernization of infrastructure, such as the Belgrade-Budapest railway, and significant investments in the Serbian mining and energy sectors. These investments are seen as a way to boost economic growth, create jobs, and modernize the country's infrastructure (Buzogány & Varga, 2018).

However, Serbia's approach to foreign investment is not without its critics. Some argue that reliance on Chinese and Russian investments could lead to a form of economic dependency, undermining Serbia's long-term economic sovereignty and making it susceptible to geopolitical pressures. Additionally, concerns have been raised about the lack of transparency in investment deals and the potential for corruption and cronyism, which could hamper the country's economic development and political stability (Eror, 2018).

### **Political Economy and Nationalism**

Vučić's economic strategy is closely tied to his political ideology, which blends economic pragmatism with nationalist rhetoric. By positioning himself as a defender of Serbian sovereignty and a champion of economic reform, Vučić has been able to consolidate power and maintain broad public support. This blend of economic populism and nationalism has enabled Vučić to appeal to both the international community and domestic constituencies.

Domestically, Vučić has framed his economic reforms as necessary steps to protect Serbia's national interests and promote economic independence. This narrative has resonated with many Serbians who feel disillusioned with the promises of European integration and wary of foreign

interference in domestic affairs. By invoking themes of national pride and sovereignty, Vučić has been able to justify his economic policies, even when they involve painful austerity measures or controversial foreign investments (Pavlović, 2019).

Internationally, Vučić has pursued a strategy of balancing relations between East and West. While Serbia remains a candidate for European Union membership, Vučić has also cultivated close ties with Russia and China, seeking to leverage these relationships to gain economic benefits and political leverage. This balancing act has allowed Serbia to attract investment from both Western and Eastern sources while maintaining a degree of political independence and flexibility (Buzogány & Varga, 2018).

### **Geopolitical Implications of Serbia's Economic Populism**

Serbia's economic populism under Vučić has significant geopolitical implications for the Western Balkans and beyond. By fostering closer ties with China and Russia, Vučić has positioned Serbia as a key ally of these powers in the region, challenging the European Union's influence. This strategy has raised concerns among Western policymakers about Serbia's commitment to European integration and its alignment with Western values.

At the same time, Serbia's economic populism serves as a model for other countries in the region, demonstrating how a small country can leverage its strategic position to attract investment from multiple sources and maintain political independence. Vučić's approach has been particularly influential in countries like Montenegro and North Macedonia, where leaders are also seeking to balance relations between East and West to maximize economic and political gains (Pavlović, 2019).

### **Social and Economic Impacts of Populist Policies**

The social impact of Vučić's economic populism has been mixed. On one hand, the focus on fiscal consolidation and attracting foreign investment has led to economic stabilization and growth, with Serbia achieving an average GDP growth rate of 3.5% between 2015 and 2019. Unemployment has also declined, from over 20% in 2014 to around 10% in 2019, reflecting increased economic activity and job creation (Erer, 2018).

On the other hand, the benefits of economic growth have not been evenly distributed. Critics argue that Vučić's economic policies have disproportionately benefited the elite and foreign investors, while ordinary citizens continue to struggle with low wages, inadequate social services, and high levels of economic inequality. Additionally, there are concerns that the focus on attracting foreign investment has come at the expense of supporting

domestic industries and small businesses, which are crucial for long-term sustainable development (Buzogány & Varga, 2018).

Furthermore, the emphasis on nationalism and sovereignty in Vučić's rhetoric has heightened social tensions and contributed to a polarized political climate. By framing economic reforms in nationalist terms, Vučić has been able to deflect criticism and maintain public support. However, this strategy also risks deepening social divisions and undermining democratic institutions (Pavlović, 2019).

### **The Future of Serbia's Economic Populism**

The future of Serbia's economic populism under Vučić remains uncertain. While the current strategy of balancing relations between East and West and pursuing economic nationalism has brought short-term gains, there are significant risks associated with this approach. The reliance on foreign investment, particularly from non-Western sources, could limit Serbia's economic and political independence in the long run. Additionally, the focus on nationalist rhetoric and economic populism may undermine efforts to promote democratic governance and social cohesion.

Looking ahead, Serbia will need to navigate a complex set of challenges to ensure sustainable economic growth and political stability. This will require a careful balancing of domestic and international interests, as well as a commitment to transparent and inclusive economic policies that benefit all segments of society. The path forward for Serbia's economic populism will depend on the ability of its leaders to adapt to changing geopolitical realities and address the underlying social and economic challenges facing the country.

### **CONCLUSION**

The rise of populism in Central and Eastern Europe (CEE) is not merely a transient political phenomenon but rather a reflection of deep-seated economic, cultural, and political transformations that have shaped the region since the end of the Cold War. The resurgence of populist movements is rooted in the complex interplay of multiple factors, including economic discontent, cultural anxieties, and a pervasive distrust in traditional political institutions. Understanding the emergence and persistence of populism in CEE requires a nuanced analysis of these interrelated drivers and their implications for the region's future.

Economic crises have been particularly instrumental in shaping the political landscape of CEE. The global financial crisis of 2008, for instance, served as a catalyst that exposed the inherent vulnerabilities of the neoliberal

economic models adopted by many post-communist states. These models, characterized by privatization, deregulation, and integration into global markets, were initially heralded as pathways to modernization and prosperity. However, the crisis revealed their dependence on foreign capital and the volatility of global financial systems, leading to severe economic contractions, rising unemployment, and growing public disillusionment with the neoliberal consensus (Appel & Orenstein, 2018). In response, populist leaders have effectively capitalized on economic grievances by promoting nationalist and protectionist policies aimed at reclaiming economic sovereignty and addressing social inequalities.

The economic models developed by populist governments in Hungary, Poland, and Serbia illustrate a deliberate shift away from neoliberal orthodoxy towards a more state-centric approach. In Hungary, Viktor Orbán's government has pursued a policy of "economic sovereignty," which includes renationalizing key industries, imposing taxes on foreign corporations, and promoting domestic entrepreneurship. Similarly, Poland's Law and Justice (PiS) party has implemented a range of redistributive social policies, such as the Family 500+ program, alongside measures to increase state control over strategic sectors like banking and energy (Rae, 2020; Bluhm & Varga, 2019). In Serbia, the government has adopted a hybrid approach that combines elements of neoliberalism with economic nationalism, leveraging strategic partnerships with both Eastern and Western powers to attract foreign investment while maintaining a degree of political independence (Eror, 2018).

While these populist economic policies have been criticized for undermining democratic institutions, promoting crony capitalism, and fostering corruption, they have also achieved some notable successes. In many cases, they have helped stabilize economies, reduce unemployment, and enhance social cohesion by addressing the immediate needs of the populace. For example, Hungary's policies have reduced its unemployment rate from 11.8% in 2010 to 3.5% in 2019, while Poland's social welfare programs have significantly decreased child poverty and boosted domestic consumption (György, 2019; Szczerbiak, 2017). These outcomes suggest that populist policies, despite their controversial nature, can provide short-term economic stability and improve social welfare, which in turn reinforces their political legitimacy and electoral appeal.

However, the long-term sustainability of these populist economic models remains highly questionable. By prioritizing short-term economic gains and political expediency, populist governments risk neglecting the structural reforms necessary for sustainable economic growth and development. Policies that focus on state intervention, protectionism, and the concentration of economic power can undermine market efficiency, deter foreign investment, and stifle innovation, leading to slower economic growth

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in the long run. Furthermore, the erosion of democratic institutions and the rule of law under populist regimes can create an unpredictable and unstable political environment, which may further discourage both domestic and international investors (Pech & Scheppele, 2017; Bogaards, 2018).

The impact of populism on international relations in the region is also significant. Populist governments in CEE have often positioned themselves in opposition to the European Union, criticizing its policies on immigration, judicial independence, and economic regulation. This antagonistic stance has led to increasing tensions between populist-led states and EU institutions, raising questions about the future of European integration and the stability of the EU itself (Kelemen, 2020). The ongoing disputes over the rule of law and democratic governance in Hungary and Poland have prompted the EU to consider stronger measures, including conditionality mechanisms linking EU funds to compliance with democratic norms. Such measures could have profound implications for the cohesion and unity of the EU, particularly if they exacerbate divisions between Eastern and Western member states (Pech & Scheppele, 2017).

Moreover, the rise of populism in CEE has broader implications for the global political landscape. The success of populist movements in challenging established political and economic orders has emboldened similar movements in other regions, contributing to a global wave of populist politics that threatens to undermine the liberal democratic norms that have prevailed since the end of World War II. As populist leaders continue to gain traction by exploiting economic grievances, cultural fears, and political disillusionment, the potential for increased political polarization, authoritarianism, and conflict grows (Inglehart & Norris, 2016; Mounk, 2018). This trend poses a significant challenge to the global community, which must grapple with the implications of rising populism for international cooperation, economic stability, and democratic governance.

Looking ahead, the trajectory of populism in Central and Eastern Europe will depend on several factors, including the ability of populist governments to deliver sustained economic and social benefits, the resilience of democratic institutions, and the response of the European Union and other international actors. As the region continues to navigate the complex challenges posed by globalization, technological change, and geopolitical competition, the future of populism will likely be shaped by its capacity to adapt to new realities while maintaining its appeal to the electorate.

Ultimately, the rise of populism in CEE serves as a stark reminder of the need for inclusive and responsive governance that addresses the economic and social concerns of all citizens. It highlights the importance of finding a balance between economic efficiency and social equity, between openness to the global economy and protection of national interests, and between the

preservation of democratic values and the pursuit of political stability. As such, understanding the roots and dynamics of populism in CEE is crucial not only for the region but also for the broader global effort to promote sustainable development, social justice, and democratic governance in an increasingly interconnected world.

## REZIME POLITIČKA EKONOMIJA POPULIZMA

Ovaj rad istražuje političku ekonomiju populizma, s posebnim fokusom na zemlje Centralne i Istočne Evrope (CEE). Nakon globalne finansijske krize 2008. godine, Mađarska i Poljska razvile su specifične populističke ekonomske programe koji su počeli da utiču i na druge zemlje CEE, uključujući Srbiju. Ovaj rad istražuje uzroke populizma, transformaciju ekonomskih modela nakon krize, kao i specifične ekonomske politike koje karakterišu populističke vlade u regionu. Kroz detaljne studije slučaja Mađarske, Poljske i Srbije, istraživanje ističe kako su ove politike zasnovane na ekonomskom nacionalizmu, aktivaciji radne snage, natalizmu i suverenitetu. Nadalje, rad ispituje uticaj ovih politika na privlačenje novih izvora stranih investicija, posebno iz autoritarnih država na Istoku.

*Ključne reči:* politička ekonomija, populizam, Centralna i Istočna Evropa, ekonomski nacionalizam, neoliberalizam, finansijska kriza, autoritarizam

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## **SUSTAINABLE ECONOMY THROUGH CONCEPTS OF VIRAL MARKETING IN SUSTAINABLE BUILDING**

**ABSTRACT:** It is considered that the basic functions in a company are marketing and innovation, whose main activities are aimed at generating profit. Everything else is seen as an expense. In this sense, marketing is considered a sector whose activities are mandatory and necessary in every company. The modern age has brought technological revolutions which cause changes to happen daily. For this reason, companies have a difficult task to find a unique and creative way to attract and then retain customers.

Viral marketing, as a marketing revolution technique, uses social media instead of "word of mouth" to mass-promote a product to consumers. The goal of viral marketing is to awaken an emotion in consumers, so they would pass it on to others, thus transmitting the message like a virus. It is often considered that the function of marketing does not have to be represented in certain activities. Nevertheless, the green agenda of sustainable development and construction is happy to use viral marketing and social networks in addition to the classic use of sustainability as innovative and creative business and construction. In this way it also uses technologies, the Internet and social networks that provide a whole range of new opportunities for innovative and creative approach to the global market.

*Key words:* marketing, viral marketing, sustainability, construction, innovation.

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## INTRODUCTION

"The new millennium, with urban life and the construction of buildings in which we live, with industry and design, has brought a multitude of innovations in all areas, which points to the direct responsibility of humans in relation to the consumption of the natural resources of the planet and the damage caused by irresponsible actions of humans. Companies where business people do not react to changes in the markets and the fact that development and growth had negative consequences on the environment generally and the environment in which we live, stay, work and spend time, to our great regret"<sup>2</sup>. Something that was considered a winning strategy last year can already become wrong this year, which leads to the fact that today there are two types of companies, those that change by adapting to the needs of modern business focused on the necessity of raising environmental awareness among people, and those that disappear.

Marketing and creativity, as well as innovation in the company, are not only a factor in order to "win" the competition, but also a factor of survival in the market in accordance with the changed needs of business, which are closely related to the concept of sustainability, ecological, economic and social benefits in every country where permanent solutions are necessary, which, having in mind certain activities, puts green architecture and sustainable construction in the foreground in accordance with the green agenda of the European Union. One of the technological forces thanks to which the revolution is taking place is digitization, which enables data to be written in *bits*.

