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The Intelligent Technologies And Their Disclosure In The Annual Report In Slovak

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Abstract
The strategy of intelligent technology allows companies to reorganize their activities by applying digitization to their processes, which causes traditional technological processes to change into intelligent processes and points to the necessity of its implementation in the strategies of Slovak industrial companies, so that companies can maintain their prosperity on the market. The aim of the paper is to evaluate the position of intelligent technologies, because they play a key role in the transformation of production processes of industrial enterprises and the publication of information about the strategy of intelligent technology implemented in an industrial enterprise in the annual report in accordance with the Accounting Act.

Key words: *Smart technology, strategy, annual report, accounting act, digitization*

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I. Introduction

With the improvement of the level of economic development, people's economic incomes were supported and the quality of life was also demanded. People began to pay attention to the pursuit of a smart and refined lifestyle, which led to the development of smart technologies in various industries. (Chen, 2019) The deployment of intelligent technologies in various social areas has been increasing in intensity and scope in recent years (Holečko et al., 2017). The global market is undergoing transformational changes under the increasing influence of innovation factors. Such changes in companies are mainly caused by the pressure to maintain their prosperity in the market. In addition, competitive and financial pressures force businesses to be more efficient, forcing them to look for new technologies and methodologies that could help them be more productive than their competitors, save costs and add value to their business (Lievano-Martinez et al., 2022). For these reasons, companies must be able to quickly respond to changes (Richnák, 2021) and create a strategy in the era of intelligent technology with variants that are defined by the goals of the company, its internal strengths and weaknesses, external opportunities and threats (Majtán et al., 2016; Jankelová et al., 2022). This means for the company the creation of such a variant of the strategy in the era of intelligent technology, which uses the previously known knowledge, experience, procedures, processes of the company, on which it is possible to focus the development and introduction of new intelligent technologies, innovations and materials and to adapt management in accordance with the user's experience. thereby achieving a system of feedback effect.

In addition, competitive and financial pressures force businesses to be more efficient, making it necessary for them to look for new technologies. For this reason, the aim of the paper is to evaluate the position of intelligent technologies, because they play a key role in the transformation of the production processes of industrial enterprises as well as in the publication of information about the strategy of intelligent technology implemented in an industrial enterprise in the annual report in accordance with the Accounting Act.

Intelligent technologies and their important position

Human history is characterized by three main technological revolutions, namely mechanization, electrification and computerization. The history of the development of these revolutions is accompanied by the emergence of revolutionary technologies (Huang & Wei, 2022).

The Slovak Republic is one of the countries with a strong industrial tradition, and the ambition is that its future will remain connected to industry. The fourth industrial revolution brings several challenges, but mainly a unique opportunity to ensure the long-term competitiveness of the Slovak economy in a global competitive environment (MH SR, 2016). The Concept of Intelligent Industry for Slovakia has a clear goal, to convince the public of the necessity of business transformation through recommendations supporting changes from traditional technological processes to intelligent processes that will maintain the position of Slovak companies on the dynamic industrial market (Concept of Intelligent Industry for Slovakia, 2022). In the area of production processes, the concept focuses on supporting development and introducing new technologies and materials that are energy efficient. In the market environment, it is not easy to define and recognize the innovative potential of a company. Rather, it is about identifying components, relationships, achieving the expected economic, social, and environmental consequences of introducing and managing innovations (Richnák, 2021).

In a manufacturing industrial enterprise, they are involved in the production line in one aspect, namely, data collection technology, intelligent equipment technology, intelligent process design technology, production line modeling and simulation technology, production line maintenance guarantee technology, and intelligent management and control technology.

Smart enterprises combine different processes into smart systems (Ren et al., 2017). An intelligent manufacturing system aims to build values by combining various industrial production factors such as manufacturing, storage systems and logistics systems.

According to Shi et. al. (2020) digital factory means digitizing production processes, production equipment, materials, process methods and environmental information in a smart factory. The smart factory is considered a follow-up to the digital factory. It is developed by digitization processes. Digital transformation involves changes in organizations through the application of digital technologies to improve existing processes or develop new processes (Hrustek & Furjan, 2019).

