ІНФОРМОЛОГІЯ ТА СОЦІАЛЬНІ КОМУНІКАЦІЇ

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BUSINESS ANALYTICS AS A FUNDAMENTAL INSTRUMENT OF MANAGEMENT INFORMATION SYSTEMS

Purpose of the article *is to analyze the process of collecting external information in the integrated business intelligence system for the diagnostic industry of Ukrainian enterprises.* ***The scientific novelty*** *of the work lies in the fact that for the first time the mechanisms of information management in the business intelligence system are highlighted. As a research task, the authors attempted to evaluate the information component of business intelligence systems. The functions of the integrated system of business intelligence indicators are highlighted. The types of capital with which the information model of intangible assets of business intelligence interacts are allocated.* ***Conclusions****. Using the business intelligence information model mechanism will significantly facilitate the implementation of business intelligence as a major axis in the production of companies ' competitiveness in a particular sector. In a dynamic business environment, there is a need for additional literature that is integrally and systematically linked to social efforts aimed at improving the competitiveness of the business through the introduction of intelligence strategies in relation to the company as an independent organization, with its own characteristics, abilities, values, knowledge, behavior and skills.*

Key words: *management information systems, information systems, management information technologies, business analytics, information.*

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БІЗНЕС-АНАЛІТИКА ЯК ІНСТРУМЕНТ ФУНКЦІОНУВАННЯ ІНФОРМАЦІЙНИХ СИСТЕМ МЕНЕДЖМЕНТУ

Мета роботи: *проаналізувати процес збору зовнішньої інформації в інтегрованій системі бізнес-аналітики для індустрії діагностики українських підприємств.* ***Наукова новизна*** *роботи полягає у тому, що вперше виокремлюється механізми управління інформацією в системі бізнес-аналітики. У якості дослідницької задачі авторами була здійснено спроби оцінити інформаційну складову систем бізнес-аналітики. Виокремлено функції інтегрованої системи показників бізнес-аналітики. Виділено види капіталу, з якими взаємодіє інформаційна модель нематеріальних активів бізнес-аналітики.* ***Висновки.*** *Використання механізму інформаційної моделі бізнес-аналітики значно полегшить реалізацію бізнес-аналітики як основної осі у виробництві конкурентоспроможності компаній у певному секторі. У динамічному бізнес-середовищі існує потреба в додатковій літературі, яка цілісно та системно пов'язана з соціальними зусиллями, спрямованими на підвищення конкурентоспроможності бізнесу шляхом впровадження розвідувальних стратегій у відношенні компанії як самостійної організації, з власною характеристики, здібності, цінності, знання, поведінка та здібності.*

Ключові слова: *інформаційні системи менеджменту, інформаційні системи управління, інформаційні технології менеджменту, бізнес-аналітика, інформація*

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БИЗНЕС-АНАЛИТИКА КАК ИНСТРУМЕНТ ФУНКЦИОНИРОВАНИЯ ИНФОРМАЦИОННЫХ СИСТЕМ МЕНЕДЖМЕНТА

Цель работы: *проанализировать процесс сбора внешней информации в интегрированной системе бизнес-аналитики для индустрии диагностики украинских предприятий.* ***Научная новизна работы*** *заключается в том, что впервые выделяется механизмы управления информацией в системе бизнес-аналитики. В качестве исследовательской задачи авторами была предприняты попытки оценить информационную составляющую систем бизнес-аналитики. Выделены функции интегрированной системы показателей бизнес-аналитики. Выделены виды капитала, с которыми взаимодействует информационная модель нематериальных активов бизнес-аналитики.* ***Выводы****. Использование механизма информационной модели бизнес-аналитики значительно облегчит реализацию бизнес-аналитики как основной оси в производстве конкурентоспособности компаний в определенном секторе. В динамичной бизнес-среде существует потребность в дополнительной литературе, целостно и системно связана с социальными усилиями, направленными на повышение конкурентоспособности бизнеса путем внедрения разведывательных стратегий в отношении компании как самостоятельной организации, с собственной характеристики, способности, ценности, знания, поведение и способности.*

Ключевые слова: *информационные системы менеджмента, информационные системы управления, информационные технологии менеджмента, бизнес-аналитика, информация.*

Relevance of the research. The formation of a sustainable competitive advantage requires an approach and attitude from organizations focused on technological learning, innovation and the introduction of information systems, business intelligence. International practice of business intelligence determines the necessity of carrying out of studies of technical supervision of competition between companies in Ukraine.

Purpose of the article is to analyze the process of collecting external information in the integrated business intelligence system for the diagnostic industry of Ukrainian enterprises.

Problem statement. The sector of information technology business intelligence is an incentive for the development of economic and social activities of Ukrainian enterprises. Applied business intelligence instruments together with communications within organizations transform Ukrainian business, so monitoring trends in their development have an impact on the complex aspects of the functioning of the economy of our state.