Marketing, as a forerunner of viral marketing, represents "The concept of planning, finding conception, pricing, promotion and distribution of ideas, products and services with the aim of creating conditions for exchange to the general satisfaction of individuals and organizations, i.e. management that guarantees identification, prediction and satisfying of consumer needs in a cost-effective manner."<sup>3</sup> Advances in technology have not only created new ways for the market to disseminate information, but also enabled consumers to disseminate information online or through other digital media that challenge traditional marketing practices. Viral marketing is considered a new direction, and for this reason the aim of this paper is to determine how viral marketing – related to sustainable construction and economic aspects of sustainability – affects the mindsets, attitudes and desires of consumers in the global consumer society.

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<sup>2</sup> [www.brianlack.co.rs](http://www.brianlack.co.rs) (accessed on January 14, 2024)

<sup>3</sup> [pdfcoffee.com](http://pdfcoffee.com) (accessed on January 14, 2024)

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In the 21<sup>st</sup> century, at the time of globalization, privatization, technology development, strengthening the position of customers, and increasing competition on the market, companies and industries are changing their strategy and directing it more and more towards the common good and environmental protection, reduction of harmful gases, green agenda and overall sustainability of all activities: economy, tourism, hunting and fishing, agriculture, construction of so-called green buildings and so on. Sustainable development is becoming the focus of thinking for every function in the company, not just marketing. "Marketing is no longer just an option for company to improve its status on the market, but the possibility of survival and the ability to present their service/product in a better way than the competition, with all the necessary innovation and creativity<sup>4</sup> in devising their strategy in order to retain existing and win new consumers/customers/users". In the age of modern technology and the age of social networks, marketing is increasingly becoming an inexpensive way to promote products and services. Viral marketing is considered a newer version of the "word of mouth" marketing activity, which takes place on the Internet and through social networks. The effects of a viral marketing strategy are messages to consumers, with the aim to promote using (primarily buying) services/products, in the form of photos and videos that have an effect on consumers. The goal of viral marketing is to awaken an emotion in consumers, so they will pass on their emotion to others, and the message they felt to be transmitted similar as a virus.

Viral marketing is not an exception in sustainable development also, having in mind that sustainability is an imaginary concept for most people, and through viral marketing it approaches the consumer who realizes the importance of sustainability and positive impact not only in the economic sense but also the need to change the way of thinking and living in accordance with the green agenda.

The subject of this research is the study and research of both viral marketing, with its advantages and disadvantages, and the sustainable development, green architecture, construction of smart buildings, economic profitability and living in harmony with nature for the purpose of a better quality of life for future generations.

The aim of this paper is to explain the theoretical concept of viral marketing, sustainable development and economic aspects of sustainability, green building and examples of good practice in relation to sustainability and development.

The assumptions on which the research is based were created in accordance with the subject and goal of the work:

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<sup>4</sup> symorg.fon.bg.ac.rs (accessed on January 14, 2024)

1. Viral marketing is one of the ways to virally promote services/products by gaining competitive advantage for free.
2. Viral marketing is necessary in the modern age in the field of green architecture, construction and sustainability.
3. Green architecture is a method of designing buildings that is based on sustainability and the use of building materials when designing with the aim of adapting them to the environment.

## THE CONCEPT OF VIRAL MARKETING

Wilson describes viral marketing as “any strategy that encourages individuals to spread a marketing message to others. In this way, the potential for exponential growth in exposure and impact of the message is created.” In the paper *Viral Marketing Online*, Wilson explains how it is actually any advertisement that spreads itself in the same way as viruses. It differs from viruses since this form of marketing uses digital media (Willson, 2001). Therefore, the concept of viral marketing refers to a message that spreads to other people because the original recipient liked the content and decided to pass the message on. This type of online communication is equivalent to word-of-mouth communication in off-line marketing, i.e. live. Many viral marketing activities occurred more by accident than by design, and theory seems to have developed after the practice. According to Wilding (Wilding, 2001), viral success requires good business people to notice and develop an activity, not to initiate it.

Viral marketing takes the basic nature of multi-level marketing and applies it to customers, making each of them a salesperson. This marketing relies on Metcalfe's Law, named after Robert Metcalfe<sup>5</sup>, which states that the usability of a network is proportional to the squared number of its users. It is considered that this phenomenon best explains the concept of viral marketing because the pattern of communication is similar to the pattern by which particular infectious viruses have the ability to move through the entire set of interactive hosts.

The difference between viral and traditional marketing is the media used and the potential explosion of growth. Viral marketing is more about accidental discovery than planned spread, which is also the case with word-of-mouth marketing. The emphasis is on creating a message worth spreading, but that does not promise spreading; in other words, creating a message and what will follow after it are two different and uncorrelated things. So, marketers can

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<sup>5</sup> Robert Metcalfe is an engineer and entrepreneur from America. He is one of the co-inventors of Ethernet.

create messages, but they cannot determine their distribution. Of course, this does not rule out the possibility of marketers carefully choosing whom to send messages to, bearing in mind that they may not affect what happens with the message after the first sending.

*Intrapromote*<sup>6</sup> digital marketing agency believes that "messages, so-called viral objects, should be designed so that they particularly appeal to the target market group, that is, the target market. The key is to introduce these objects into the digital form of the network in an acceptable way, unlike offensive spam. These objects should be in accordance with the digital spirit of a certain affinity within a certain community." An example of this would be contributing to a discussion on an internet forum.

Successful viral marketing is considered to be free and at the same time specific. Along with these two qualities, viral marketing campaigns are based on one of three models, namely the promotion model, the incentive model, and the loyalty model. Wilding, guided by experience, states that jokes, games and contests take the leading place in viral marketing stakes and fall into the category of promotional models.

This model generates enough interest that consumers are willing to share the content with their friends without receiving any incentives. In this model, Wilding explains, the trick is to require the content to somehow enhance or represent the sender's personality or match the recipient's personality so that the sender feels they must present it to the recipient. Another model, incentive-based one, allows the sender to be rewarded for their actions. This model is the most common since the recipient is only a component of the money-making mechanism. The third model, the loyalty-based one, combines elements of affiliate programs and provides financial rewards, but only if the recipient engages in some way.

Viral marketing is neither promising nor easy to implement. There are several prerequisites for the success of a viral marketing campaign. Among the main ones are the attraction of emotions and the absence of obstacles to messages that stand out. A viral message is always directed to a certain emotion; therefore, it should be created in a way that will cause a certain feeling. A successful viral message spreads very quickly across different social media platforms. The main difference between viral and ordinary marketing is how the messages reach the target audience. With viral marketing, messages arrive gradually, slowly building momentum; whereas in conventional marketing, messages are shown to a mass audience all at once. The next important difference is in the way the organization (company) sends its messages. Viral marketing depends on social networks and the sharing of the

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<sup>6</sup> Digital marketing agency specializing in Search Engine Optimization, Social Media Marketing, Content Marketing, Mobile CEO. Headquarters in Hudson, Ohio, USA.

message on those, while campaigns of conventional marketing mainly take place around events where the message can reach millions of people in an instant.

Other differences that should be mentioned are the increased scope of influence, the expanded possibilities of recipients and the possibility of exerting influence that is greatly increased. The most important part of viral marketing success is developing engaged businesses that encourage consumers to pass on the message. Marketing managers choose one of three different ways to start viral advertising: using an e-mail strategy, an online advertising strategy, or an offline advertising strategy.

There are several steps that are considered essential when conducting viral marketing (Filipović, 2022)<sup>7</sup>:

1. Precise setting of the idea, the goal and the final results to strive to.
2. Content creation - preparing the message according to the requirements.
3. Finding the right viral channels and target audience, understanding their interests and connections.
4. Launching a viral campaign (through pre-selected channels).
5. Use of web analytics to monitor key campaign success parameters.

These two marketing types have the same goal, but the choosing one of them depends on how quickly we want the message to spread. In any case, an effective marketing strategy and patience are required.

### **Viral marketing and consumer emotions**

The concept of viral marketing suggests that marketers (sellers) of certain products or services can continue to use the power of interpersonal networks to promote their products or services. This form of communication between customers and clients is an effective means of transforming electronic communication networks into influential networks. As already mentioned, viral marketing uses existing social networks by encouraging customers to share product information with their friends. What is also true with viral marketing is that the viral nature of the internet means that a negative comment about a company can spread faster than a forest fire and it is always very difficult to undo the damage caused.

However, Klopper points out that the viral marketing concept allows consumers to spread information online, which has begun to replace what was traditionally called word-of-mouth. Successful marketing campaigns consist of

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<sup>7</sup> mbs.edu.rs and www.ekof.bg.ac.rs (accessed on January 14, 2024).

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an engaging message that includes imagination, fun and encourages ease of use and visibility using a combination of technologies.

Like in any other marketing activity, the emotion conveyed by a viral marketing message is often just as important as the factual information. Electronic content is often shared more quickly when the recipients of the message feel a strong emotional connection. Those emotions apply to marketing as a whole, not just to viral marketing. There are six emotions that regulate the behavior of the receiver of information, namely:

1. Surprise - considered to be the most important emotion for all marketing efforts. A sense of the unexpected creates a stronger impression on recipients. However, relying on surprise alone would be a mistake, as it has a much greater effect when used in combination with one of the other five emotions.

2. Joy - considered a good choice when companies want to revive an already existing product on the market.

3. Sadness - can be used as a negative emotion in marketing and is best used when a quick response to a specific event is required. However, the downside of this emotion is that it often encourages short-term commitments instead of long-term ones. Balancing sadness with a sense of hope can help create a more grounded message.

4. Anger - the most appropriate emotion for messages that want to cause a quick response, for example to an injustice. Like sadness, this emotion works best for short-term actions.

5. Fear - used in marketing campaigns, but it primarily applies to political campaigns. This emotion is also oriented towards short-term commitment. It should be evoked sparingly, as it may trigger a mixed response from the target market.

6. Ambiguity - best used when targeting young men and can give the image of how rebellious they are. Men share messages that include ambiguous humor twice as often as women.

### **Advantages and disadvantages of viral marketing**

The leading advantage of viral marketing compared to advertising through traditional media (television or print ads), from an economic perspective, is that it is cheaper and more accessible. It is not necessary to spend a large sum of money to get airtime, there is no printing or distribution fee. The design of viral marketing enables all this and is therefore more effective than the current form of advertising that we are used to.

The generation that is most active on social media are millennials (people born in the 1980s and 1990s), and this is also the generation that has the least

confidence in traditional advertising. During certain research<sup>8</sup>, it was determined that influencers have a greater influence on them than the advertising of the companies themselves.

In the European Union, the type of marketing based on the concept that influencers promote the products of a certain company on their profiles or in videos and receive adequate compensation for this is considered illegal, while in America this is not the case, but is regulated by law. For these reasons, the YouTube platform allows influencers to add a note to their videos indicating promotional activities with the phrase "Includes paid promotion".

Everything that has an advantage has its disadvantages too, including viral advertising. The biggest drawback is the lack of control. This lack of control is reflected in the moment when a message spreads to enough people, and the creator no longer has control over its distribution and use. The problem arises if the message is interpreted incorrectly, or if any error occurs, since it is increasingly difficult to eliminate that error, which can result in a negative impact on the image of the company itself. Another risk is pooling risk. As mentioned, there is no way to control who receives and who shares messages, so when people and groups start sharing content, there is no control over whom it reaches. This leads to the fact that people spreading the company's message may be someone the company would rather not work with. Among other shortcomings, there are the lack of legal and ethical standards, dependence on consumers and potential negative impact, i.e. a negative feedback effect.

### **Types and principles of viral marketing**

At the core of this topic, there are two different types of viral marketing – active and passive one. Passive viral marketing essentially broadcasts the brand through some type of medium without it being the focus of the content. It can be equated to something like watermarking a viral video. Active viral marketing works differently: there must be some kind of call to action and participation of the recipient. A good example of this would be some kind of social media contest where any contestant is interested in sharing or commenting on a particular page, which would eventually result in it spreading like wildfire.

When talking about the principles of viral marketing, one should take into account the six basic principles that lead to maximum success and efficiency, and they are:

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<sup>8</sup><https://www.forbes.com/sites/andrewarnold/2018/01/21/millennials-hate-ads-but-58-of-them-wouldnt-mind-if-its-from-their-favorite-digital-stars/#54601d4e59ca> (Accessed on March 31, 2020)



1. Availability of products or services. It results in viral spread which in turn produces a larger audience of potential customers.

2. Easy transfer to others. Viral marketing campaigns only spread when they are easy to spread. Users of social networks are constantly bombarded with information and this can result in poor attention span. Therefore, concise and short messages are the most effective ones.

3. Simple scaling.

4. Explosion of common motives and behavior. In order for the campaign to reach its full potential, it is necessary to include appeal by the usual motivating factors (the need to be known, loved, understood). Companies that create their messages in accordance with these factors have more chance of success.

5. Use of existing communication networks. Viral marketers who manage to place their message in the existing communication between people have the potential to multiply their dispersion quickly.