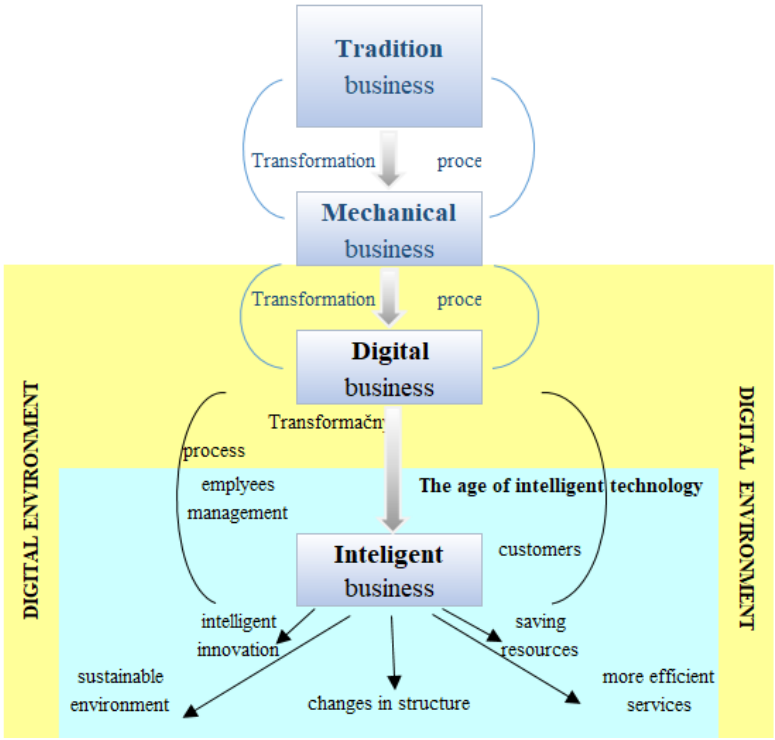
One of the key features of digital technologies is the development of intelligent systems, in which, from the point of view of the manufacturing sector, traditional factories are transformed into intelligent factories.

In the manufacturing industry, the smart enterprise (factory) is considered the final stage of the fourth industrial revolution (Jung et al., 2021). Creating a smart manufacturing platform that can enhance the achievement of smart factories is vital and desirable for the modern manufacturing industry (Okeme et al., 2021).

According to Scheme 1, the effort of the transformation processes is to emphasize the need for the company to adapt in the era of intelligent technologies to new business models, new technological trends, new production methods and new demands from consumers.

To adapt to ever-evolving business dynamics and sensitive buyer preferences, businesses are looking for a fundamental digital transformation where systems can become intelligent (Figure 2) (Asquith, Horsman, 2019). As the global economy changes in response to the development of new technologies, businesses must become more agile and respond quickly to demands (Rename et al., 2017). The digital revolution is not only an additional production factor from an economic point of view (like a steam engine), but also a total transformation of the view on the functioning of the market and the economic system as a whole, because it also affects consumer behavior. The digital environment is transforming all production factors, the behavior of businesses and consumers. It represents a new dimension.

Scheme 1 Stages of factory (enterprise) development and the impact of intelligent technologies



Source: own processing

The application of intelligent technology in various industries pointed to the direction of the development of intelligent technology (Chen, 2019) and the development of individual areas of intelligent technology. Smart technologies in electronic engineering are gaining importance. Currently, however, due to the limitations of the

development of automation of electrical engineering, it is necessary to introduce new technologies to support the further development of automation of electrical engineering.

We can see the extensive application of intelligent technologies in the healthcare industry today and in the future. We can already see the application of intelligent technologies during the patient's first entry into the medical environment and the subsequent diagnosis of his condition, examination, but also during the prescription itself.

The automotive sector applies intelligent technologies in its entire production process with a focus on the digitization of its processing processes.

Civil engineers introduce some new technologies into the smart building architecture, which are digital control system network technology, industrial Ethernet, wireless communication technology in smart building, digital video transmission technology, smart card technology. (MH SR, 2016)

Intelligent technologies and their disclosure in the annual report

The streamlining of processes and the development of knowledge and ultimately the introduction of intelligent technologies into the company's production processes may be the subject of information disclosure in the annual report pursuant to Act no. 431/2002 Coll. on accounting as amended (Accounting Act), as they play a key role in the transformation from traditional production processes to intelligent production processes of industrial enterprises in the digital environment, and thus can cause a significant change in the nature of the industrial enterprise itself. Businesses that must have their financial statements certified by an auditor according to § 19 of the Accounting Act, except for a branch of a foreign bank, a branch of a foreign management company, a branch of an insurance company from another member state, a branch of a foreign insurance company, a branch of a reinsurance company from another member state, a branch of a foreign reinsurance company and a branch of a foreign trader with securities, are required to prepare an annual report (§ 17a paragraph 1 letter b of the Accounting Act). The basic information that the company should publish can be divided into financial information, non-financial information and information that fulfills both the financial and non-financial nature at the same time.