Analysis of recent research and publications. The subject of research of information systems of business intelligence is quite relevant and is reflected in the works of Ukrainian scientists. Information systems and technologies in management are covered in the works by I. Gordienko [1]; research of information systems in management was conducted S. Glivenko, E. Lapin and O. Pavlenko [2], the role of modern technology in the economy was considered by U. Hava [3]; information technology and corporate governance in the twenty-first century revealed in his writings O. Stupnitsky [4].

The scientific novelty of the work lies in the fact that for the first time the mechanisms of information management in the business intelligence system are highlighted. As a research task, the authors attempted to evaluate the information component of business intelligence systems. The functions of the integrated system of business intelligence indicators have highlighted the types of capital with which the information model of intangible assets of business intelligence interacts is allocated.

Unresolved aspects of the problem. Information systems of business intelligence is an instrument for the expansion of the world analytical technologies in the field of economy, so the modules of the business intelligence systems considered in the article have an impact on the processes occurring

in the enterprises. Thus, business Analytics and its information technology part provide the progression of information relations in the internal environment of the company and are a vital aspect of determining the prospects of development of the enterprise in its information and technological potential.

Presentation of the main material of the study. The reality of the Ukrainian business environment shows that business analysis is not limited to the monitoring of scientific and technical aspects. Holistic analysis of strategic variables and decision-making for organizations requires the application of technological supervision in a certain competitive dimension and has a multi-sectoral nature.

Business intelligence provides knowledge in defining strategies, creating programs of research and development, cooperative agreements, introduction of new technological developments and identify investment opportunities and commercialization ventures.

Knowledge management as a new branch of the enterprise economy increases the value of intangible assets as a center of business actions and strategies. Knowledge management has become one of the main topics of research and paradigm of best management practices in the field of organization and management of business structures.

On knowledge management there is a concept of business intelligence, which is a set of strategies, actions and instruments aimed at managing and creating new knowledge based on the analysis of existing data in the organization or company.

Information systems are defined as electronic information management elements that have an impact on business processes and their practical implications for knowledge generation. Thus, different systems are used to carry out an innovative operation and are defined as actions or operations that contribute to the improvement of any of the products or services produced by the company. It can be a technological, operational, administrative or business strategy [1]. Interaction of data management in the business intelligence information system is shown in figure 1.

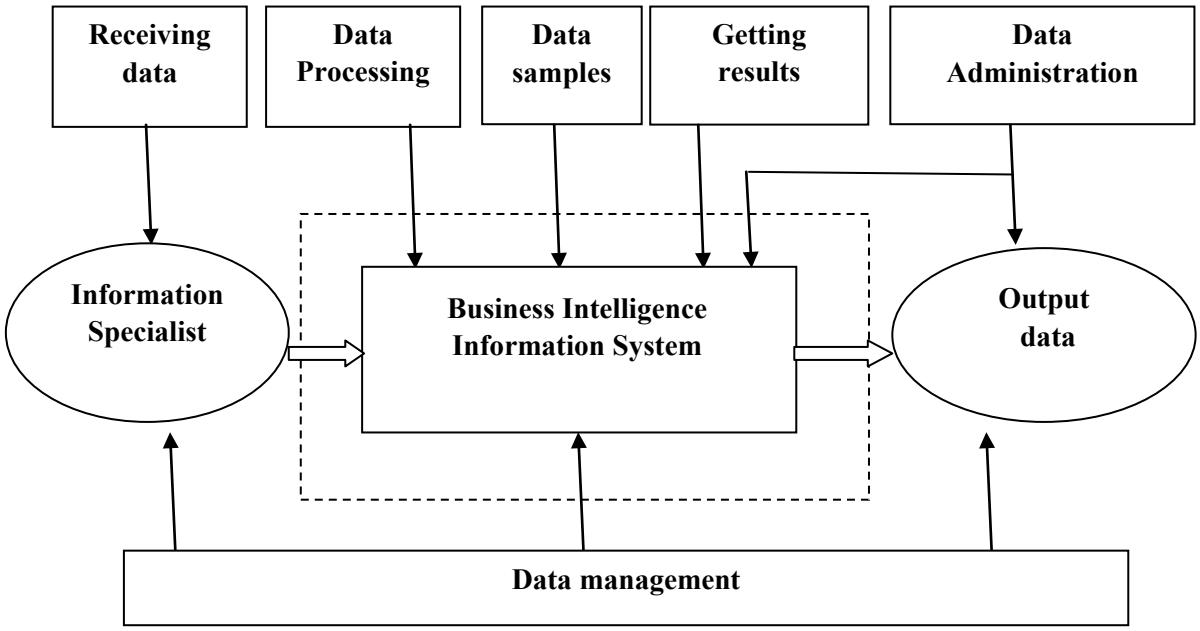

Figure 1. – **Interaction of data management in business intelligence information system**

The creation of a model of business analytics at the enterprise lies in company's carrying out an assessment of processes, products, people in the organization with the purpose of accumulation or the concentration of information in production processes using established methodology or guidelines for assessing the results.

