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ARTIFICIAL INTELLIGENCE (AI) AND STRATEGIC PLANNING

Annotation

AI is constantly evolving, becoming useful across various industries. The fields that use AI are numerous. Artificial intelligence is also widely used in the financial sector, specifically to detect banking and financial activities such as unusual credit card use and large account deposits – all of which helps bank employees fight fraud.

Most industries are successfully using intelligent techniques to automate individual processes, which leads to the not-so-unfounded assumption that humans as a workforce will no longer be needed.

Technological progress is reshaping the future of industries. The rapidly changing technological environment creates different opportunities and threats for businesses, requiring them to respond with different, modern strategies. This, in turn, creates the need to use artificial intelligence (AI) as a technological advancement. The integration of AI in the management and decision-making processes of organizations enables the governing body to collect and analyze large amounts of data and make important decisions based on them.

As is known, strategic planning is the process of SWOT analysis and identifying ways to respond to it in order to set long-term goals. It enables businesses to take advantage of opportunities and overcome challenges in a rapidly changing environment to expand market share or ensure sustainable development. Experience shows that businesses often differ from each other; even among the best of them, weaknesses are often revealed in strategic planning processes. In particular, in the process of making strategic decisions, the discussion is often based only on the intuition and experience of high-level managers, the dynamic changes taking place in the environment and the rational factors in it are not taken into account. The planning process does not use sufficient, accurate and impartial data, which is crucial to achieving high results.

Keywords: Artificial intelligence, human, industry, strategy, decision, automation, optimization, generation, “Deepfake” technology, mindset, delegation, responsibility, implementation.

Introduction: Concept of Artificial Intelligence

“In the modern era, artificial intelligence (AI) is a central element of technological progress. Artificial intelligence (AI) — a branch of computer science that aims to create an intelligent computer machine/program that will have the ability to achieve an understanding of human intelligence. The determination of the level of intelligence largely depends on what task is set as the goal” (3)

AI is constantly changing established ways of working, learning and communicating. It is based on the principle that human intelligence can be defined in such a way that a machine can easily mimic and perform tasks from the simplest to the most complex. The essence and goals of artificial intelligence

include mimicking human cognitive activity. Researchers are taking rapid steps to duplicate learning, reasoning, and perception activities. There is an opinion that innovators will soon develop systems that significantly exceed human capabilities. However, others are skeptical because cognitive activities are full of value judgments that are subject only to human experience. Artificial intelligence learns from data and can ultimately find patterns and make predictions independently.

Evolution and Scope of AI Applications

AI is constantly evolving, it is becoming useful for various industries. The fields that use AI are numerous. Artificial intelligence is also widely used in the financial industry. In particular, to detect banking and financial activities such as unusual credit card use and large account deposits – all of this helps bank employees fight fraud.

Most industries successfully use intelligent techniques to automate individual processes, on the basis of which there is a not unfounded assumption that humans as a workforce will no longer be needed.

Technological progress is changing the future of industries. The rapidly changing technological environment creates different opportunities or threats for businesses, which requires different, modern strategies to respond to them. This, in turn, creates the need to use artificial intelligence (AI) as a technological achievement. The integration of AI in the management and decision-making processes of organizations allows the management to collect and analyze large amounts of data and make important decisions based on them.

As is known, strategic planning is the process of identifying SWOT analysis and ways to respond to it in order to set long-term goals. It allows businesses to take advantage of opportunities and overcome challenges in a rapidly changing environment to expand market share or ensure sustainable development. Experience shows that businesses often differ from each other; even with the best of them, weaknesses are often revealed in strategic planning processes. In particular, in the process of making strategic decisions, reasoning is often based only on the intuition and experience of high-level managers, without taking into account the dynamic changes in the environment and the rational factors in it. The planning process does not use sufficient, accurate and impartial data, which is crucial for achieving high results.

AI Applications Across Industries

Artificial intelligence is already actively used in business management and operations planning. It often has a descriptive function and is used to produce analytics (charts/tables for analysis) or to study various aspects of business activity. Modern versions of AI are equipped with diagnostic intelligence, which gives us the opportunity to establish cause-and-effect relationships between events; with similar algorithms, patterns and trends are determined in consumer behavior or competitors' strategies based on the analysis.

A significant stage in the development of AI and its active use in business is predictive intelligence. It has the ability to create a forecast based on the assumption of probabilities and the analysis of existing practices. **Predictive intelligence** is applied to create scenarios based on various variables and assumptions, which allows for the assessment of the potential impact of these scenarios on the business and the development of individual strategies to respond to them. Predictive intelligence has the ability to identify potential risks, the constant monitoring of which allows for the proactive reduction of their negative impact. The levels of AI integration in business are:

- ✓ Development of recommendations based on analysis;
- ✓ Delegating individual decisions to artificial intelligence;

✓ Full autonomy of artificial intelligence.

And yet, how can AI be used in strategic planning? Despite the growing trend of using artificial intelligence in important areas of business management, the quality of its implementation in the strategic planning process is still quite low, which is due to the important features of this process. In the strategic planning process, compared to other business management processes, the degree of human involvement is quite high, and the share of decisions based on personal experience, intuition, emotion, and historical-cultural context is significant.

Technological Change and Strategic Planning Challenges

Is it possible to fully automate the strategic planning process using artificial intelligence? The answer is clear, of course – no (given the current situation and perspective). At the same time, observing the business environment makes it possible to say that artificial intelligence is already transforming the strategic planning process and the approaches and mindset of the people involved in these processes (a marketing department composed of professional marketers that provides full consulting and marketing services).

