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## **DRIVERS OF SUSTAINABLE GROWS IN THE SMART-BUSINESS PARADIGM**

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В статье представлено авторское понимание процессов трансформации мировой экономики и бизнес-концепций под влиянием Интернет-экономики и развития искусственного интеллекта в новую экономическую реальность. Во вступительной части проанализированы основные этапы и подходы к формированию производственных и управленческих систем. Кроме того, автор поставил под сомнение возможность дальнейшего развития производственных и социальных отношений в условиях применения фордизма и систем управления постфордизм. В статье указано, что

современная мировая экономическая система под влиянием Интернета и социальных сетей превращается в экономику, в которой человеческий труд будет вытесняться не только от производства, но и от управленческих бизнес-процессов. Автор рассматривает развитие технологических структур и глобальную экономику с точки зрения участия человека в процессе принятия решений. Исходя из тенденции к уменьшению человеческого фактора в процессе принятия решений, статья пытается прогнозировать развитие отношений между заинтересованными сторонами бизнеса. По мнению автора, развитие «умного бизнеса», под которым автор понимает бизнес-системы, способные к самостоятельному принятию решений, приведет к выводу человека не только из процесса оперативного управления, но и из процессов стратегического планирования. В то же время мы можем считать, что функция социальных предприятий переходит от удовлетворения потребностей общества к формированию у людей непонимание «нужд». Изучение растущей роли искусственного интеллекта в бизнес-процессах показывает, что компании, которые минимизируют количество управленческих решений человеком в сфере финансов и стратегического планирования, достигнут успеха.

**Ключевые слова:** умный бизнес, Интернет-экономика, искусственный интеллект, бизнес-процесс, экономика знаний.

У статті подано авторське розуміння процесів трансформації світової економіки та бізнес-концепцій під впливом Інтернет-економіки та розвитку штучного інтелекту в новітню економічну реальність. У вступній частині проаналізовано основні етапи та підходи до формування виробничих та управлінських систем. Крім того, автор поставив під сумнів можливість подальшого розвитку виробничих та соціальних відносин в умовах застосування фордизму та систем управління постфордизмом. У статті зазначено, що сучасна світова економічна система під впливом Інтернету та соціальних мереж перетворюється на економіку, в якій людська праця буде витіснятися не тільки від виробництва, але й від управлінських бізнес-процесів. Автор розглядає розвиток технологічних структур та глобальну економіку з точки зору участі людини у процесі прийняття рішень. Виходячи з тенденції до зменшення людського фактору в процесі прийняття рішень, стаття намагається прогнозувати розвиток відносин між зацікавленими сторонами бізнесу. На думку автора, розвиток «розумного бізнесу», під яким автор розуміє бізнес-системи, здатні до самостійного прийняття рішень, призведе до виведення людини не лише з процесу оперативного управління, а й із процесів стратегічного планування. У той же час ми можемо вважати, що

функція соціальних підприємств переходить від задоволення потреб суспільства до формування у людей нерозуміння «потреб». Вивчення зростаючої ролі штучного інтелекту в бізнес-процесах показує, що компанії, які мінімізують кількість управлінських рішень людиною у сфері фінансів та стратегічного планування, досягнуть успіху.

**Ключові слова:** розумний бізнес, Інтернет-економіка, штучний інтелект, бізнес-процес, економіка знань.

The main economic rival is already taking place not for resources and technology, but for the consumers. More special – this rival is not for markets in their classical sense, but for the consciousness of humans, for their understanding of the usefulness and functionality of things or services. This shift of economic consciousness towards the fact that the consumer should not be persuaded but to “grow” him, to shape his needs and preferences could be already observed. This requires the rapid development of science and technology. Only twelve years ago, the concept of the “blue ocean” emerged. The creators of this theory saw the rapid development of companies that can generate productive business ideas, creating a pre-existing demand in the new market (“blue ocean”), with virtually no rival, instead of competing with many competitors in low-income markets (the “red ocean”) [1, 2]. Now we can say that this development strategy has been exhausting and new growth and development strategies have emerged.

So what has changed during these twelve years? The main drivers that have changed the economic picture of the world refers to rapid IT technology grows [3,4]:

1. The rocket penetration of the Internet into the human relations. At the time of the concept of the “blue ocean” was presented, there were about 1 billion Internet users, most of whom were geographically concentrated in North America and Europe. Nowadays, almost 4 billion users are covered by the Internet, with the largest share of internet users being from Asia. In addition, the worldwide network penetration in Africa and South America is increasing rapidly.

2. The development of mobile devices and the growth of their share. At present, desktop computers and laptops (desktops) was shifted as devices from which the Internet is primarily logged. According to statistics,

in 2017, 52% of all use of the World Wide Web was through mobile devices.