6. Taking over other people's resources.

## **SUSTAINABLE ECONOMY**

"One of the prerequisites and basic drivers of the general development of humans and civilization are energy sources. The measures implemented and the goals pursued by implementing the energy policy must be aligned with the concept of sustainable development" (Radovanović, 2019). Energy resources were concentrated in certain parts of the world during the last decades of the 20<sup>th</sup> century, with the intention of becoming a complex and important object of world trade.<sup>9</sup> These countries have a great economic advantage that results from the very possession of large amounts of energy, and on the other hand, the need to constantly increase that amount, which would ensure sufficient amounts for the normal functioning of society as a whole<sup>10</sup>. According to Marković (2005), "*Sustainable development should be a concept that will treat economic and ecological interests in a complementary manner.*"

Sustainable development includes 3 aspects:<sup>11</sup>

- "Environmental protection, which means that natural resources are used in a manner and with appropriate management aimed at preventing pollution of resources such as: water, air, soil, waste recycling and the like;

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<sup>9</sup> educons.edu.rs (accessed on January 14, 2024)

<sup>10</sup> odrzivirazvoj.wordpress.com (accessed on January 14, 2024)

<sup>11</sup> odrzivirazvoj.wordpress.com (accessed on January 14, 2024)

- The social aspect, which is focused on the standard of living, education, community, equal opportunities;
- The economic aspect related to profit generation, cost reduction, general economic growth, research and development".<sup>12</sup>

The possibility of achieving sustainable development in the Republic of Serbia lies in the introduction, adaptation and application of the principles that are dominant in the European Union countries, i.e. the principles established in the Lisbon Strategy, which are related to increasing competitiveness based on knowledge, innovation and entrepreneurship.<sup>13</sup>

When defining all aspects of sustainable construction and the use of materials in accordance with the Green Agenda of the European Union, it is necessary to pay attention to the definition of terms related to sustainable development and sustainability, but also to the so-called circular economy, which is based on the use of natural resources during the production of goods and/or services with the aim of maximizing the lifetime and value of the said products/services and also to simultaneously minimize the level of waste material so that at the end of the use cycle, everything produced in the production process can be put back into the same process as a newly created value.

According to Vukadinović, *"The need to satisfy both the basic and higher demands of humans as an economic beings has brought humanity from prehistoric times to the present day in a position where the average Homo economicus is increasingly becoming a consumer of the mass production market, which in numerous segments of the economy is reduced to the overexploitation of resources... Known as global goals, the Sustainable Development Goals (SDGs) are the result of the Millennium Development Goals and emphasize that the fight against poverty goes hand in hand with the fight for economic growth and industrialization, along with numerous social needs for health, education, social protection, a healthy environment and a community resilient to climate changes."* (Vukadinović, 2022:11).

"In a circular economy, growth is decoupled from the consumption of scarce resources. Products and materials are kept in productive use as long as possible, and when they reach the end of their use, they are effectively returned (or looped) back into the system" (Vukadinović, 2022: 17). The circular economy is applied by employers who apply new business models, as well as responsible consumers (Kirchherr, Reike and Hekkert, 2017). The circular economy makes good use of natural resources through high resource efficiency

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<sup>12</sup> odrzivirazvoj.wordpress.com (accessed on January 14, 2024)

<sup>13</sup> faolex.fao.org (accessed on January 14, 2024)

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and waste prevention, with minimal end-of-life material discard in the manufacturing sector so that it is restorative and regenerative by design.

A series of systemic solutions that provide a response to climate change is called the circular economy: this name is cumulative since it includes problems related to climate change; pollution of air, water, agricultural land and the like; loss of biodiversity and increase of waste. This economy rests on three basic principles, namely: elimination of waste through circular design; circularity of materials and products, and renewal of nature. The foundation of the circular economy is based in ecological economics, which studies the interrelationships of natural ecosystems and systems in the economy, and its focus is on the retention of materials in the system through the continuous material circulation, the elimination of toxic substances, the reduction of the use of biological and technological resources, renewable energy sources, the reduction of production waste to zero or close to zero and to the overall well-being of natural ecosystems and people.

### **Socio-economic aspects of sustainability**

The material is used too much in the production of goods and services in the Republic of Serbia, which raises the question of the extent of recycling, which is insignificant in relation to the quantity, and this has a negative impact including a general depletion of resources and waste management costs. For this reason, one of the priority tasks that the Republic of Serbia must implement relates to measures to restrict the so-called "dirty" production and measures aimed at diversification of production and at use of energy and materials, especially for those resources that are classified as non-renewable.<sup>14</sup> Although the quality of life is a subjective feeling, by which an individual expresses their satisfaction with their way of life, when viewed more broadly it can be described as the relationship between the individual and their environment in which they live and work: physical, health, social and economic environment. Sustainability implies a lifestyle of every individual in society that is ecologically aware, healthy, safe, solidary, participatory, and differentiated.<sup>15</sup>

The sustainable development as a concept is basically aimed at the preservation of natural ecosystems and the rational use of the country's natural resources, as well as at methods and management related to raising the quality of the environment and life in a safe and healthy environment. Accordingly, sustainable development represents the stated need of humans to preserve and protect nature on a foundation that are sustainable, using it to the extent allowing for nature to reproduce. In cases where nature is exploited without

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<sup>14</sup> extwprlegs1.fao.org (accessed on January 14, 2024)

<sup>15</sup> cis.org.rs (accessed on January 14, 2024)

any control and excessively, from the point of view of the environmental capacity, it will lead to a disruption of the ecological balance, and the consequences will be unimaginable and could lead to ecological disasters. The concept of sustainable development puts the quality of the living environment and the environment in the first place<sup>16</sup>. Eradication of poverty and reduction of differences in the standard of living in different parts of the world are essential to achieve sustainable development and meet the needs of individuals, while the task of nations is to cooperate in preserving, protecting and restoring the "health" and value of the Earth's ecosystem.<sup>17</sup>

The priority of economic development is economic growth, accompanied by the attraction of direct foreign investments, better conditions in the business environment by paying more attention to economic freedoms: full protection of property (especially intellectual property), freedom of contract, liberation of the internal market from state control, privatization, denationalization, lowering of customs and non-customs barriers, low state spending, low taxes, moderate regulation, removal of administrative barriers for starting, running and ending business, freeing up capital and current transactions, free exchange rate formation and suppression of non-economic rents, corruption, gray economy and tax evasion.<sup>18</sup>

## **SUSTAINABLE BUILDING**

"In the last decades of the 20<sup>th</sup> century, the world is faced with attempts to build systems in various ways that will be based on sustainable production and consumption, and this concept is based on the production of greater added value with as little consumption of materials and energy as possible, while taking much care that the impact on the environment is as small as possible in order to leave future generations with better chances for a quality life in a healthy environment".<sup>19</sup>

### **Green architecture and construction with sustainable materials**

The environment represents a direct or indirect surroundings of human beings from which various capacities are drawn for the normal functioning of the life and work of every person. For this reason, its value has a special social interest to be protected both on a global level and through specific measures

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<sup>16</sup> [www.menadzment.tfbor.bg.ac.rs](http://www.menadzment.tfbor.bg.ac.rs) (accessed on January 14, 2024)

<sup>17</sup> [repositorij.ufzg.unizg.hr](http://repositorij.ufzg.unizg.hr) (accessed on January 14, 2024)

<sup>18</sup> [cis.org.rs](http://cis.org.rs) (accessed on January 14, 2024)

<sup>19</sup> [www.ekourb.vojvodina.gov.rs](http://www.ekourb.vojvodina.gov.rs) (accessed on January 14, 2024)

and actions by citizens, preventive and repressive alike, as well as by competent authorities and institutions.

When talking about construction, green architecture and an environment with less waste that will disrupt and pollute it, it all starts with stating the consequences<sup>20</sup> and ways of solving the issue of waste, reducing the consequences of harmful emissions, use of "green" packaging, recycling existing by-products, with the aim to later focus on clean, material- and energy-saving production<sup>21</sup> and construction of green buildings with sustainable and selected materials; or organic agriculture that will produce safe and healthy food.

"During the production of goods and the provision of services in the Republic of Serbia, it was observed that too much material is used, and at the same time the volume of recycling is minuskule, which has a negative impact, depletes the resources, and increases the costs of waste management. For this reason, the Republic of Serbia must urgently take harsh and unpopular measures to restrict "dirty" production and technologies, as well as measures aimed at unnecessary waste of energy and material from non-renewable resources."<sup>22</sup>

Green architecture as a method of designing buildings is based on sustainability and the use of designated building materials with the aim of adapting to the environment, that is, to focus the construction on energy-efficient and environmentally friendly homes and their exteriors (facades).

From the very beginning of a smart, i.e. green building, steps are used that are aimed at sustainability and development: the very design of the project, the location, the choice of materials used, and after that the construction that should be harmonized with the ecosystem or in its favor. Although many consider that the "green building" is a novelty in the field of construction and materials used in the world of architecture and construction, it is necessary to know that in principle people are returning to their roots with this method of construction, because since times immemorial materials such as mud, straw, wood and stone were used for building homes not only in Serbia but also in the world.

We should never forget the fairy tale about the wolf and the three piglets, where story about three forms of construction appear: straw, mud, stone... The same applies to the renewable energy of the Sun, wind and water.

In the modern world, green architecture means the design, construction and management of buildings with minimal use of resources and less negative impact on the environment, which means that a green building uses the land in an efficient way: it uses materials, energy and water with minimal (or no)

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<sup>20</sup> [www.ekourb.vojvodina.gov.rs](http://www.ekourb.vojvodina.gov.rs) (accessed on January 14, 2024)

<sup>21</sup> [cis.org.rs](http://cis.org.rs) (accessed on January 14, 2024)

<sup>22</sup> [faolex.fao.org](http://faolex.fao.org) (accessed on January 14, 2024)

waste. Also, indoors, it provides a healthy environment and restores or improves the natural environment.

### **Materials for the construction of green buildings**

A very important element for the sustainability of construction is the materials used, which ensure the energy efficiency of buildings. Energy efficiency refers to well-done thermal insulation, but also to other components that should be respected during construction and that primarily depend on the size of the building (e.g. controlled ventilation, economical heating/cooling systems and so on). Carpentry is a component that is given special attention to, since the insulation of the living space depends on whether the doors and windows seal well. It is necessary to use devices with low electricity consumption, and the best ecological materials are wood, bricks, straw, stone, Simprolite wall, concrete and the like.

Traditional or conventional construction uses natural resources maximally and creates waste, while green architecture, on the other hand, offers advantages in relation to ecological, economic and socially positive aspects that are reflected in construction methods at any stage, an integrated approach from the earliest stages of construction project to the very end, with numerous effects that successfully achieve global goals aimed at solving climate change, creating sustainable and successful communities and initiating economic growth.

The main benefits include the environmental impact by protecting the ecosystem and biological diversity; improving water and air quality; waste reduction and preservation and restoration of natural resources, and in economy sense, those advantages are aimed at increasing the value of the real estate and the impact on the productivity of tenants, that is, people who live and work in green buildings.

Social benefits refer to better health conditions and comfort, better indoor air quality and better quality of life in general. Older buildings can also be made green, since green architecture does not mean only new construction, but green building principles can be integrated into existing buildings. Green restoration and renovation can be achieved on any house, residential or commercial one, hotel, even on sports stadiums and production facilities by, for instance, installing solar panels on the roofs, replacing classic lighting with LED lighting, rearranging water installations and the like. It is important to add that the renovation can include the use of the so-called green materials such as wood, stone, earth, or go a step further by recycling waste (e.g. tires, glass/plastic bottles, etc.).

Finally, it should be noted that sustainable and green architecture are not the same, since sustainable architecture implies the use of renewable energy

sources and minimal negative impact on the environment, while in practice sometimes happens that green construction does not meet these conditions despite the rational consumption of resources. One of the most common examples is the large production of carbon dioxide during the transportation of building materials, which disrupts the ecosystem, even though the material used is considered sustainable.

For a building to be sustainable and green, the way it is designed is important, as well as the construction itself in relation to the environment. The environment sets the foundations and guidelines for future design, and green construction must respect the immediate ecology of the area where it is built and practically blend in (be in harmony) with it.

Only when these conditions are met it can be considered that people really live with full respect and appreciation for the environment, that they design beautiful, energy-efficient, ecologically acceptable residences and workplaces that will emphasize our ability to have desire and the ability to adapt to nature without disturbing its harmony and preserving the environment.

## **VIRAL MARKETING IN THE FIELD OF SUSTAINABLE CONSTRUCTION**

The role of viral marketing stems from the very revolutions in the historical development of human beings: the third industrial revolution applied electronics and information technologies to automate production, and the fourth industrial revolution is built upon the third digital revolution. According to Vukadinović (2022) and the World Economic Forum, in 2019 alone more than 92 billion tons of materials were processed and separated, which contributes to the problem of reducing global CO<sub>2</sub> emissions, and the waste that is created (such as textiles, food, plastics, electronics) directly affects the environment and people's health, while the circular economy itself promotes the reduction of waste and the use of natural resources in a safe and secure way.

The viral marketing may be a great help in presenting this data through photos that show the ways of environmental pollution, but also as the way of fighting to preserve it through the "smart" use of resources that we use in production, consumption and all other activities, taking into account economic aspects and rationality in implementation of sustainable development and its principles. A polluted environment means<sup>23</sup> the destruction of not only the part of the natural values and resources, but also the destruction of part of the future of the next generations. Numerous ecological problems arise because there is

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<sup>23</sup> zuns.me (accessed on January 14, 2024)

a wrong conception in the waste management system that is not based on ecological principles, and which prevents proper handling of waste, which would not lead to ecologically harmful consequences.

