

**ECONOMICS AND MANAGEMENT OF ENTERPRISE**

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**TOWARDS A SUSTAINABLE SUPPLY CHAIN: CONTRIBUTION TO HOSPITAL WASTE MANAGEMENT IN AN ALGERIAN HOSPITAL**

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The object of research is medical waste management. Healthcare activities protect health, cure patients and save lives. However, they generate waste that is harmful to public health and the environment. As a result, the management of this healthcare waste is becoming increasingly important in the field of public health and the environment. One of the most problematic places is, poor management of these issues that can put healthcare workers, medical waste workers, patients and their families, and the entire population at risk. On the other hand, poor treatment or inadequate disposal of this waste can also cause risks. From now on, the rational elimination of this pollution is one of the essential conditions for respecting hygiene rules, not only inside establishments, but also in the general environment. In this unfavorable context, we are trying through this contribution to achieve adequate management using reverse logistics practices with the main objective of resolving healthcare waste management problems while taking into account the reality of things in situ. For this purpose, an approach guided by data, carried out directly in the field, by direct contact with the different categories of health personnel interviewed, through findings, observations, audits, questionnaire and knowledge of the causes was used. This approach is based on the audit of compliance with the supply chain in the management of hospital waste in the different departments of the Constantine University Hospital (Algeria). As a result of the research it is shown that the situation is very poor given that the logistics chain is completely faulty or no step is respected. Thus, the least respected stage is storage, where no service exceeds 25 %, this is due to the fact that no clinic has an intermediate waste storage area. And the most respected is treatment stage that does not exceed 75 %. This allowed to detect the inadequacies recorded at the level of the study establishment, and even improvements are suggested for sustainable management of healthcare waste at the level of Algerian health establishments.

**Keywords:** healthcare waste management, public health, priority preventive actions, reverse logistics, risk management.

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**DEVELOPMENT OF MANAGERIAL ECONOMICS AS A COMPONENT OF ECONOMIC THEORY**

pages 15–20

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The object of research is managerial economics, which is considered as a component of economic theory. The scientific problem is that there are such concepts as management and managerial economics, which are tangential and somewhat overlapping. Managerial economics is included in the structure of the economic system as a separate component. It is also proven that managerial economics is a systemic entity and has the following levels: global, macro-, meso-, micro- and nano-. The study defined these levels and outlined the use of the global (international) and macro levels. Analysis of these categories is necessary for understanding the governance and governance conditions of global and national economies. The essence of the obtained results is that the existing system of managing international relations is inflexible and difficult to solve the global problems of humanity. And the management of national economies must correspond to the strategic development plans of a particular nation. These obtained results can be explained by the immobility of management structures and the need to revise the global economic order. At the state level, there should be levers for regulating economic relations.

It was noted in the work that society is a set of people united at a certain stage of historical development by one or another economic relations that determine all other social relations. The economic life of society consists of various phenomena and processes, the essence of which must be sought in social production. The concept of «managerial economics» is often used to characterize the regulation of social production. There are different approaches to defining the content of managerial economics. First, managerial economy is considered as regulation by a set of industries and types of material production. Secondly, a system of regulation of productive forces and production relations is usually associated with managerial economics. Thirdly, managerial economics regulates the conditions for achieving equilibrium and cyclicity of social production.

**Keywords:** managerial economics, system of managerial economics, international relations, macro level of economic relations.

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## MODELING THE DESIGN OF MARKETING RESEARCH OF THE BRANDS' SOCIAL RESPONSIBILITY

pages 21–24

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The object of the research is the brands' social responsibility. The process of marketing research on the brands' social responsibility is considered. The phenomenon of brands' social responsibility has been studied and the need for a detailed study of its directions has been proven. The influence of socially responsible actions of brands on increasing their level of awareness and loyalty is substantiated. Trends in the development of brands' social responsibility at the current stage have been determined. It has been established that the brands' social responsibility is related to environmental initiatives, social justice, ethical responsibility, sponsorship and charity, economic responsibility, and the implementation of innovations. The directions of brands' social responsibility are characterized on the example of companies Johnson&Johnson, Google and Coca-Cola, which are primarily related to environmental initiatives. The most popular areas of brands' social responsibility have been established by means of a survey, which gives grounds for asserting the priority of environmental initiatives, sponsorship and charity. Attention is focused on the role of marketing research in the brands' social responsibility. The main types of marketing research design are characterized – exploratory, evaluative and reproducible. A structural model of marketing research on the brands' social responsibility is proposed. This model takes into account all stages of the process of researching the brands' social responsibility – from the conditions for the implementation of social initiatives to the formation of the strategy of brands' social responsibility. The practical value of the proposed model of marketing research on the brands' social responsibility will allow to study social initiatives more deeply and in detail and choose the most priority ones. This, in turn, will create prerequisites for increasing brand loyalty and forming an effective communication strategy.

