

THE BUSINESS ENVIRONMENT IN THE CONTEXT OF INDUSTRY 4.0

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Abstract

A quality business environment is a prerequisite for the growth of any economy. The aim of this paper is to characterize the business environment, evaluate the quality of the business environment through selected indexes and then specifies obstacles and limits that prevent business entities from implementing digital technologies into business processes (manufacturing, technological, process or operational) and their further progress in Industry. 4.0.

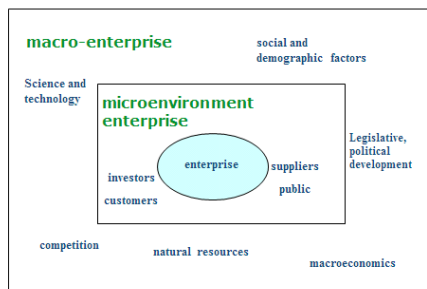
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1 Introduction

Understanding the business environment in which the company operates, is one of corporate fundamentals. The business environment is made up of many diverse factors that interact with the company itself and ultimately affect their behaviour and decision-making in today's turbulent business conditions only. It is important that every business regardless of its size and a thorough understanding of the business environment in which it operates, so that when you change the conditions in the sector has dealt successfully with all the competing forces. The interaction of all environmental factors creates for undertaking a wide range of opportunities and threats, which the company must continually meet in a competitive environment.

Figure 1: Business Environment



The term business environment is a well-known and frequently used term, yet its definition is neither simple nor unambiguous, especially given the large number of entities involved in its design. In general, however, it can be stated that the business environment reflects the quality of economic conditions and prerequisites for the economic activity of entrepreneurs to Nováčková, Milošovičová, [5]. When defining the term business environment, it is appropriate to start from the definitions of economic theorists. One view is that the business environment is everything that surrounds the business; j. economic, political, legal, technical, ethical and cultural and other conditions in

which the business process takes place to. Similarly, the business environment is understood by Helena Strážovská et al. [6], who characterize it as an environment surrounding the business entity and affecting its business activity. They also emphasize its close links with the competitive environment, but also with the governing bodies that issue legal standards and determine the rules and conditions of business. Business entities are an important economic factor for the growth and development of the economy of the state and its regions. Of particular importance are micro, small and medium-sized enterprises, which are able to respond much more flexibly to market changes, implement available technical progress results into practice, are more flexible, closer to the customer, have minimal management hierarchy and flexibility in responding to change. Therefore, in this article we decided to focus on the business environment and its quality, which greatly affects the success and competitiveness of businesses operating in the economy and to support the process of digital transformation. The digital transformation will substantially affect the way in which several economic sectors and businesses operate. It will significantly affect the efficiency of production, production and operational processes, whether in terms of time or cost. An important element of digitization, and in particular of Industry 4.0, will be the adaptation of

workers to changes related to the introduction of automation and the replacement of human labour by machines. Changes will also affect labour relations and will also put pressure on changes in education and education. This also puts pressure on the growth of the business environment. Within the developed economies, the category of small and medium-sized enterprises is considered to be the most flexible, efficient and most progressive, and thus also the most important part of the economy. Small and medium-sized enterprises account for around 70% of gross domestic product in developed countries. For this reason, EU and other developed countries pay maximum attention to the development of micro, small and medium-sized enterprises and are constantly taking measures to support and develop them. For the Slovak Republic, the development and support of business activities in the Industry 4.0 period is irreplaceable. In the era of digital transformation, the pressure to increase the implementation of digital technologies in enterprises, or the combination of information and communication technologies, micro, small and medium-sized enterprises are the decisive factor in the successful implementation of Industry 4.0 principles into practice.