"The benefits of sustainable construction are felt by everyone, from companies engaged in production, contractors who realize direct economic benefits and better access to the market, through the economy and increased profits due to the production of quality services and/or products, to consumers who can choose<sup>24</sup> a high-quality, safe and a healthy home, i.e. life equipment for themselves and for their family". It is the job and task of viral marketing to present these advantages in the right way and to highlight what is the essence of the marketing function, regardless of what type of marketing is being talked about.

What significantly affects the increase in the number of views, and thus the promotion of viral marketing and faster spread, is when celebrities participate in campaigns related to humanitarian work in the field of environmental protection, living in buildings/houses/objects that were built using green architecture and construction with selected materials that do not pollute the environment.

## CONCLUSION

People in their daily life make an effort to improve living standards, knowingly or unknowingly endangering the environment and even themselves. The household is the basic consumer unit which in modern living conditions increases consumer activities, and thus the amount of waste. It can be summarized that with the very process of building one's home, a person begins the process of sustainable development and sustainability. By applying sustainable construction and green architecture, they take important steps in preserving the environment. Sustainable economy and sustainable construction are the future of the modern world, the basis of which is sustainable development that promotes renewable energy sources (air, water, forests) that should be used economically so that they are available for future generations. This means that the principles of sustainable economy (economic sustainability) are pointed towards achieving goals that ensure economically efficient development and that resources being managed in the best possible way so that future generations can also use them successfully. This concept requires the formation of a new ecological awareness, the increase of the responsibility of the state administration, the appropriate revision in the spheres

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<sup>24</sup> [www.bugi.unsa.ba](http://www.bugi.unsa.ba) (accessed on January 14, 2024)



of the economy and the legal order, as well as the inclusion of science that would offer adequate solutions to the observed current development problems.

Viral marketing plays a big role in this process as a marketing revolution technique that uses social media instead of "word of mouth" in order to mass present a service/product to consumers, in a way that brings closer the very need of construction using selected materials that will have as little waste as possible and the greater energy efficiency, which would meet the needs and conditions of modern living and improve the quality of human life from the aspect of sustainable development. Viral marketing shows that "word of mouth" travels faster through media, and at low cost. Based on the research of the theoretical part of the paper, the conclusion is reached that environmental protection, green construction and life based on sustainable development keep pace with technology and changes in the market in relation to how companies dealing with green architecture use viral marketing as one of the ways of promoting services/products and improving their image on the market.

Based on theoretical and empirical research, it can be said that viral marketing is necessary in the modern world when changes happen every day and is the one of the ways to gain a competitive advantage if the essence and positive emotion, uniqueness, and finding ways to interest followers on social networks are properly used. Given that technology is constantly advancing and that the current period can be called a technological revolution, marketing on social networks is becoming necessary in all activities, including the use of green architecture and all aspects of sustainable construction. It can be summarized that viral marketing should bring the basic motto of sustainable construction closer to people and other relevant factors, and that sustainable construction points to major global challenges related to the significant environmental impact of the construction industry and to economic and social benefits with the guarantee of the highest quality of aesthetics, strength and durability, but also the entire lifetime of the building, which includes the choice of materials, demolition and recycling.

## **REZIME**

### **ODRŽIVA EKONOMIJA KROZ KONCEPTE VIRALNOG MARKETINGA U ODRŽIVOJ GRADNJI**

Smatra se da su osnovne funkcije u kompaniji marketing i inovacije čije su osnovne aktivnosti usmerene na stvaranje profita. Sve ostalo se posmatra kao trošak. U tom smislu marketing se smatra sektorom čije su aktivnosti obavezne i neophodne u svakoj kompaniji. Savremeno doba je donelo tehnološke revolucije, u kojima se promene dešavaju svakodnevno. Iz tog razloga

kompanije imaju težak zadatak da pronađu način koji će biti jedinstven i kreativan kako bi privukli, a potom i zadržali kupce.

Viralni marketing kao tehnika marketinške revolucije u tu svrhu koristi socijalne medije umesto „usmene reči” kako bi se masovno predstavio proizvod potrošačima. Cilj viralnog marketinga je da probudi emociju kod potrošača, da oni njihovu emociju proslede drugima i da se poruka koju su osetili prenosi poput virusa. Iako se često smatra da funkcija marketinga ne mora biti zastupljena u određenim delatnostima i aktivnostima, zelena agenda održivog razvoja i gradnje rado upotrebljava viralni marketing i društvene mreže i na taj način, pored klasičnog posmatranja održivosti kao inovativnog i kreativnog poslovanja i gradnje, koristi tehnologije, Internet i društvene mreže koje pružaju čitav niz novih mogućnosti za inovativan i kreativan pristup globalnom tržištu.

Ključne reči: marketing, viralni marketing, održivost, gradnja, inovativnost.

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## **MANAGERIAL STRESS IN THE PROCESS OF DIGITAL TRANSFORMATION OF ORGANIZATION**

**ABSTRACT:** Digital transformation is an essential process in modern business that enables organizations to fundamentally redefine their operations, communication, and business models through the integration of digital technologies. This process represents more than a mere technical upgrade; it is a profound change that requires the inclusion of technology in the foundation of daily activities in order to improve efficiency, innovation, and competitiveness in the market. In the context of globalization, rapid adaptation to digital trends becomes crucial for preserving market position, and successful implementation of

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digital transformations can result in significant savings, resource optimization, and productivity improvements.

Digitization also enables a better understanding of customer needs through the analysis of large amounts of data, contributing to the creation of personalized products and services. However, digital transformation also brings challenges, including managing organizational change, managerial stress due to rapid decision-making, continuous learning, and the need to adapt to new technologies. As a general phenomenon and an eminent factor of business activities, managerial stress manifests in different ways across the wide range of actions in the process of digital transformation of organizations.

Human resource management is important in managing stress in the process of digital transformation of organizations, directing it into optimal frameworks where it manifests a positive dimension, aimed at enhancing the success of both individual business activities and overall results in the process of digital transformation of organizations.

*Key words:* Digital Transformation, Human Resource Management, Digital Competencies, Managerial Stress, Management of Managerial Stress, IT Tool Integration, Process-Oriented Organisations, Business Process Optimisation, Analytical Tools

## **INTRODUCTION**

The modern era in which organizations operate is an era of continuous change. The contemporary organization is flexible, effective, efficient, innovative, knowledge-rich, and profitable. Current trends in the global economy have led to significant changes in the behaviour of companies. Global economic flows and economic policy have a significant impact on the business philosophy and strategy of organizations (Ikač, 2005, p. 37).

Digital transformation is essential for modern business, providing organizations with the opportunity to radically enhance their operations, communication, and business models through the integration of digital technologies. The transformation process is not just the implementation of new technologies, but a profound and comprehensive change that affects the core of business activities and how a company approaches the market, its customers, and internal processes. Digital technologies enable organizations to achieve significant savings, optimize resources, and improve efficiency,

which is crucial for maintaining competitiveness in a rapidly changing global environment.

Automation of business processes, as a key element of digital transformation, involves replacing manual operations with automated solutions, which can lead to substantial savings and increased productivity. However, this also requires managers to effectively oversee the integration of new systems, ensure employee training, and minimize resistance to change. Similarly, the digitization of data and documentation transforms how companies manage information, but it demands that managers guarantee the security and integrity of transferred data, which can be a significant source of stress.

The implementation of complex IT systems and the integration of Big Data and analytical tools present additional challenges that managers must face. These technologies require a high level of technical expertise and the ability to make quick decisions based on the analysis of large volumes of data. The stress associated with these tasks can be intense, especially when managers must balance the expectations for rapid results with the need for detailed analysis and data security.

However, digital transformation also brings numerous challenges, particularly regarding managerial stress. Managers face the pressure of rapid changes, the need for continuous learning of new technological skills, and challenges in managing teams through often disruptive changes. Additionally, there is an expectation that technological changes will quickly reflect improvements in business results, further increasing the pressure on managers. An organizational culture that promotes innovation, learning, and flexibility can be crucial in mitigating these challenges, allowing for easier adaptation and more efficient implementation of changes.

In conclusion, the success of digital transformation depends on the ability of managers to effectively navigate these challenges, support their teams, and successfully integrate new technologies into business processes. Understanding and managing managerial stress in this context is crucial not only for the personal success of managers but also for the overall success of the organization in a dynamic digital environment.

## **MANAGERIAL STRESS IN THE CONTEXT OF DIGITAL TRANSFORMATION**

Today's knowledge and scientific research encompass a vast array of facts that determine the nature of stress, not only that which arises in everyday communication but also stress that emerges in business dialogue, business relationships, and within the organization in a general sense, as well as in the



process of digital transformations of organizations. Stress is the response of our body and mind to something that disrupts their natural balance. One of the more interesting definitions of stress is: a modern syndrome in business communication and the pursuit of success (Đorđević, 2003, p. 582). This particular definition of stress is most commonly associated with managerial stress. Today, it is almost impossible to imagine a successful manager without managerial stress.

The modern manager makes decisions, negotiates, persuades, advocates for consensus, fosters team spirit, coordinates, and strategically plans (Oldcorn, 1990, p. 290). For the successful performance of business activities, managers of holistic systems must possess certain skills:

- Technical skills - specialized knowledge that enables the manager to understand the essence of the job,
- Conceptual skills - enable the manager to view and analyse the organization as a whole,
- Interpersonal skills - enable the manager to establish cooperation with colleagues and the environment.

In the context of a holistic approach, we view the organization as a whole. It is not a collection of parts; rather, the whole exists in every part, much like in the human body. Managers cannot effectively do their job without understanding the simultaneous relationships within the whole. Modern business organizations function as a whole, and wholeness is a function of constant, efficient communication, akin to the circulatory and central nervous systems (Torrington, et al. 2004, p. 324).

The organizational environment consists of a set of factors both outside and within the organization that can influence its progress toward achieving its goals. For the purpose of analysing and predicting the organizational environment, an assessment is generally made so that its management can respond rationally and thereby increase the organization's success (Certo, et al. 1991, p. 36).

Organizational structure, as a projection of activities, authorities, and relationships within the organization, represents the internal environment for creating business processes. In this context, organizational structure emerges as an important factor for the business success of any organization (Ikač, 2005, p. 46).

Organizational structure creates conditions for decision-making, the functioning of business processes, and the achievement of organizational goals in the process of digital transformations. The goal is for organizational culture and structure, in the process of digital transformations, together with the corporate plan, to form a context within which the human resources strategy operates in mutual interconnection. Organizational culture can influence the

business of the organization both positively and negatively. It can be the "secret formula for success" or the "silent killer" (Janićijević, 1997, p. 43).

From a strategic approach, modern organizations in the process of digital transformations must continuously study the human resources market in the context of the global market and business environment. Based on this, organizations in the process of digital transformations ensure appropriate information for making rational decisions and achieve flexible adaptation to conditions and changes in the environment during the digital transformation process.

## **MANAGERIAL STRESS AND AUTOMATION OF BUSINESS PROCESS**

Business process automation represents a key component of digital transformation, aimed at increasing operational efficiency through the use of sophisticated technological tools. This process involves replacing manual operations with automated solutions, which can result in significant cost reduction and increased productivity. However, the implementation of these technologies is not without challenges, particularly when it comes to managerial stress.

Managers find themselves at the centre of these changes, bearing the responsibility for the successful integration of new systems into existing business operations. This brings with it the pressure for rapid and efficient adoption of technologies, as well as the need to achieve and maintain high performance in the teams and processes that automation alters. Stress is further complicated by the need for constant adaptation of work procedures and managing changes that employees may perceive as threats to their routine tasks and job security.

In this context, managers must develop the ability to navigate these changes, not only technically but also emotionally, supporting their teams through the adaptation process and minimizing resistance. Effective management of this aspect of automation becomes crucial for maintaining a healthy work atmosphere and achieving the goals of digital transformation.

- **Stress from learning and adopting new technologies**

Managers face pressure to quickly adopt new technologies to remain competitive, which can cause anxiety and uncertainty about their capabilities.

A culture that encourages continuous learning and innovation can mitigate stress by providing support and resources for employee training.

If the organizational structure promotes decentralized decision-making, employees can have greater autonomy and resources for learning, which can reduce stress associated with adopting new technologies.

- Pressure to achieve quick results from implemented systems

Expectations that automation will immediately increase efficiency and productivity create additional pressure, especially if results are not immediately visible.

Organizations with a culture that values transparency and realistic expectations can help reduce pressure by clearly communicating project goals and timelines.

A clear schedule of responsibilities and authorities can help reduce pressure on individuals, allowing for better management of expectations and outcomes.

- Navigating changes in work procedures and responsibilities

Managers must lead teams through changes, manage resistance, and adapt business processes, which requires additional managerial skills and emotional intelligence.

A culture that promotes flexibility and adaptation can ease the transition, reduce resistance to changes, and support employees in new roles.

A flexible structure that allows for rapid adaptation and reallocation of resources can facilitate the transition to new work processes and reduce associated stress.

## **MANAGERIAL STRESS AND DATA AND DOCUMENTATION DIGITALIZATION**

The digitalization of data and documentation is a fundamental aspect of digital transformation, focusing on the transition from paper-based to electronic forms of information. This enables better accessibility, analysis, and management of data. This process brings numerous advantages to organizations, including improved efficiency, reduced spatial requirements for document storage, and quicker, more accurate decision-making based on relevant and easily accessible data.