Business intelligence mechanisms-documents, processes, and policies that facilitate intelligent decision-making in organizations to achieve the development of methodologies and management models aimed at developing intelligence strategies that seek to analyze business models are more widespread, and at the same time, they recognize knowledge as a critical element in the development of the organization. The business intelligence information model is designed to describe, understand, explain, and predict the behavior of the parts that make up a phenomenon or its components. In this sense, business management models are relevant through the importance of the approach to knowledge management and the intangible value of organizations.

The following are some of the most common business intelligence information models. The European quality management model (EFQM)is one of the business models, widely used in Europe. Excellence 2000 (EFQM, 2010) highlights the importance of knowledge, innovation, and learning processes to achieve business excellence. This model aims to provide companies with a methodology that allows them to improve their strategies to achieve organizational results [2]. In the EFQM model, the information system functions in the directions of the knowledge formation process, which establishes a connection with business Analytics. From innovation and the results of this process that the components of the business intelligence system function, which improve the performance of the enterprise.

The model of the integrated system of indicators of business Analytics involves the formation of some economic indicators through the model of financial integrals. This model includes the ability to manage intangible values [2]. The authors trace the process of functioning of the model of the integrated system of indicators of business intelligence and highlight its primary functions:

- presentation of the organizational strategy in the financial dimension;
- formation of strategic goals and increase of corporate interaction between the company's divisions;
- alignment of strategic unit initiatives;
- the increase of organizational relationship between financial indicators and strategic goals of the enterprise;
- promote the adoption of solutions based on information indicators business intelligence.

The strategic vision in business intelligence information systems is based on financial, internal and intra-organizational equality. This can be seen as the adaptation of business intelligence in the processes that shape organizational vision business-processes of the company Thus, the model management business intelligence enhance the use of knowledge in the process of strategy formation organic [3].

The information model of the integrated system of business intelligence indicators precedes the vision of business analysis. The elements of intellectual capital that he recalls - human capital, relational capital, and structural capital-are part of the factors subordinated to the acquisition of knowledge in an organization. Therefore, the authors suggest that in the strategic future of Ukraine organizations have increased the performance of each factor, to store competitive advantages in support of intellectual capital.

The information model of intangible assets of business analysts focuses on the modification and structuring of the company's knowledge on how to update business processes and ensure their effective management. The information model of intangible assets is based on the creation of dynamic internal cohesion, which improves the future performance of the organization. The information model of intangible assets is based on the formation of dynamic internal cohesion, which improves the future performance of the organization. The authors identify the following types of capital with which the information model of intangible assets of business analysts interacts:

- human capital, consisting of the knowledge and experience of individuals of the organization;
- structural capital, which is integrated in organizational structure, processes, hardware, software, databases, and all the components of the organizational abilities of the company;

● client capital (relational), represented by relations with the main customers of the organization.

Thus, the prospect of business analysis of the information model of intangible assets of business analysts is based on the organization of training, which acquires the value of certain skills and knowledge of individuals (human capital), as well as organizational structures and market conditions (structural capital) and, finally, the process of formation of coherent strategies, alliances and cooperation (relational capital).

In this reference structure it can be concluded that business Analytics depends on the organizational direction and management styles in order to implement adequate implementation of information systems, innovative mechanisms and decision-making processes. Solutions that are jointly managed through a knowledge management system. However, it is from the basis of workers, from the processes and relationships between them, as well as from the organizational culture that business intelligence arises, which corresponds to the management model [5].

Knowledge is the Foundation on which value is created; ultimately, it requires management, so business management models are developed differently, adapting to each environment. Finally, the concept of intelligence arises from the knowledge gained in the previous stages. This illustration shows the approach to the concept of the study and sets out the guidelines used to determine the degree of progress in the concept of business intelligence.

Knowledge is presented as one of the assets that can bring the company more value. The study shows that the leaders and key human elements of the organizations studied have important references to knowledge. From intellectual property and technology transfer to innovation, research and development, this type of intangible asset is proving to be key to the growth of technology-based companies. The information technology sector is confirmed when this sector is updated and the cost of innovative processes and specialized human elements that exist in the region increases [6]. People and processes are mainly of logical and mathematical nature. This means that many of their productive activities revolve around the importance of knowledge and how they manifest themselves in the organization's business opportunities.