2 The business environment in the context of Industry 4.0

In the Slovak Republic, small and medium-sized enterprises represent a strong economic development potential and the state is aware that the area of support for small and medium-sized enterprises throughout the national economy is one of the key issues of the future direction of our economy. Small and medium-sized enterprises can be considered as a driving force of national economies, but also of the European Union economies, because they create suitable conditions for increasing employment, realization of innovation processes, but also creating suitable social environment in regions. Their flexibility predetermines them to become a stabilizing factor for the economy, even today, at a time of advancing the development of intelligent industry in the context of robotics and process automation in enterprises. It is therefore important to create appropriate conditions to support the creation and development of SMEs. An important role in this process is played by the State, which has a wide range of instruments through which it can support the development of SMEs, but if they are used incorrectly, it can act in reverse and hinder development, thus creating barriers to business development. This means that the state should create stable conditions for the implementation of business activities in the long term, ie gradually build a favourable, high-quality business environment that will not create barriers to business. Here we could ponder the notion of a favourable or good, high-quality business environment: “What is a good, high-quality business environment?” Often the different individuals who use this term mean something completely different. For some, the business environment is good and of good quality if it is good for them, their business, or their industry. And they often try to help this through privileges, exceptions, preferences, etc., approved by governments and parliaments. However, such a perceived quality of the business environment can in no way be considered good. In this case, the business environment is distorted by a selective favouritism policy that provides a competitive advantage to selected entities or industries, to the detriment of all others who are disadvantaged. A quality business environment is therefore an environment that creates equal opportunities for all concerned, no matter where they come from, what their legal form, size, etc. We must therefore state that the formation of a quality business environment is an important factor in supporting and developing SMEs throughout the national economy. We need to realize that, given their size, SMEs are very sensitive to changes in the business environment. Ongoing digitization offers micro, small and medium-sized enterprises new opportunities to participate in global trade, innovate their production and production processes and the growth of digital technologies alone will enable SMEs to improve their access to global markets, improve their market behaviour in sales, marketing, customer care whether to understand supply-customer targets at relatively low prices as it is today. Digitization creates a number of new opportunities and challenges for expanding and developing various forms of business activity, with some businesses achieving significant growth without employing large numbers of employees or using other tangible assets. Using digital technology can also make it easier for SMEs to access more skilled and talented employees through better selection processes, outsourcing, online job search, and more. Digitization is also shaping new approaches to a wide range of financial instruments and financial services with innovative solutions to attract business financial resources.

The quality of the business environment significantly affects the possibilities of exploiting market opportunities by business entities. Improperly set conditions create barriers. Different indices are used to measure the quality of the business environment. The indices on the basis of which we can evaluate the quality of the business environment have different construction, use different data, different data sources and different variables. We can divide them on the basis of several criteria, such as species, objectivity of evaluators and the like. The individual indices also differ from each other by the subject of their measurement. The object of measuring each index is (what is to be accurately measured) through the chosen variable to measure the quality of the business environment. The following indices can be used to measure the quality of the business environment:

- Corruption Perception Index (CPI)
- Global competitiveness index, evaluated by the World Economic Forum
- Business Environment Index (IPP)
- Doing Business report, carried out by the World Bank
- Aggregate Governance Indicators (AGI)
- Opacity Index (OI)
- Captivity Index (CI)
- Corporate Governance Risk Index (CGR)

The quality of the business environment in the Slovak Republic, according to the indices mentioned above, generally lags behind the average of Europe. According to the results of the rankings assessing the quality of the business environment and the level of competitiveness, the Slovak Republic has improved its position over the past five years, but has nevertheless recorded a slight slump in the assessment of the competitiveness of the economy. If we examine in detail the individual rankings that assess the quality of the business environment, we would find that the other countries under review are working to improve the situation in these areas. In the long term, since 2013, when it reached its historically worst position, the Slovak Republic has gradually improved its position up to the current 42 place in the ranking ranking. The Global Competitiveness Index is the most comprehensive assessment of national competitiveness and is analysed and evaluated annually by the World Economic Forum on the basis of available statistical data from the Global Executive Opinion Survey. Within this survey, Slovakia ranked 42nd among the 141 countries of the world. The following table 1 shows the values of the index of global competitiveness of the SR.