However, for managers, digitalization can be a significant source of stress. They are responsible for ensuring that the transition to digital systems is smooth and efficient while managing the expectations of various stakeholders. Managers face challenges such as ensuring the accuracy and security of digitized data, which requires the use and understanding of new technological tools and systems. Additionally, there is stress arising from the

need to manage changes within the organization, as digitalization often necessitates changes in routines and procedures that employees must adopt.

This dynamic requires managers to support their teams both technically and psychologically, managing the resistance and fears that can accompany digital changes. In this context, managerial skills in communication, leadership, and empathy are crucial for overcoming these challenges.

- Stress due to the need for monitoring the accuracy and security of digitized data

Concerns about the integrity and security of data lead to stress, particularly in sectors where data is sensitive or regulated.

Organizations that develop a culture of responsibility and ethical data handling can help ensure that employees are trained and aware of the importance of data protection.

An effective organizational structure that clearly defines protocols for data management and responsibility can alleviate stress by providing well-defined guidelines and support.

- Handling employee resistance to changes in routines and procedures

Managers often face the challenge of leading teams that may be sceptical about digitalization, which can cause interpersonal conflicts and resistance.

If the organizational culture supports open communication and employee involvement in decision-making processes, resistance can be reduced, and acceptance of new practices can be increased.

An organizational structure that includes mechanisms for feedback and employee support can help reduce resistance and promote positive acceptance of digital tools.

## **MANAGERIAL STRESS AND SYSTEM IMPLEMENTATION**

System implementation represents a crucial phase of digital transformation, wherein organizations introduce new technologies to modernize their operations and enhance business processes. This step involves integrating complex software solutions that are often vital for the company's efficiency and competitiveness. However, this process also carries significant challenges, especially concerning managerial stress.

For managers, system implementation can induce stress for several reasons. First, there is the pressure to implement new systems quickly and efficiently, with expectations that these systems will immediately improve performance. Managers must balance managing teams, resources, and deadlines while ensuring that all team members are adequately trained to use the new systems. This often involves managing resistance to change, which

can be particularly pronounced when employees face potentially disruptive changes in their daily tasks.

Additionally, managers face challenges in managing stakeholder expectations, who may exert pressure for quick results while there is a real possibility of initial problems with new technologies affecting business operations. Balancing the maintenance of operational stability with the introduction of innovations requires precision and strategic thinking.

- Stress from managing large and complex implementation projects

Managing projects with many variables and high stakes can create significant stress due to the potential for major errors or failures.

A culture that promotes teamwork and collaboration can help manage projects more effectively, distribute responsibilities, and minimize stress.

A structure that supports specialized project teams for implementation can aid in more efficient resource and time management, reducing pressure on managers and teams.

- Stress from the pressure to improve performance through technological changes

There is constant pressure on managers to demonstrate how technological changes improve business performance, which can be stressful if results are uncertain.

An affirmative culture that recognizes and rewards effort and innovation can motivate employees and reduce the pressure they feel for quick results.

Clear lines of responsibility and rewards can facilitate tracking and evaluating the success of the implementation, reducing stress due to performance uncertainty.

- Resistance and frustrations arising from initial problems with new technologies

Frustrations due to technical problems or learning curves can negatively affect team morale and cause additional stress for managers responsible for implementation.

A culture of tolerance for mistakes and learning from failures can help employees feel more secure when facing challenges and less frustrated.

A structure that allows for rapid iterations and testing, as well as support for problem-solving, can alleviate frustrations for both employees and managers.

## **MANAGERIAL STRESS AND BIG DATA ANALYTICS**

Big Data and analytics represent crucial components of digital transformation, enabling organizations to gain deeper insights and improve decision-making through the analysis of vast amounts of data. These

technologies can transform how companies understand their customers, markets, and internal processes, leading to significant competitive advantages. However, the integration and effective use of Big Data technologies can also pose substantial challenges, particularly concerning managerial stress.

Managers are often at the forefront of implementing these technologies, facing the need to quickly adopt and apply complex analytical tools and processes. This pressure is heightened by expectations that Big Data technology will bring rapid and measurable improvements in organizational performance. Managerial stress in this context can arise from several sources: the pressure to interpret and effectively apply vast amounts of data, the need for continuous learning and adaptation to stay ahead of technological developments, and the challenges of maintaining data security and integrity amid increasingly stringent regulations.

Managing these challenges requires managers to possess not only technical knowledge but also the ability to communicate effectively with their teams, manage changes and expectations, and develop strategies for integrating new tools into business processes.

- Stress from interpreting large amounts of data and making informed decisions

The expectation that managers will use complex analytical tools to guide decisions can be a source of stress, especially if they lack deep understanding of analytics.

A culture that supports knowledge sharing and expertise can ease the pressure on individuals by providing better support and training resources.

An organization with specialized analytical teams responsible for data processing and interpretation can reduce the pressure on individual managers.

- Stress from the need for continuous learning and adapting to analytical tools

Continuous learning and adapting to new tools and methods in the dynamic field of Big Data can create feelings of inadequacy and overload.

Organizations that invest in the development of their employees and offer regular training and professional development can mitigate stress related to continuous learning.

A structure that promotes professional development and learning can provide the necessary resources and time for learning, thus reducing stress.

- Stress from the need to stay updated on the latest security threats

The constant need to monitor and protect data from the latest security threats requires a high level of engagement and can be a significant source of stress.

A proactive culture that emphasizes security and predictability can help reduce employees' anxiety and ensure that everyone is adequately informed about potential threats.

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Having well-defined IT security teams and continuous monitoring can alleviate pressure on other parts of the organization, allowing them to focus on primary tasks.

## **CONCLUDING CONSIDERATIONS AND RECOMMENDATIONS**

Operating in a dynamic business environment influenced by numerous external and internal factors, organizations undergoing digital transformations bear a significant responsibility to foster harmonious relationships and achieve business success, thereby contributing to their own development. In this context, managerial stress manifests within organizations, affecting both managers, as the creators of change and business success, and all employees involved in the digital transformation process.

As a general phenomenon and an eminent factor in business activities, managerial stress manifests in various ways across a wide spectrum of actions during the digital transformation process. Human resource management is crucial in managing this stress, directing it into optimal frameworks where it exhibits a positive dimension, thereby enhancing the effectiveness of individual business activities and overall results in the digital transformation process.

By involving all employees in decision-making processes and making them accountable for the outcomes achieved during digital transformations, human resource management creates the necessary conditions for fostering optimal managerial stress. This stress motivates not only the managers leading the digital transformation processes but also all employees to achieve maximum results and effects. On this basis, a specific management of managerial stress is constituted. The management of managerial stress involves purposefully directing this stress into optimal frameworks where it plays a creative and motivating role in achieving individual and organizational goals during digital transformations.

From a strategic approach, directing managerial stress is an integral part of human resource management and strategic management within the organization during the digital transformation process.

**REZIME**  
**MENADŽERSKI STRES U PROCESU DIGITALNIH**  
**TRANSFORMACIJA ORGANIZACIJA**

Digitalna transformacija je esencijalan proces u modernom poslovanju koji omogućava organizacijama da temeljito redefinišu svoje operacije, komunikaciju i poslovne modele kroz integraciju digitalnih tehnologija. Ovaj proces predstavlja više od puke tehničke nadogradnje; to je duboka promena koja zahteva uključivanje tehnologije u osnovu svakodnevnih aktivnosti kako bi se poboljšali efikasnost, inovativnost i konkurentnost na tržištu. U kontekstu globalizacije, brza adaptacija na digitalne trendove postaje ključna za očuvanje tržišne pozicije, a uspešna implementacija digitalnih transformacija može rezultirati značajnim uštedama, optimizacijom resursa i poboljšanjem produktivnosti. Digitalizacija takođe omogućava bolje razumevanje potreba klijenata kroz analizu velikih količina podataka, doprinoseći kreiranju personalizovanih proizvoda i usluga. Međutim, digitalna transformacija nosi i izazove, uključujući upravljanje organizacionim promenama, menadžerski stres zbog brzog donošenja odluka, kontinuiranog učenja i potrebe za prilagođavanjem novim tehnologijama. Kao opšti fenomen i eminentan faktor poslovnih aktivnosti, menadžerski stres se ispoljava na različite načine u širokom spektru delovanja u procesu digitalnih transformacija organizacija. Menadžment ljudskih resursa je bitan sa aspekta upravljanja stresom u procesu digitalnih transformacija organizacija, odnosno usmeravanja istog u optimalne okvire u kojima on ispoljava pozitivnu dimenziju, a u pravcu podizanja uspešnosti obavljanja kako pojedinačnih poslovnih aktivnosti, kao i ukupnih rezultata u procesu digitalnih transformacija organizacija.

*Ključne reči:* Digitalna transformacija, Menadžment ljudskih resursa, Digitalne kompetencije, Menadžerski stres, Menadžment menadžerskog stresa, Integracija IT alata, Procesno orijentisane organizacije, optimizacija poslovnih procesa, analitički alati.

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## **CONTEMPORARY BUSINESS: WHEN COMMUNICATION AND CULTURE MEET**

**ABSTRACT:** As cultures in contact are inevitable, we tried to emphasise that the readiness to maintain intercultural communication is essential for survival in a world as globalised as it is today. Due to the inevitable changes that have taken place in the field of modern business, the application of information and communication technologies contributes significantly in areas such as competitive advantages, quality of services and products, and overall corporate activities. In this regard, it is necessary to completely reset attitudes and mentality from the past and change how companies communicate inside and outside their walls with employees, clients, suppliers, and interested parties. As essential for achieving a fruitful outcome, willingness and motivation to understand and get to know the culture with which one cooperates is almost indispensable. To promote a true spirit of collaboration, companies must first recognise communication's strategic role in their management, implementing a well-defined global communication plan that includes external and internal communication strategies. This approach is vital to establish genuine cooperation between the associates who make up and give life to the organisation. Above all, it is crucial to have a relationship between them and create an effective and efficient communication channel. Therefore, organisations must take an active role in collaboration and knowledge management.

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*Key words:* Information and Communication Technology, Intercultural Communication, External Communication, Internal Communication

## **INTRODUCTION**

As a consequence of modern globalisation, we are witnessing the meeting of different cultures in modern intercultural business, that is the meeting of different people from different cultures and identities, both organisational management styles and communication. In this connection, questions concerning intercultural patterns of behaviour and business, as an imperative of communication, were raised. In a modern successful business, knowledge of intercultural communication is necessary for a fruitful and efficient outcome of negotiations and nurturing good business relations (Thomas et al., 2010). Undoubtedly, we live in the communication era, and knowing how to manage it can contribute to the company's progress towards intentionality regarding its services or products.

In today's market, it is undeniably essential for businesses to manage communication with the various stakeholders they interact with, directly and indirectly. However, this attempt to be more open to the environment and form relationships that will bear fruit in the medium- and long-term needs to be revised to achieve the planned success and the proposed goals. Regardless of their position in the hierarchy or the variety of functional areas in which they work, every employee in the organisation should be on the same page, have similar values, and strive for the same goals. Organisations must undertake various internal communication initiatives to achieve this. Communication plays a crucial role in encouraging workers' cooperation and exchanging information.

Through interaction and the creation of information flows, organisational communication has enabled companies to enter the market and properly develop their various activities. The trend of communication in companies and the use of new technologies facilitates the creation of new work organisations following the business needs of the 21st century. It contributes to the achievement of organisational goals and the creation of new forms of cooperation

## **INTERCULTURAL COMMUNICATION AND MODERN TECHNOLOGIES: THE KEY TO SUCCESS IN BUSINESS**

Organisational communication is a field of human knowledge that studies how the process occurs within and between organisations. (Jokanović et al., 2019) The emergence of this discipline is relatively recent, since the first serious and systematic attempts to develop it, as well as the first publications on this topic, date from the 1970s - during those years, even associations of experts in organisational communication, which undoubtedly gave a significant impetus to this field not only in the generation of knowledge through research but also in the application of this knowledge in organisations (Mumby, 1893). Since the 1980s, especially in the 1990s, interculturality has become topical due to various factors, including globalisation and growing immigration in Europe and the United States (Martin et al., 2012). Nevertheless, it is based on shared experience: talking to people of another mother tongue is also talking to people of another culture. The economy is currently one of the most important pillars at the global level, which is why companies strive to internationalise their products and services. To achieve this, organisations must understand the market they want to enter and research the culture and communication in the target country (Ting-Toomey & Dorjee, 2018). Namely, intercultural communication, as a branch of science, focuses on studying how different cultures communicate using different languages (Teme, 2013).

According to Sahadevan and Sumangala's (2021) research, several key elements contribute to the establishment of effective communication in intercultural business, namely:

1. Adhere to etiquette - adhere to cultural norms and patterns of behaviour characteristic of the target culture.

2. Do not draw conclusions based on the culture from where we are - Managers must understand and differentiate between the personality and the culture from which the employees come. Understanding cultural stereotypes can help prevent conflicts.

3. Understanding transactional analysis so that interlocutors will become more aware of themselves - It helps to determine the interlocutor's ego state. It contributes to the understanding of behaviour in different situations and conflict management. Eric Berne developed this method and contributed to adapting and understanding communication styles.