3. The emergence and development of the Internet of Things (IoT) concept. From 2003 to 2010, the amount of devices connected to the Internet changed from 500 million to more than 12 billion devices. Thus, the number of devices connected to the network exceeded the world's population.

4. Development of smart contract and chatbot infrastructure.

In order to understand what has changed conceptually and what changes await us in the world economy and economic science, it is necessary to analyze the history of technological development of the world economy over the last several centuries. It is believed that the production of goods is a determining factor in the formation of economic theories and views. This means that the method of production is also crucial for approaches to managing derivatives of its categories - finance, marketing, strategies, etc.

According to the proposed theory, there are currently 5 technological stages, and the world stands at the threshold of the sixth technological device, or the way, there are even attempts to predict the main features of the seventh technological device. Researchers distinguish technological devices (structures) primarily by the type of energy that is used mainly by industry within a particular structure, as well as by the products and technologies that prevail at this stage.

In our opinion, all technology efforts, beginning in the 18th century and ending with the projections for the next, caused only one, but the most global, change in the role of human in the production and business process. Traditionally, the development of technology is accompanied by rapid increase in productivity, or vice versa - a reduction in the complexity of the goods produced. In our opinion, the disadvantage of such a traditional approach is that it does not explain the nature of social and industrial change, because increasing productivity is a natural phenomenon of human development. From our point of view, the most proper way is to examine how the process of managerial decision-making has changed. The main research idea is to divide management decisions

into management decisions in the sphere of production, in the sphere of its organization and in the sphere of distribution. Lets analyze how the decision-making process in the manufacturing sector has changed:

1. During the period of manual labor, the whole process of managerial decision-making in the field of labor operations was entirely up to the worker. Which tool to choose? With what force and in what sequence to perform labor movements? What material to choose?

2. Mechanization increased the speed of work, but at the same time narrowed the range of management decisions that needed to be made by the worker. From this time the basic production staff did not make the decision on the tool to work with, but there were a number of management decisions that still required their adoption: what force, consistency should be worked with?

3. Automatization has further narrowed down the range of managerial decisions faced by an employee or an automatic line operator. Now the question of the tool, the sequence of movements and so on was determined by the parameters and capabilities of the automatic line. However, the worker still has to make decisions related with starting a line, changing the mode of operation, etc.

4. Robotization completely excluded the worker from the production process. Thus, the technological process and the change of technological structures have almost completely eliminated the human from making management decisions in the production process. However, if we analyze the management decisions in the process of organizing the production and management of the enterprise as a whole, then here the changes began to take place only at the latest technological stage.

Indeed, although mechanization, automation, and robotization led to the gradual elimination of production personnel in decision-making processes, maintenance and organization of production still required a large number of decisions made, moreover, increased productivity at production volumes required the intensification of service processes. The situation began to change with the introduction of automated systems for managing resources and material values, logistics and finance.

In the area of enterprise and corporate property management, the number of decision-making has not significantly decreased. Employee

decisions, strategic planning, product and product policy decisions, mergers and acquisitions are still the sole responsibility of the individual. Thus, technological advances have reduced the material consumption of products, increased labor productivity several times, but have not yet driven a person out of the decision-making process, especially in the field of enterprise management.

In our opinion, future economic development will be marked by the elimination of human decision-making. Today, there are several conceptual technological solutions that will significantly reduce the number of decisions made by people's managers in the near future [5,6]:

1. The Internet of Things and Big Data, as a way of transforming information into data.

2. Smart contracts and blockchain technology, as a guarantee of inability to interfere with human beings and human factors.

3. Development of chatbots (both voice and text) that replace office workers and mid-level managers.

Named technological solutions already reduced transaction costs, and in the future will significantly reduce the costs of servicing traditional business processes. Given the above, we can list some conclusions:

1. During the pre-industrial period, the success in business was achieved by enterprises that had skilled production personnel, capable of relatively quick decision-making and making quality products with the desired consumer functions.

2. During the period of industrialization, companies that have relied on minimizing decision-making in the manufacturing sector have achieved success. They benefited from utilizing the specialization of work and universalisation of equipment. The core of their success was the issues of work organization, time management and optimization of production management. Those companies that have relied on skilled manufacturing staff, superior product quality, and employee involvement have gone bankrupt.

3. Post-industrial successful companies differed from their predecessors, in focusing their efforts not on the search for cheaper products, but on the search for new product features and the creation of previously unspecified markets.

Analyzing technology changing towards elimination human factor in decision making we can predict that in the future success will be achieved by those companies who will meet two conditions: first, they will minimize the number and duration of management decisions in the field of finance and strategic development; secondly, they will offer products to the consumer at a time when the consumer is barely aware of their need for it. Obviously that the first condition can be achieved by using technologies such as Blockchain (smart contracts) and AI (chatbots). Achieving second condition is more complex and requires creating social ratings and wishes based on networks.

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