Table 1 GCI index in Slovakia

Year	2004	2005	2006	2007	2008	2009	2010	2011
ranking	43	41	37	41	46	47	60	69
chance	0	+2	+4	-4	-5	-1	-13	-9
year	2012	2013	2014	2015	2016	2017	2018	2019
ranking	71	78	75	67	65	59	41	42
chance	-2	-7	+3	+8	+2	+6	+18	-1

Source: own processing [10]

In its report, the World Economic Forum also identifies what it considers to be the biggest competitive disadvantages in the Slovak Republic on the basis of the analyses carried out:

- high level of clientelism, corruption
- enforceability of law
- low public confidence in politicians
- wasting government spending
- low government support for technological innovation
- impact of taxation on motivation to work
- the escape of talented people abroad
- poor quality education system
- ethical behaviour of companies
- quality of aviation infrastructure

The position of the Slovak Republic in the World Bank ranking has deteriorated in recent years, and as a result has lost its best position in the V4 countries in the long term. The Doing Business Index is currently ranked in 189 countries with different types of economies and political cultures. Based on the development of the Doing business index, it is clear that the quality of the business environment in Slovakia has been slightly deteriorating in recent years, which may have a negative impact on the successful adaptation of the intentions of digital transformation into practice. SMEs, in particular, may have difficulties in effectively incorporating the goals and objectives of digital transformation into their business practice.

Table 2 Ranking of Slovakia according to the World Bank's Doing business rating

Year	2013	2014	2015	2016	2017	2018	2019
Ranking	49	29	30	33	39	42	45

Source: own processing [8]

The results of the surveys of the quality of the business environment in the conditions of the Slovak Republic are the definition of basic barriers, deficiencies that deteriorate the quality of the business environment and consequently the business activities themselves. Problems include law enforcement, functionality, quality and availability of production inputs, efficiency of state management, and access to state aid, clarity, usability, stability of legislation and level of corruption in the authorities. The development of intelligent industry as part of the digital transformation puts pressure on workers to adapt to changes related to robotization and the gradual replacement of the human workforce by machines. Information, telecommunications and digital technologies will contribute to the development of both industrialized and non-industrial economies with higher added value, increasing professional employment, employing young people, and will also put pressure on effective retraining of the workforce. Other problems and barriers to the business environment that may hinder the process of smooth adaptation of small and medium-sized enterprises in Slovakia to the conditions of digital transformation:

- poor quality education,
- lack of skilled labour,
- lack of links between vocational schools and the labour market,
- insufficient availability of funding.

The introduction of new digital technologies into business practice will put pressure on the quality of the workforce with new competences and skills. Currently, the labour force is lacking in the market, and there are also missing fields of study that would prepare such a labour force for the labour market. There is a lack of links between educational institutions and businesses and the labour market.

Finally, we can state that the quality of business environment in the Slovak Republic has stagnated in recent years, even slightly decreasing, which is not flattering, especially at a time when in such a turbulent environment, it is necessary to create favourable conditions especially for small and medium international competition and take advantage of all the opportunities that digital transformation brings. These include, in particular, the quality of the legislative environment, the quality of the workforce, the quality and level of the education system and, last but not least, the quality of the public sector.

3 Conclusions

In conclusion, we can state that the quality of the business environment in Slovakia is low and it is necessary to improve the quality of the business environment in Slovakia in a systematic way. Despite the fact that there is still potential for entrepreneurship in Slovakia, the quality of the business environment in Slovakia lags behind the European average. We know that a healthy business environment that motivates people to do business is one of the government's key instruments to ensure the country's long-term competitiveness, because entrepreneurship is an essential element of the efficient functioning of a market economy, of which SMEs are an essential part. In developed economies, these have many functions. They are producers of new goods and services, carriers of inventions and innovations, enabling the use of the skills and initiative of the individual. Small and medium-sized enterprises are a key area for the future of digital transformation. In the context of modern Industry 4.0. they are

flexible and can flexibly adapt their structure to meet their needs and situations so as to be able to further increase the impact of smart solutions implementation in their enterprise. Industry 4.0 can be characterized by an unstable, changing environment which, in the case of a good business environment and an appropriate structure of economic policy instruments, can flexibly adapt and realize its potential. Ongoing digital transformation is an environment full of innovation and change that presents new opportunities and opportunities for SME development.

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