4. Understanding the thoughts, feelings and experiences of other people and gradually assimilating another culture, way of life and language into one's own - Social cognition involves understanding the mental states and experiences of others, overcoming misunderstandings and stereotypes.

5. Paying attention to non-verbal communication - It plays a critical role in intercultural communication because, in the research conducted, 94% of respondents answered that non-verbal communication is an essential link in the business world (Gerald et al., 1991 in Ibrahim et al., 2022). Likewise, it is worth noting that 75% of communication is non-verbal communication (Razak et al., 2019).

6. Accepting the stress factor in the context of intercultural communication - Employees should also accept this attitude and not take all reactions personally; in this regard, experience teaches them to adapt and manage effectively, have realistic expectations and equip themselves with fundamental intercultural skills.

7. Mutual respect and promotions based on merit - Companies that foster a multicultural work environment focus on conflict resolution and respect among employees, including them in decision-making and involvement in the company's processes.

8. The importance of training on interculturality - Contributing to employees to broaden their horizons, adapting to a multicultural environment, cultural empathy, communication skills, avoiding misunderstandings and developing an effective and healthier environment.

9. The importance of creative thinking in multicultural corporations - This way of thinking, fostered by companies like *Apple* and *Microsoft*, contributes to overcoming traditional thinking patterns and promotes innovation to solve more complex problems.

10. Being an inclusive communicator. It means respecting the interlocutor's background, i.e. cultural origin, avoiding assumptions and promoting diversity.

11. Interpersonal interaction to build relationships - Detachment from conversation contributes to a better understanding of intercultural perspectives, fostering group roles. Share stories, use the "echo effect", and learn about different cultures to start new conversations.

12. Ethical communication in different cultures - Companies need to decide how to deal with the ethical attitudes of different cultures. However, it should be done in a way that does not reinforce the patterns of discrimination that prevail in that country. It is called the "moral minimum" of the ethical standard (Thomas Donaldson, 1991). (Sahadevan & Sumangala 2021).

It is known that we live in the age of relationships and communications. Therefore, this topic is of great importance both personally and professionally. The work is done between two interested parties and can only be done if these two parties understand each other. The topic of communication is vast because all human activities take place through communication, whether written, verbal or non-verbal. A company must at least train in intercultural business communication if it wants to

internationalise its products or services because the success of its business depends on it. Any company trying to enter a foreign market must educate its employees about the culture of the country in question. In order to gain advantages in negotiations, it is essential to pay attention not only to the culture from where we are, language and traditions but also to the culture of the interlocutor. Recognition of intercultural communication has been increasing in recent years, which has led to organisations, companies, and institutions training managers and employees in intercultural communication skills to be able to manage business relationships successfully.

Due to the use of information and communication technologies (ICT), most of the activities carried out in organisations have experienced a gradual and profound change because "a high level of information technologies also increases the satisfaction of employees whose nature of work is such that they depend on information technologies.", and above all, the interlocutors are more satisfied with the outcome of the communication (Mitić, 2016). The application of ICT contributes to achieving competitive advantage, staying on the market, strategically focusing on business activities, redefining the scope of business activities and strengthening competitiveness (Parida et al., 2019). However, each company uses such technologies differently based on its characteristics, considering several factors, such as the organisation's culture, leadership, mission or shared vision. It is worth noting that the use of ICT in itself enables significant benefits for the reason that "the application of ICT alone enables large savings in the business, improves the quality of products and services provided, shortens the time required for the execution of work and reduces administration, and there are already several used for the transformation of internal and external business processes for decades." (Stankić & Stojković, 2019) In this regard, the work of managers should be aimed at eliminating errors and introducing ICT in the company. Moreover, there must be a complete reset of the attitudes and mentality of the past: changing how companies communicate inside and outside their walls with employees, customers, suppliers and stakeholders in general. Ultimately, it is a question of cultural change in the company, which is achieved by modifying the habits of the people who are part of it (Shachaf, 2008). The "network company", whose terminology is a consequence of the application of Baran's theory (1962), was created due to the introduction and use of the Internet in all areas and at all levels of the organisation. Therefore, a network company is one that, using the Internet for information processing, works on its proper adaptation to the environment. In this way, it can be concluded that the network company is a flexible organisation of economic activity constituted around specific business projects implemented by networks of different compositions and origins (Mrđa, 2008). The use of the network in the company has multiple functionalities such as creativity, innovation and

space for greater efficiency of communication and collaboration in the 21st-century company and better coordination between the different components of the value chain (ibid). We live in a time where to survive, it is necessary to communicate faster, increasingly effectively, which will contribute to not being left out. "It is reasonable to assume that the impact of IT on how companies communicate will, in turn, affect the nature of relationships. Therefore, social exchange is important for establishing long-term relationships of trust." (Leek et al., 2003).

Due to the importance that this field of knowledge has recently acquired, its approaches, perspectives, and all of them can be highlighted: communication business, corporate communication, corporate behaviour, corporate image, company culture, internal communication, external communication, comprehensive communication, where they are team "Information technologies reduced the depth of the organisation, abolished hierarchy, contributed to faster and better functioning of all types of management because it enables faster, but also better communication with colleagues (Martinović, 2012). "In the Internet economy, the highest hierarchical level knows, i.e. knowledge workers." (ibid.) By implementing "technologically more efficient equipment, the number of employees' obligations is reduced, efficiency is increased, which increases the business economy, free time is increased, business processes are humanised, and the satisfaction of employees and other actors who directly or indirectly participate in the business chain is increased." (ibid.). In this regard, it is important to point out that communication in the company is present in all fields of business, which is an indispensable segment of survival and a comprehensive management mechanism. (Mrđa, 2008). Company communication "refers to communication between people whose desires and goals are much more complex than economic interests, and the results of this are that the company strives to achieve financial and non-financial goals, with the fact that their relative importance is different for each company and changes over time." (Mrđa, 2008). Communication in the company can be internal or external (Dobrijević, 2011). External communication analyses the information the organisation exchanges with various interest groups outside it, including competitors, consumers, investors, the media and others (Dobrijević, 2011). Therefore, we can say that it builds its image and its relationship with stakeholders. Internal communication refers to communication within communication, that is, between employees and higher and lower managers, that is, between all members at all levels within the organisation (Dobrijević, 2008). It contributes to strengthening corporate culture, reducing insecurity and motivating employees (ibid.). It thus achieves a favourable climate, better productivity and better cooperation within the organisation. In this regard, modern technologies make various

tools available to organisations to promote collaboration. New technologies for improving business enable organisations to work and collaborate, "in this sense, the right combination of virtual and physical space can lead to increased productivity and reduced costs without losing the uniqueness of the organisation and employee motivation." Innovative leaders have already recognised that information technologies and the Internet enable employees to be mobile, work with colleagues remotely and across time zones, and perform tasks in different forms and outside the traditional office. These opportunities save money, increase work flexibility, make the best use of their assets and improve employee productivity through creativity, knowledge sharing, teamwork and collaboration." (Đorđević Boljanović & Dobrijević, 2014).

### **HOW TO OVERCOME IMPOSED CHALLENGES IN COMMUNICATION**

It is worth mentioning initially that politeness and face are something we must take care of in intercultural business communication. However, it depends on the people and the country we negotiate with. Authors such as Brown and Levinson (1987) propose two categories of politeness: positive: It is associated with sociability and solidarity and negative: refers to freedom of choice, as well as acceptance and expression of diversity. In order to highlight the importance of the politeness strategies used and interpreted by negotiators from different cultures, people in charge of international negotiations must develop intercultural communication skills. A negotiator must understand the interlocutor's language, forms and cultural traditions to succeed in negotiations. Intercultural business communication is crucial because employees have the ability to work with people from different cultures and effectively with partners located anywhere in the world, in addition to building trust with clients and even creating relationships with new clients. It is a beneficial step for any organisation because it maintains business relations with partners anywhere in the world and internationalises the company (Thomas et al., 2010). It takes work to train company employees in intercultural communication. In addition to the employees' will, skills must be acquired to facilitate the training process. Intercultural competence is "the ability to negotiate cultural meanings and to act effectively communicatively in accordance with the multiple identities of the participants" (Piršl, 2013). However, it is essential to remember that effective communication does not imply wholly controlled communication without problems of understanding.



According to communication theory, perfect communication is complicated, even between people of the same culture. People interpret messages per their knowledge, that is, their perception, and how successfully they manage the information at their disposal (Schiuma, 2012). Namely, some experts believe that there are two main approaches to the development of intercultural competence: the social skills approach and the holistic approach. The first mentioned, a model of a native speaker, aims to convince a person to behave by the norms and conventions of the respective speech community and become its second member. In this approach, language is considered a barrier to communication between people of different cultures. Another approach, on the other hand, suggests developing certain affective and emotional aspects in the individual. This approach emphasises a unique attitude, sensitivity and empathy towards cultural differences. Only in this way will it be possible to overcome ethnocentrism while preserving one's personality and identity and, by reducing the impact of culture shock, be a mediator between cultures in contact. (Schauer, 2016). In the research conducted by Nardon (2019), three stages were identified in the acquisition of intercultural competence:

1. Monocultural level: A person observes the culture of the object within the limits of his own culture and interprets it according to his own culture.

2. The intercultural level: It implies that a person occupies an intermediate position between his culture and another person's culture, allowing them to compare them.

3. Transcultural level: a person separates himself appropriately from the cultures with which he is in contact in order to act as a mediator between them.

Success in intercultural communication is increasingly important. Escoffier (1991) defined what is necessary for intercultural dialogue to be successful. Namely, when we start the conversation, we must be ready to accept the change. There are no universal positions. Everything is subject to change. It would help if we learned to deal with conflict and the possibility of hurt feelings. Our identities are different from others. Any problem can be solved at any time. Interculturally competent individuals must be able to communicate and connect in interactive and social activities, in which three main areas stand out:

1. Negotiation
2. Communication
3. Joint work.

It facilitates the application of norms and rules that regulate the activity of the country in question. Since we work with people from different

cultures and companies, we will also be able to respond to different needs and situations that may arise. At this point, the acquisition and development of intercultural competence are processes that include learning and development (Deardorff, 2009). Intercultural business communication is crucial because it is a fascinating topic for development in organisations, especially when the main goal is the internationalisation of products or services. For successful negotiation and expansion of the company we represent on a global level, it is necessary to understand the culture of other countries.

Removing barriers, open exchange of information, respect for the professionals who make them, promotion of individual freedom and fair recognition of the merits of each subject are some practices and attitudes that help manage collaboration at work (Glaser, 2007). When information flows in a company in different directions, such as vertical communication up and down, horizontal communication between teams, people or departments of similar rank, and diagonal communication, they encourage collaboration. In order to encourage cooperation in a specific team, it is necessary to analyse its structure and characteristics because teams are different from people. They quickly develop a group personality after joining (Adair, 2008).

## CONCLUSION

Edward Hall said that communication is necessary for culture, and culture is communication (1990). In this regard, communication is such a broad topic that it manages to connect with almost everything related to individuals, so every human act must be accompanied by it. The statement that started this paragraph shows that intercultural communication is crucial for business people and anyone who wants to establish and expand business in an intercultural world and tends to internationalise their services. In today's global society, information flows at remarkable celerity, travelling with the click of a mouse from one point to another on the planet. As technologies and the use of the Internet shorten distances and lead to simultaneous events, companies and ways of working undergo changes to enable them to adapt to the new demands of the environment. In this context, when information and knowledge exert such powerful influence and produce significant economic and social changes in short periods, the ability to collaborate in the day-to-day management of work becomes a skill highly valued by organisations and fundamental to the 21st-century worker. It forces companies to keep up with modern changes in business and requires them to implement new platforms and tools that enable collaboration and knowledge management within them. First, we should value and help improve the communication skills of all

employees, especially those in leadership positions. Second, it must recognise and promote collaboration and knowledge sharing so that employees feel motivated to share what they know and what it took them to acquire many years of training and professional experience. However, it must be borne in mind that more than introducing these solutions alone is required to stimulate an actual change in the work of the entities that are part of the organisation nor encourage cooperation.

Moreover, within internal communication, the necessary strategies must be used to create a culture change in which people are placed at the organisation's centre. It is about improving the communication skills of every employed individual who is part of its structure. Ultimately, in the company of the 21st century, communication is the main subject of improving cooperation, thus becoming the key that opens the door to meetings and exchange of ideas and knowledge.

## **REZIME**

### **KOMUNIKACIJA U SUSRETU KULTURA I TEHNOLOGIJA U SAVREMENOM POSLOVNOM OKRUŽENJU 21. VEKA**

Kako su kulture u kontaktu neizbežne, nastojali smo da ukažemo da je spremnost na održavanje interkulturalne komunikacije od suštinskog značaja za opstanak u svetu tako globalizovanom kao što je današnji. Zbog neminovnih promena koje su se desile na polju savremenog poslovanja, primena informaciono-komunikacionih tehnologija doprinose boljitke u polju konkurentske prednosti, kvaliteta usluga i proizvoda, i sveobuhvatnog efikasnijeg i efektivnijeg poslovanja. S tim u vezi, neophodno je potpuno resetovanje stavova i mentaliteta iz prošlosti, promena načina na koji kompanije komuniciraju unutar i izvan svojih zidova, sa zaposlenima, klijentima, dobavljačima i zainteresovanim stranama uopšte. Kako je za plodonosan ishod gotovo neizostavna spremnost i motivisanost da se razume i upozna kultura sa kojom se saraduje - da bi promovisali istinski duh saradnje, kompanije prvo moraju prepoznati stratešku ulogu koju komunikacija igra u njihovom menadžmentu, sprovodeći dobro definisan globalni komunikacioni plan koji uključuju strategije eksterne i interne komunikacije. Ovaj pristup je neophodan jer, da bi postojala prava saradnja između saradnika koji čine i daju život organizaciji, prva i osnovna stvar je da postoji odnos između svih njih i da se stvaraju efektivan i efikasan kanal komunikacije. Iz tog razloga, organizacije moraju preuzeti aktivnu ulogu kada je u pitanju saradnja i upravljanje znanjem.