The business environment is basically a joint effort of companies and the government; however, it is the latter's responsibility to provide the necessary conditions to help companies realize business opportunities and improve the competitiveness of enterprises is the axis fully dependent on the organization. It is important to have the means to facilitate access to national and international markets, but also to ensure a stable socio-political and economic environment for the region, which benefits from investment in research and development of new products. It is in this context that business analysis as an instrument or methodology is not a strategy that alone can enhance the competitiveness of an organization. In this sense, the systemic reality of the regional environment affects the outcome of activities aimed at improving the ability of organizations to generate value in their products and services. This finding illustrates the complexity inherent in companies where, although the processes of intelligence generation is important, they are not successful, if not the same series of system conditions that account for the competitiveness of businesses [7].

Innovation, the use of information systems, and the decision-making process are fundamental activities for the study of companies. Innovation is also considered as one of the aspects that helps companies to learn and to strengthen them in the market of information technologies. For this business strategy to be successful, it must have a highly specialized, trained and certified workforce. Organizational culture, public policy and relations with the education sector are fundamental, and the main reason for dependence on these conditions is the need for cultural change, with great attention to quality, to sustainable development and respect, as well as the protection of intellectual property, all the foundations of the environment of innovation, research and development, which is the edge of both economic growth and the development of competitiveness of companies in the sector.

Research variables are part of the social construct in which information technology (it) companies are located. Research variables are part of the social construct in which information technology (it) companies are located. Areas of

opportunity always continuous improvement is bonding, technology transfer and specialization of human capital through certificates that will enhance opportunities for value creation and intellectual property educational processes for organizations.

The business intelligence information model provides empirical data on business intelligence processes as phases or process variables to generate companies ' competitiveness in information technology or technology-based [8].

The mechanism of the information model of business intelligence combines research methods using a deductive and inductive logical model to build competitiveness in terms of knowledge management in order to analyze business intelligence based on company technology. The results of qualitative research provide a reliable basis for the conceptualization and operationalization of the model, as well as provide useful for the design of the measuring device, which leads to the emergence of statistical analysis of quantitative research data. As part of the continuity of this study, we intend to apply statistical and computational methods to improve the reliability of the results. The intention triangulation of methods attached to this study findings with greater methodological support. The intention triangulation of methods attached to this study findings with greater methodological support.

The process of formation of competitiveness is analyzed using the approach to knowledge management, which points to the organizational areas of the company related to business intelligence. The process of formation of competitiveness is analyzed by means of using the approach to knowledge management, which points to the organizational areas of the company related to business intelligence.

Changing the strategy to strengthen the competitiveness of companies in the it sector offers support for refocusing to certify employees to improve processes for business intelligence.

Given the specifics of this study for it companies, which by their nature operate in dynamic environments, it can be concluded that companies operating in such environments may have the same contextual elements to generate competitiveness.

Conceptual and empirical work in this area of knowledge in Ukraine is at an early stage, and the results of the study suggest a number of areas of research approaches for future analysis.

Implementing business analysis strategies to foster competitiveness in organizations that operate in a dynamic or stable environment through a knowledge management approach must adapt to each industry sector.

Implementing business analysis strategies to foster competitiveness in organizations that operate in a dynamic or stable environment through a knowledge management approach must adapt to each industry sector. It is important to check the results with a financial approach that more closely examines the implications for the company's profitability [10].

Conclusions. Using the business intelligence information model mechanism will significantly facilitate the implementation of business intelligence as a major axis in the production of companies ' competitiveness in a particular sector. In a dynamic business environment, there is a need for additional literature that is integrally and systematically linked to social efforts aimed at improving the competitiveness of the business through the introduction of intelligence strategies in relation to the company as an independent organization, with its own characteristics, abilities, values, knowledge, behavior and abilities.

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СОЦІАЛЬНІ КОМУНІКАЦІЇ ТА ЇХ РОЛЬ В УКРАЇНСЬКОМУ ІНФОРМАЦІЙНОМУ МАРКЕТИНГУ

Мета роботи: *аналіз інтегрованих соціальних маркетингових комунікацій і виділення принципів ведення соціальних комунікацій в аспекті українського інформаційного маркетингу.* ***Методи дослідження:*** *аналіз літератури – дослідження соціальних маркетингових комунікацій; метод системного і порівняльного аналізу – для аналізу комунікацій прямого та непрямого маркетингу, визначення їх переваг та недоліків, порівняльний аналіз комунікацій інформаційного маркетингу.* ***Наукова новизна****: вперше виокремлюються принципи ведення соціальних комунікацій в аспекті українського інформаційного маркетингу. Проведено аналіз стратегії інформаційної маркетингової комунікації. Проаналізовано інтеграції соціальних комунікацій з іншими елементами ведення маркетингової діяльності.* ***Висновки:*** *ведення соціальних комунікацій в українському інформаційному маркетингу є*