Following the division of published information in the annual report by nature, we can also divide the information about intelligent technologies in the annual report into (Tab. 1):

- information on intelligent technologies of a financial nature,
- information on intelligent technologies of a non-financial nature,
- information on intelligent technologies of a financial and non-financial nature.

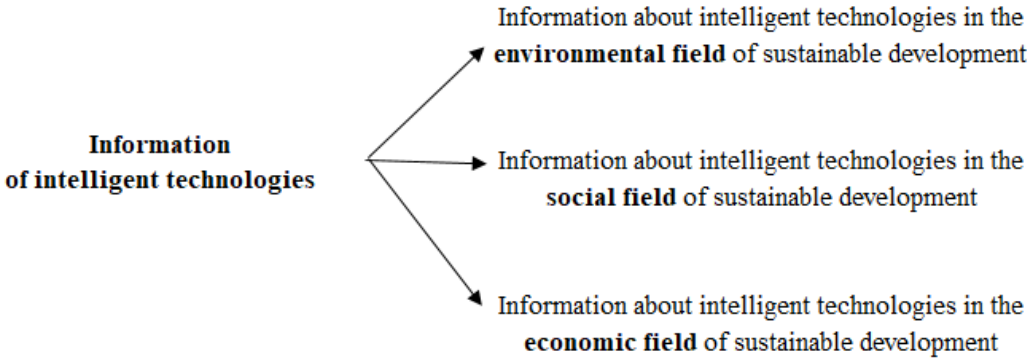
Tab. 1: Classification of information on intelligent technologies by nature in the annual report

Classification of information on intelligent technologies by nature in the annual report		
Information about intelligent technologies of a financial nature	**Information on intelligent technologies of a non-financial nature**	**Information about intelligent technologies, which have a financial and non-financial nature**
Information reported in the financial statements for the accounting period for which the annual report is prepared.	Information about the development of the enterprise, the state in which it is located and the significant risks and uncertainties to which the enterprise is exposed to the introduction of intelligent technologies. Including information on intelligent technologies on the impact of the company's activities on the environment and on employment, with reference to the relevant data presented in the financial statements.	Information about events of special importance that occurred after the end of the accounting period for which the annual report is drawn up and these events were influenced by intelligent technologies in the company.
Information on research and development costs incurred in relation to intelligent information.	Information about the expected future development of the company after the introduction of intelligent technologies, e.g. into production processes.	Information about the expected future development of the company after the introduction of intelligent technologies, e.g. labor protection systems with social security and insurance.

Source: according to the Accounting Act

Another important point of view, according to which the published information about intelligent technologies in the annual report can be divided, is the division of information about intelligent information from the point of view of the environmental, social and economic areas of the sustainable point of view (Scheme 2).

Scheme 2 Classification of information on intelligent technologies from the point of view of areas of sustainable development



Source: own processing

Industrial enterprises that currently operate in a digitalized environment should examine the impact of intelligent development on the overall productivity of their operations and publish information on the indicators of their intelligent enterprise development in annual reports.

II. Conclusion

The technological development of the company also had an impact on the development of businesses and was accompanied by three main revolutions, namely mechanization, electrification and digitalization. Each of the revolutions is accompanied by revolutionary technologies. The digital revolution is a total transformation that has affected the functioning of the market and the economic system as a whole, with a significant impact on the transformations of production factors, the behavior of businesses and consumers. In order to maintain their prosperity on the market, companies are looking for new smart technologies against the background of the digital environment, the development of which also depends on the area in which smart technologies are introduced. Currently, intelligent process automation is considered one of the most strategic technological solutions for the development of corporate digital transformation. Even key economic sectors are being restructured to bring higher added value.

One of the means by which companies can inform the external environment about the introduction of smart technologies in all aspects of sustainable development as an added value of the services provided or the products sold is the publication of information of a financial and non-financial nature, as well as information that simultaneously meets the elements of a financial and non-financial nature in the annual report according to the Accounting Act.

Achieving goals in the era of intelligent technologies in the digitalization environment and fulfilling the vision according to the Intelligent Industry Concept for Slovakia contributes to the transformation of the Slovak economy into a knowledge-based economy.

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