*Ključne reči:* Informaciona i komunikaciona tehnologija, interkulturalna komunikacija, eksterna komunikacija, interna komunikacija

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## **CAUSES AND EFFECTS OF TECHNOSTRESS IN THE WORKPLACE: A SYSTEMATIC LITERATURE REVIEW**

**ABSTRACT:** Modern life circumstances have led to the fact that people spend more and more time connected to their computers. As digital technologies become present in societies, the psychological and physical effects of their use become evident in their users. The aim of the paper is to explain the creators and effects of technostress in the workplace. The paper presents an overview of the research results so far in the field of digitization of the workplace. The most significant factors of technostress that have been identified are: creators of technostress, use of technology, multitasking, uncertainty about new technologies and exposure to screens. Technostress has significant effects on work productivity, employee health, commitment to the organization and business decision-making. Literature sources include scientific papers published in various scientific databases. The limitation of this paper is the impossibility of accessing all articles dealing with the topic of technostress. The results can serve as a foundation for understanding the challenges that managers face in modern business conditions.

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*Keywords:* technostress, causes, effects, productivity.

## INTRODUCTION

The subject of the research is technostress as a consequence of accelerated improvement of existing and implementation of new technological solutions at workplaces where workers are exposed to information and communication technologies. Modern workplaces are digital workplaces that are no longer tied to a specific place or time. While smart workplace technologies facilitate business processes and increase work productivity, digital technologies, on the other hand, cause technostress, that is, a specific form of stress perceived by the end users of information and communication technologies. Technostress is considered the dark side of digital transformation (Becker, 2021).

The aim of the paper is to explain the causes and effects of technostress in the workplace. The central research hypothesis is: The causes of technostress play an important role in the origin and development of technostress. In the methodological sense, secondary data will be collected, namely available scientific works that deal with the scientific field of technostress. The collected materials will be processed using scientific methods of analysis and synthesis. The work is structured in five parts. The second part provides an overview of previous research on the topic of technostress, the third part of the paper reveals the methodology used, the fourth part presents the basic determinants of technostress, and the fifth part is a conclusion with limitations and recommendations for further research.

## LITERATURE REVIEW

As a consequence of the intensive use of digital technologies in solving work demands and digital transformation, various forms of discomfort among employees appear. The negative effects of using digital technologies are the subject of research in numerous works, and as a result of them, the term technostress was identified, as a documented human reaction to interaction with technology (Agboola, Olasanmi, 2016, according to Smeltzer, 1987).

The cause of many diseases is stress, unless it is in an adequate balance with rest and relaxation. Today, we are witnessing that continuous stress at the workplace can be the cause of so-called burnout, which is constantly increasing, and therefore, there is a need for stress prevention and management. Burnout is defined as an individual response to chronic stress at work that develops progressively and can eventually become chronic, leaving



various consequences on the individual (Edu - Valsania, Laguia, Moranio, 2022, according to Montero - Marin, 2016). With the expansion of digital technologies in the workplace, the occurrence of digital stress has increased. Digital stress was the subject of research in Venezuela in the field of higher education, and it was shown that the level of digital stress decreases with higher digital competences of teaching staff and vice versa (Anton - Sancho, Vergara Medina, Sanchez - Calvo, 2022). They defined digital stress as a form of stress that manifests itself through feelings of fear and insecurity. The field of digital stress at work is still under-researched, and there is a need to fill that research gap (Blaknenhagel Theilig, Koch, Witte, Zarnekow, 2019).

Bearing in mind all the advantages brought by the progress and rapid development of information and communication technologies for companies, numerous studies have been recorded that examined the impact of digital transformation on employee stress. However, there is a lack of empirical research examining the relationship between technostress and work efficiency. Digital transformation is the process of creating new business models using existing or new technologies to support changes in the organizational structure of the company, its resources or relations between internal and external stakeholders (Plekhanov, Franke, Netland, 2022, according to Brynjolfsson, Hitt, 2000; Frank et al. al., 2019; Loebbecke, Picot, 2015; Vial, 2019). In their work, Plekhanov, Franke and Netland (2022) observed the negative effects of the digital transformation process. Some of them are stress at the workplace, i.e. stress as a consequence of the digital transformation of the company.

Technostress is the subject of numerous researches, especially after the coronavirus pandemic which accelerated the need for transformation, as customers preferred digital technologies and transactions over the traditional way of buying and selling. The research conducted in Indonesia dealt with the impact of digital transformation on employee engagement and stress. Considering the numerous changes that have taken place in a very short time, and in terms of the use of new tools of information and communication technologies, this has shown the need for support for employees, because with the increase of uncertainty in the workplace, due to technological changes, a high level of stress appears. (Winasis, Wildan, Sutawidjaya, 2020).

Generally speaking, new solutions based on the development of information and communication technologies result in positive effects for both the company and its employees. However, the process of digital transformation can be the cause of the development of digital transformation stress (Digital Transformation Stress - DTS). The aforementioned form of stress manifests itself in situations where work demands caused by the rapid implementation of information and communication technologies are elevated, with limited resources available to employees (Makowska - Tlomak, Bedynska, Skorupska, Paluch, 2022).

In the Republic of Croatia, Ćuk, Grabovac and Glebov (2022) conducted research related to the intensity of technology use. In particular, they point out that the introduction of smartphones, laptops, applications and other platforms into the business world has led to employees feeling compelled to respond to e-mails and receive calls of a business nature outside of working hours, resulting in family conflicts and an imbalance between private and personal life. and business life.

Multitasking is the simultaneous execution of several tasks and is one of the creators of technostress (Hefner, Vorderer, 2016; according to Salvucci, Taatgen, 2011).

Research has shown that the creators of technostress positively correlate with uncertainty about new technologies. Technological uncertainty encourages deviant employee behavior that manifests itself through reduced engagement in performing work tasks (Chiu, Tan, Shih - Chieh Hsu, Cheng, 2023). In 2023, Yao and Wang conducted research among Chinese students on the impact of exposure to screens on the occurrence of technostress. The results showed that the use of smartphones and information overload affect the occurrence of technostress and reduce the quality of students' sleep.

Picazo Rodriguez, Verdu – Jover, Estrada – Cruz, Gomez – Gras (2023) examined the relationship between digital transformation and labor productivity. The results of their research showed that there is a positive significant relationship between the previously mentioned two constructs, and the research units were workers from the administrative sector. Tarafdar, Tu, Ragu - Nathan, T. S., Ragu - Nathan, B. S. (2011) found that technostressors reduce work productivity.

Lei and Ngai (2014) conducted research on the impact of technostress on work performance and found that technostress negatively affects work efficiency. Research conducted among academic staff in Great Britain showed that technostress is present and reduces work efficiency (Bourlakis, Nisar, Prabhakar, 2023).

Employee health is a very important construct when examining the effects of technostress. Namely, Pfaffinger, Reif and Spiess (2020) determined that technostress affects the health of employees. When researching the impact of technostress on employee health, among workers from the manufacturing sector in China, the mediator variable job exhaustion was used, and it was shown that technostress, in addition to the mediating effect of employee exhaustion, also determines their health (Wang, Ding, Kong, 2023).

Organizational commitment was often observed in the context of technostress. The impact of technostress on commitment to the organization was examined by Taneja and Singh (2018) among employees in the information and communication technology sector. The results showed that

technostress reduces employees' commitment to the organization in which they work. The same results were obtained by Lei and Ngai (2014).

Yildirim and Eldber Börü (2023) included the moderator variable job insecurity when observing the relationship between technostress and business decision-making, and showed that technostress through uncertainty in employment status determines the decision-making process of employees.

## **RESEARCH METHODOLOGY**

As a part of this paper, a secondary research of available scientific papers dealing with the topic of technostress was carried out. Over 130 papers were collected with a search using the keywords: techno stress or digital stress. Out of 130 papers, 46 were selected according to their relevance to the research subject. Literature sources include scientific works published in various scientific databases such as: EBSCO, Google Scholar, SCIndeks, Emerald, Jstor, Taylor and Francis and Wiley, and the analysis method was used during the literature study and the synthesis method in order to systematically provide an overview of the causes and consequences of technostress.

## **DETERMINANTS OF TECHNOSTRESS**

By analyzing the available literature, the key creators, that is, the causes of technostress, as well as its consequences, were systematized. In their work, Tarafdar, Tu and Ragu – Nathan (2014) aimed to show the negative consequences of technostress to the extent that employees believe that the applications they use at work can be used to improve their business performance. The authors sought to identify mechanisms that can mitigate these effects. Specifically, they tried to develop and validate a model that analyzes the effects of factors that create technostress on employee satisfaction and the performance of work tasks using information and communication technologies.

### **Causes of technostress**

According to several studies (Tarafdar et al., 2007; Ragu-Nathan et al., 2008; Singh et al., 2022), five creators of technostress can be defined, namely: techno-invasion, techno-overload, techno-uncertainty, techno-complexity and techno-uncertainty. Techno-invasion occurs when an employee feels that work demands prevail outside working hours (Singh et al., 2022). Techno-

overload occurs when an employee faces extreme use of technology (Singh et al., 2022). Techno-overload is expected to have a negative effect on work-life balance (Dingemans, 2020). Techno-insecurity describes the insecurity that individuals experience due to their lack of knowledge about new technology, they might feel insecure as a result of feeling that others know more than they do (Singh et al., 2022). Techno-complexity describes an individual's perception of using new technology and the difficulty of how to use it (Singh et al., 2022). According to Harunawamwe and Ward (2022), the complexity of technology used during work increases the feeling of incompetence among employees, which they state has a negative effect on the organization. This is because employees start to feel frustrated and their productivity decreases (Harunawamwe, Ward, 2022). Techno-uncertainty occurs when employees are not familiar with new technology and how to use it (Singh et al., 2022).

The use of technologies was the subject of research by a group of authors from South Korea in 2013. Namely, it includes using the Internet, playing games, using smartphones and other digital technologies. Thus, a scale was developed to measure the excessive use of smartphones, the so-called SAS scale (eng. Smartphone Addiction Scale), which consists of 6 factors and 33 statements, and is measured by a five-point Likert-type scale. Indicators for measuring this construct are: failure to perform planned tasks due to the use of smartphones, inability to concentrate, feeling dizzy, back pain, feeling tired and calm, self-confidence, overcoming stress through the use of mobile devices, feeling fun while using smartphones, using social networks right after waking up, constantly checking smartphone content and battery drain rates (Kwon, Kim, Cho, Yang, 2013). Technostress appears as a consequence of the use of technologies in the workplace, namely various forms of generic applications, mobile and communication technologies, collaborative technologies and others, as well as technologies that users use for private purposes (Maier, 2014).

Multitasking represents the frequency of using the Internet simultaneously with other media content or using the Internet during other non-media activities such as meals or conversations with others (Hefner, Vorderer, 2016). Multitasking is measured on a five-point Likert-type scale, and the indicators for measuring multitasking are: the frequency of simultaneous playing of games, watching television, playing games on a mobile device, writing SMS messages, making calls, searching the Internet and social networks (Trombetta, 2019).

The uncertainty of new technologies refers to the fear of termination of the employment contract. Namely, there is some uncertainty regarding the automation of some skills that could lead to a reduction in the number of employees in organizations (Fischer, Reuter, Riedl, 2021; according to Sahin, Coklar, 2009, Frey, Osborne, 2017). Uncertainty about new technologies is

measured by questioning attitudes about: the feeling that the workplace is threatened through the introduction of new information and communication tools, fear of replacing personnel due to increased standardization of work processes, pessimism regarding long-term employment security, fear that employees will be replaced by machines, fear of the consequences of digitization (Fischer, Reuter, Riedl, 2021) and the degree of employee fear of the impossibility of mastering and understanding the use of new information and communication tools (Tarafdar et al., 2007).

Screen exposure is the time spent on digital devices such as smartphones, monitors, laptops, tablets, televisions or other digital devices. Exposure to screens will be measured by questionnaires about the time employees spend using some of the digital media (Sharma, Anand, Ahuja, Thakur, Mondal, Singh, Kohli, Venkateshan, 2020).