**Keywords:** marketing research, brand social responsibility, communication strategy, company image, consumer behavior.

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#### **DETERMINATION OF THE IMPACT OF INNOVATIVE TECHNOLOGIES IN THE SYSTEM OF STRATEGIC MANAGEMENT OF CORPORATE SOCIAL RESPONSIBILITY**

pages 25–32

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The object of research is the process of using innovative technologies in the system of strategic management of social responsibility of enterprises. The main problem solved during the research was the need for a more effective integration of the principles of social responsibility in the business strategy, which will help enterprises to adapt to the global challenges and demands of modern society. The study of new technological approaches in this area allowed to identify the most effective tools for increasing transparency, responsibility and sustainable development of companies. As a result of the conducted research, the content of the concept «innovative technologies in the system of strategic management of social responsibility of enterprises» was clarified, which is proposed to be understood as a modern approach to the integration of technological innovations into strategic management, aimed at improving the social indicators of the enterprise. These technologies are found to include a wide range of tools such as Big Data, Artificial Intelligence (AI), Internet of Things (IoT), Blockchain, and others that help businesses effectively implement and monitor social programs and initiatives. It is substantiated that the use of innovative digital technologies in the system of strategic management of social responsibility of enterprises opens wide opportunities and generates significant advantages. Namely, increasing transparency and openness; optimization of resources and costs; increasing internal efficiency; strengthening of reputation and brand; automation of enterprise processes; innovativeness and competitive advantages; stimulating innovation. A model for determining the relationship between the level of profitability of enterprises by type: large, medium, and small enterprises and by the number of employees and their labor costs is proposed, which allows to establish the required number of employees for each type of enterprise. This enables the enterprise to function effectively, reducing labor costs, but not reducing the positive impact on supporting the social sector of the population, creating jobs and remaining a socially responsible enterprise. The possibility of using the latest digital technologies in the social responsibility management of enterprises is summarized.

**Keywords:** social responsibility, strategic management, innovative technologies, information technologies, digitalization of strategic management.

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## ECONOMIC CYBERNETICS

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### THE USE OF ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING IN E-COMMERCE MARKETING

pages 33–38

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The object of this research is the use of artificial intelligence (AI) and machine learning (ML) in e-commerce marketing strategies. Traditional e-commerce marketing approaches often lack a personalized customer experience and find it difficult to adapt to changing consumer behavior. The integration of artificial intelligence and machine learning offers a solution to these problems, enabling real-time marketing initiatives and data analysis.

Studies have shown that the use of artificial intelligence and machine learning in e-commerce marketing has led to improved customer relationship management, increased operational efficiency, and more customer-centric advertising strategies. In addition, technologies such as visual search, virtual personal shoppers, and real-time product targeting have changed the e-commerce landscape by providing interactive and personalized shopping experiences. Artificial intelligence and machine learning algorithms analyze vast amounts of customer data to

identify patterns, preferences and trends, enabling e-commerce businesses to conduct targeted marketing campaigns and optimize product offerings. Using advanced technologies, companies can streamline operations, increase customer satisfaction and stay ahead of the competition in the digital marketplace. This data suggests that integrating artificial intelligence and machine learning into e-commerce marketing strategies can benefit businesses by improving customer engagement, increasing sales, and gaining a competitive advantage. However, a successful implementation requires access to quality data, a robust AI infrastructure, and ongoing monitoring and optimization to ensure effectiveness and relevance in a dynamic marketplace.

**Keywords:** artificial intelligence, machine learning, e-commerce marketing, personalized customer experience.

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## DEVELOPMENT OF PRODUCTIVE FORCES AND REGIONAL ECONOMY

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### SCIENCE PARKS: ANALYSIS OF INTERNATIONAL EXPERIENCE AND DEVELOPMENT PROSPECTS IN UKRAINE

pages 39–46

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The object of the research is the issues related to the creation of science parks in Ukraine at a new level in the process of its post-war reconstruction. In this paper, the main focus is on the analysis of the very concept of «science park» and the experience of some international ones, which are most suitable for the domestic plans for the transformation of the Ukrainian economy and its social infrastructure. Also researched the initiative of the Kharkiv city government to create the so-called «science quarter», which would absorb all the best that exists in the world in the field of science parks, and would have its own «highlight». As a result of this study, it was established that the creation and functioning of science parks is an important component of the modern world economy, which should be given serious attention in the process of post-war transformation of the Ukrainian economy. Moreover, the process of developing a strategy for the construction of such science parks should be started now, without waiting for the end of the war. A good example of this is the start of work on the project to create a science park in Kharkiv called

«Science Quarter» as part of the development of a city recovery plan with the help of specialists from various international organizations, universities, banks and funds. The article analyses the activities of some similar science parks in Poland, which can be used as a guide in this process, and provides recommendations for the improvement and enhancement of certain basic elements of the future Kharkiv science park. As a result, it was concluded that thanks to the hard work of the city authorities with the support of international institutions, active work is being done to develop a city reconstruction strategy at a fundamentally new level in Kharkiv, within which a significant place is given to the implementation of the «Science Quarter» project. The success of the latter will depend not only on the experienced team of specialists implementing this project and the receipt of the necessary funding, but also, first of all, on the success of our defenders in repelling russian aggression.

**Keywords:** post-war reconstruction of the country, science parks, «Science Quarter», Kharkiv science park.

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