The interaction between AI and people in the strategic decision-making process can be considered as a process that includes three stages. In the first stage, a person provides artificial intelligence with a specific problem/issue to be solved; in the second stage, AI processes and analyzes the database related to the problem; as a result, in order to solve the problem, AI offers the "customer" several possible solutions/alternatives. After that, the "customer" has the opportunity – based on these alternatives, to make the final decision himself, to fully entrust the decision-making to artificial intelligence, or to modify the task/problem to be solved in order to receive other decision options.

Thus, AI can play an important role in the strategic planning process in making rational, fact- and data-based decisions, while the subsequent review and final evaluation of decisions is still in the hands of humans.

Delegating rational decision-making to artificial intelligence significantly changes the specifics of the activities of personnel with certain qualifications and skills in organizations, accordingly, the demand of employers will increase for those who are ready to take responsibility for the compliance of the recommendations and decisions proposed by artificial intelligence with the organization's mission, goals and values. In such conditions, special importance is attached to skills that will facilitate intuitive strategic decision-making. Such skills include creative thinking, analysis of context along with facts, abstract thinking.

Introducing artificial intelligence into the strategic planning process offers several important benefits to companies/organizations, namely:

✓ Automation of frequently recurring tasks – it allows to reduce the time spent on this type of tasks, optimize costs, and increase business performance and efficiency;

✓ Optimizing the decision-making process – AI algorithms are objective and can provide data-driven insights, which allows for faster and informed decision-making;

✓ High accuracy of forecasting – reduces strategic decision-making related risks; At the same time, it will detect the range of deviations in a timely manner through constant monitoring.

Any business has the opportunity to use artificial intelligence. In order to benefit from the use of artificial intelligence in strategic planning, we must first create/prepare the environment. Therefore, before starting the process, it is necessary to ask questions (we offer some non-exhaustive important questions because the readiness assessment process is quite complex), namely:

✓ Do you have full information/data that may affect strategic decisions? – Often insignificant events in the environment can have a significant impact on the choice of strategy;

✓ How good is the data you have? – The quality of information you provide for processing to artificial intelligence, the result generated by it will be exactly the same quality. Accordingly, for effective AI analysis, data accuracy and reliability are important, which requires additional investment in the data management system;

✓ How flexible is your business? – Scenarios and recommendations that AI creates, in a changing environment, allows for the development of rapid response strategies; At the same time, you need to make sure that the implementation of these recommendations is facilitated by business processes, systems, structures and team mindset.

Involving AI in the strategic decision-making process has potential risks. If you decide to involve artificial intelligence in the strategic planning process, it is necessary to take into account that the existence of such a universal artificial intelligence that is capable of solving all problems is unrealistic. In addition, we need to realize that artificial intelligence is not "universal". Based on the above, in order to avoid excessive expectations and unsuccessful implementation, it is necessary to "train" it to some extent in order to get the right answers and predictions.

Ethical problems may also arise in the use of artificial intelligence in the strategic decision-making process. Managers must take into account various ethical aspects and human values, their potential impact on society and the environment, which may not be integrated into the artificial intelligence system.

An important challenge in using artificial intelligence in the strategic decision-making process is responsibility. It is noteworthy that only a person can take responsibility for their decisions.

Artificial **super intelligence** is the stage when intellectual capabilities exceed those of humans. That is why this stage is worrying, because it will be able to solve issues that are difficult for humans, and in the future it is unknown in what form it may turn against humanity. It is also impossible to determine the date of its creation today. It may be created in the coming years, or it may not be possible to create it at all" (2).

It is assumed that super artificial intelligence or artificial superintelligence will be smarter than humans, it will have a wider range in terms of solving certain problems or tasks, as well as creative and social capabilities. Super artificial intelligence will be able to set its own goals and form values, adapting them situationally. However, the question arises – does super artificial intelligence include consciousness? Undoubtedly, true super artificial intelligence will revolutionize the world.

,,The most noteworthy and potentially dangerous use of artificial intelligence in the political sphere is the so-called "Deepfake" technology. It allows to create very realistic but fake video and audio material in which politicians or public figures appear in situations or make statements that are unreal." (2) Deepfake technology poses a serious threat to democratic processes. It is noteworthy that the successful integration of AI into society depends on its rational management. It requires a complex approach: it is necessary to develop and implement clear ethical standards for the development and use of AI. At the same time, close cooperation is needed between the technological, academic, governmental and business sectors to develop artificial intelligence while reducing risks. Informing and educating the public about the capabilities and risks of artificial intelligence is no less important. The full realization of AI's potential and the neutralization, avoidance or reduction of its possible dangers and negative consequences is only possible with a complex approach.

Conclusion

In modern conditions, organizations are rushing to implement artificial intelligence, but they do not consider it as an instrument of fundamental business transformation. They perceive AI as a simple add-on, not as a powerful lever with which it is possible to redesign the entire value creation system.

Finally, artificial intelligence has largely changed the strategic planning process and will transform

it even more significantly in the future. For long-term success to ensure the use of AI, it is possible to adapt business strategies to a rapidly changing environment. However, it is important to take care of two main directions: dealing with the challenges created by artificial intelligence in the conditions of use and ensuring increased responsibility in strategic in the process of making decisions using artificial intelligence.

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