### **Effects of technostress**

The consequences of technostress have also been recorded at the workplace, and are manifested through reduced productivity. Although the negative aspects of technostress are known, what is less understood and represents a research gap is how individuals can cope with technostress to mitigate its negative consequences. In this regard, a qualitative study was conducted in Great Britain that examined 30 executives in the information technology sector and how they deal with the consequences of technostress. Seven forms of behavior that individuals engage in as a response to technostress have been identified here. The second is a survey of 846 American employees who use information technology in their workplace. Here, the effects between the causes of technostress and the productivity of employees working in the information and communication technology sector were measured, where the goal was to explain how employees and organizations can cope with technostress (Tarafdar, Pikkalainen, Salo, Makkonen, 2020). Given that technostress is viewed in relation to work efficiency, it is necessary to define this construct as well. Namely, efficiency represents the rational use of financial, material and human resources and information with the aim of achieving the maximum result (Omar, 2023; according to Kharkhash, 2015).

The health of employees, that is, their well-being is a subjective concept and refers to the individual evaluation of the quality of life and emotional state (Hang, Hussain, Amin and Abdullah, 2022; according to Diener, 2000, de Jong, 2014). It also represents a state that characterizes an individual's health, sense of comfort and prosperity (Hang, Hussain, Amin, & Abdullah, 2022; according to Seligman, 2011). Hang, Hussain, Amin and

Abdullah, (2022) examined the impact of technostress on employee health and found that technostress determines worker health. The influence of employee health on work efficiency (Yuan, Yi, Miao, Zheng, 2018), and they came to the conclusion that the health condition of employees in the construction sector determines work efficiency. A five-point Likert-type scale is used to measure employee health, and the indicators for measuring employee health are: awareness of self-protection (Yuan, Yi, Miao, Zheng, 2018; according to Cohen, Smith, Anger, 1979), daily working hours (Yuan, Yi, Miao, Zheng, 2018; according to Alamursula, Vahtera, Kouvonen, Väänänen, Linna, Pentti, Kivimäki, 2006), time to rest (Yuan, Yi, Miao, Zheng, 2018; according to Yi, Wang, 2017), frequency of physical control health (Yuan, Yi, Miao, Zheng, 2018; according to Jayakrishnan, Thomas, Rao, George, 2013), sleep duration (Yuan, Yi, Miao, Zheng, 2018; according to Hsu, Sun, Chuang, Juang, Chang, 2008) length of service (Yuan, Yi, Miao, Zheng, 2018; according to Mok, Dong, Chang, 2013) and frequency of anxiety and upset mood (Yuan, Yi, Miao, Zheng, 2018; according to Patrick, 2013; Loewenstein, Weber, Hsee, Welch, 2001).

Business decision-making is a process in which an individual, a group of people or a company makes conclusions about future movements, taking into account goals, constraints and available resources (Schoemaker, Russo, 2014). Saturation of information and communication tools in the workplace can lead to feelings of anxiety, technostress and job dissatisfaction, which results in reduced ability to make business decisions (Sarabadani, Compeau, Carter, 2020). This construct is measured by a scale called "Decision-Making Questionnaire" (DMQ) and consists of ten dimensions: uncertainty, time, information and goals, decision consequences, motivation, self-regulation, cognition, emotions, social pressure and work pressure. Each of the mentioned dimensions is measured by individual indicators, the most important of which are: overcoming ambiguity, organization of activities depending on available time, gathering information needed for decision-making, predicting the consequences of a decision, awareness of the importance of decision-making, identification of factors that influence decision-making, overcoming fear, avoiding conflicts, complying with work rules (Sanz de Acedo Lizarraga, Sanz de Acedo Baquedano, Oliver, Closas, 2009). The variable business decision-making has its own lower order constructs and they are: Rational business decision-making, intuitive, dependent, avoidant and instant business decision-making, and the indicators for measuring individual constructs are: manager's logical approach to decision-making, experiential business decision-making, waiting for the support of others, before making a business decision, postponing decision making and impulsive and quick decision making (Yildirim, Elber Börü, 2023).

Labor productivity is defined as a measure of employee competence assessment and evaluation of his work results (Walton, 2019; according to Shin, Eksioglu, 2015). The effects of technostress on work productivity were investigated by Walton in 2019. The results showed that technostress does not significantly determine work productivity, but that reduced technological efficiency of employees leads to reduced productivity, a higher degree of absenteeism and burnout. The impact of stress on the business performance of companies was examined in Malaysia, also in the banking sector, and it was shown that the phenomenon of stress affects the business performance of banks (Ismail, Saudin, Ismail, Abu Samah, Abu Bakar, Aminudin, 2015). Work productivity is measured with a five-point Likert-type scale. The scale consists of 4 statements, and the indicators for measuring this construct are: technological solutions help to improve the quality of work, technology contributes to productivity, technology contributes to doing more work tasks than usual, technology helps to do the job better (Walton, 2019; according to Tarafdar, Roy, 2014).

Commitment to the organization represents the degree of commitment and attachment of the employee to the organization, and is reflected in his willingness to make an effort for the benefit of the organization and the desire to remain a member of it (Ahmad, Amin, Ismail, 2012; according to Mowday, Steers, Porter, 1979; O'Reilly, 1989; Meyer, Allen, 1991). Commitment to the organization is measured by a scale developed by Meyer and Allen called the Organizational Commitment Scale. It consists of three dimensions: Affective attachment, continuous attachment and normative attachment. Indicators for measuring affective commitment to the organization are: a feeling of happiness if you would be an employee of the organization until the end of your career, identification with the organization's problems, a feeling of not belonging to the organization, a feeling of emotional disconnection with the organization, personal importance of the organization, a feeling of not belonging to the organization; indicators for measuring continuance commitment: feeling of distress in case of leaving the organization, disruption of private life in case of leaving the organization, need to keep the job, consideration of leaving the organization, lack of alternatives in case of leaving the organization and personal sacrifice in case of leaving the organization; indicators of normative attachment are: lack of need to stay in the organization, improper decision to leave the organization, feeling of guilt, feeling of obligation to the organization, indebtedness to the organization (Allen, Meyer, 1990).

Recent research mentions the concept of digital detox, as a strategy in the fight against the negative effects of technostress. Digital detoxification strategies have been proposed as a solution to reduce the negative consequences of using smartphones, social networks and other advanced

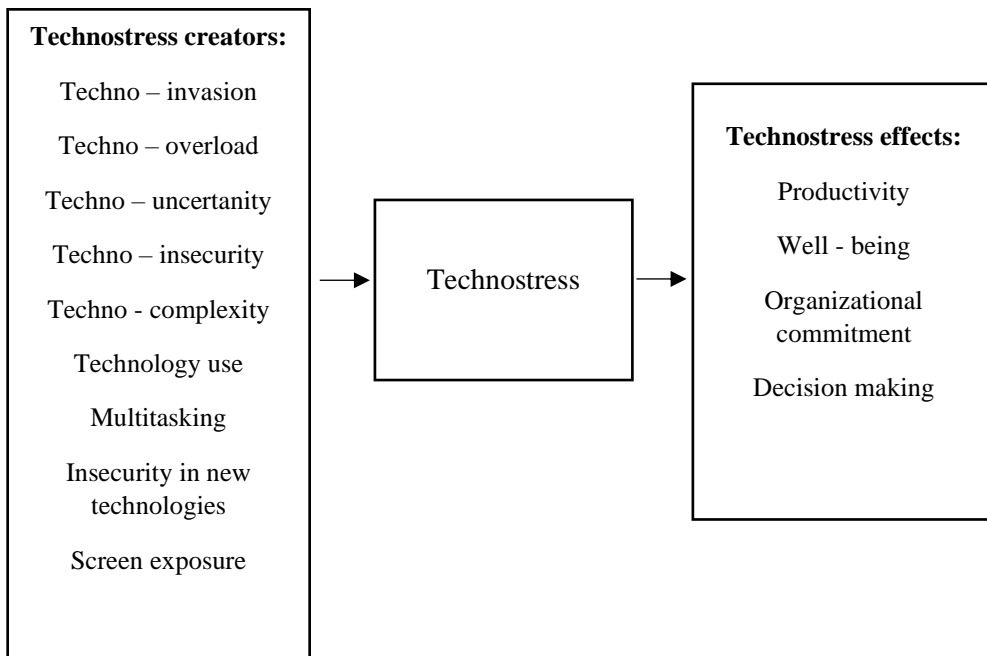
technologies in the workplace. Digital detoxification is defined as avoiding the use of electronic devices, e.g. smartphones (Radtke, Apel, Schenkel, Keller, von Lindern, 2022). Given the uncertainties regarding the effectiveness of digital detox strategies, the authors analyzed and systematized previous research on this topic. A literature review was made that answered the question of the effectiveness of the above-mentioned strategies in the context of employee well-being. Their study showed that detox strategies proved to be effective in some cases, and had an effect on self-control and employee well-being, while in some other cases they had no positive effect.

Digital detoxification was also the subject of research by Miksch and Schulz (2018). Namely, the goal of their work was to empirically investigate the practical side of detoxification and the appropriate motivations for implementing those actions. Their target group was a young group of people and their experience during the offline environment (Miksch, Schulz, 2018; according to Diem, 2017; Ofcom, 2016). Furthermore, the use of a smartphone during work represents a disruption in the execution of assigned work tasks, which leads to interruptions and additionally results in a loss of continuity in the work process (Miksch, Schulz, 2018; according to Montag, Walla, 2016), focus during working hours and leads to reduced productivity (Miksch, Schulz, 2018; according to Duke, Montag, 2017). According to Haug et al. (2015) when employees use a mobile device simultaneously while performing work tasks, it is more difficult for them to concentrate and complete assigned duties. According to Duke and Montag (2017), there is a negative relationship between the level of technological dependence and the number of actual productive working hours. In their study, the use of mobile devices during work reduces the perceived productivity of most employees. Furthermore, employees lost their perception of time while using mobile devices at work, which further problematizes the fact that employees lose control (Miksch, Schulz, 2018; according to Duke, Montag, 2017). So-called technostress (Tarafdar et al. 2007) at the workplace, which is described as stress caused by overloading information and computer technology, negatively affects individual productivity (Tarafdar et al. 2007). This is associated with stress and fear of missing important work-related information. What's more, the inability to disconnect can have a long-term negative impact on cognitive abilities, then processes like decision-making and creativity in the workplace (Miksch, Schulz, 2018; according to Scott, Valley, Simecka, 2017). As a result of technological progress, personal and professional constraints begin to merge with each other and it becomes increasingly difficult for employees to separate their private and work lives (Miksch, Schulz, 2018, according to Scott, Valley, Simecka, 2017; Shallcross, 2012). Continuous connection with work can result in stress, depression and anxiety in the workplace (Miksch, Schulz, 2018, according to Shallcross, 2012).



The most significant causes of technostress were identified as: techno creators, use of technology, multitasking, uncertainty about new technologies and exposure to screens. The effects of technostress are reflected in work productivity, health, commitment to the organization and business decision-making. Figure 1 shows the systematization of the identified causes and effects of technostress.

*Figure 1.* - Model of technostress: creators and consequences



Source: Author's creation

## CONCLUSION

With the transformation of the global economy and the gradual shift to digitization, the modern financial industry is changing, especially banking. The research that was conducted analyzed the impact of perceived stress on the performance of managerial officers in the banking sector in conditions of digital business transformation (Chen, Cao, 2023). Work-related stress is a common reaction of an individual when he becomes overburdened with work tasks. Especially in the time of digital transformation, stress becomes an everyday thing that develops into a problem if steps are not taken to manage this phenomenon and solve it (Harshana, 2018). Based on all of the above, the central research hypothesis can be accepted.

The limitations of this work refer to the lack of empirical findings, which would enable new knowledge about the subject phenomenon. Managers must become aware that technostress has become a daily occurrence and that understanding employee fears is the key to successful human resource management. Recommendations for further research are reflected in the inclusion of constructs such as employee motivation and satisfaction as mediator variables of the research model. Identifying the creators and consequences of technostress will enable the knowledge of the extent to which technostress is present among employees, will provide the opportunity to develop strategies and policies to combat technostress in companies, explain areas in which improvements are possible, as well as recommendations that would enable technostress to be overcome in order to improve business company performance.

### **REZIME**

#### **UZROCI I EFEKTI TEHNOSTRESA NA RADNOM MESTU: SISTEMATIZOVANI PREGLED LITERATURE**

Savremene životne okolnosti dovele su do toga da ljudi sve više vremena provode povezani za svojim računarima. S obzirom da digitalne tehnologije postaju prisutne u društvu, psihički i fizički efekti njene upotrebe postaju evidentni kod njenih korisnika. Cilj rada jeste objasniti kreatore i efekte tehnostresa na radnom mestu. Rad predstavlja pregled dosadašnjih rezultata istraživanja iz oblasti digitalizacije radnog mesta. Najznačajniji faktori tehnostresa koji su identifikovani su: kreatori tehnostresa, upotreba tehnologije, multitasking, nesigurnost od novih tehnologija i izloženost ekranima. Tehnostres ostavlja značajne efekte na radnu produktivnost, zdravlje zaposlenika, predanost organizaciji i poslovno odlučivanje. Izvori literature uključuju naučne radove objavljene u raznim naučnim bazama. Ograničenja rada ogledaju se u nemogućnosti pristupa svim radovima koji obraćuju tematiku tehnostresa. Rezultati mogu poslužiti kao temelj za razumevanje izazova sa kojim se menadžeri susreću u savremenim uslovima poslovanja.

*Ključne reči:* technostres, uzroci, efekti, produktivnost.

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