

## Секція 4. МЕНЕДЖМЕНТ І МАРКЕТИНГ

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### **ІНФОРМАЦІЙНА СТРАТЕГІЯ ПІДПРИЄМСТВА: ПІДХОДИ ДО ВИЗНАЧЕННЯ СУТІ**

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*Досліджено визначення суті поняття «інформаційна стратегія підприємства» та виокремлено такі теоретичні підходи:*

*– інформаційна стратегія підприємства як частина стратегії підприємства вищого рівня;*

*– складова функціональної стратегії підприємства;*

*– результат стратегічного інформаційного планування підприємства;*

*– інструмент поведінки підприємства в конкурентному середовищі.*

**Ключові слова:** *інформація, стратегія, конкуренція, інновація, IT-інфраструктура.*

### **ИНФОРМАЦИОННАЯ СТРАТЕГИЯ ПРЕДПРИЯТИЯ: ПОДХОДЫ К ОПРЕДЕЛЕНИЮ СУТИ**

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*Исследовано определение сути понятия «информационная стратегия предприятия» и выделены такие теоретические подходы:*

*– информационная стратегия как часть стратегии предприятия высшего уровня;*

*– составляющая функциональной стратегии предприятия;*

*– результат стратегического информационного планирования предприятия;*

*– инструмент поведения предприятия в конкурентной среде.*

**Ключевые слова:** *информация, стратегия, конкуренция, инновация, IT-инфраструктура.*

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## ENTERPRISE INFORMATION STRATEGY: APPROACHES TO THE ESSENCE DETERMINATION

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*In the modern dynamic conditions of the competitive environment one of the means of qualitative increase of enterprise competitiveness is a rational information resources management, when information is regarded not only as the most important and specific resource, but also as the element of informational potential and correspondingly there arises a problem of determination and formulating own informational strategy by every enterprise. Scientists and practical men from the whole world started to pay great attention to research of effective information use in the sphere of strategic management and as a result – forming of the information strategy essence. The aim of the publication is research of scientific and theoretical approaches to essence determination of the “enterprise information strategy” notion and their generalization and systematization. In order to achieve the aim, the main problems and aspects of the enterprise information strategy matter formulating were determined and theses of the native and foreign scientists were generalized. It gave possibility to determine and systematize approaches to the matter determination of this notion according to the stages of detailing. In the publication it was determined that the term “information strategy” together with the incoming notions “strategy” and “information” combined into a single word combination have different meanings depending on the context. At that some interpretations are generalizing – enterprise information strategy is a set of means for achieving strategic aims of an enterprise, its profitability and competitiveness by means of active use of information resources, determines a set of the priority initiatives in the sphere of information technologies, that contribute to dataware productive development, commercial and management enterprise activity. Others – the narrower ones and detail concrete aspects of various spheres of this notion use. Generalizing of the theses of the native and foreign scientists, who formulated scientific and theoretical approaches to the essence of the “enterprise information strategy” notion, gave possibility to single out and systematize such approaches according to the stages of detailing – information strategy: 1) a part of the enterprise strategy of the higher level (corporate strategy, business strategy); 2) a constituent part of the enterprise functional strategy (production, resource, organization, innovative); 3) a result of the strategic information enterprise planning (document, plan, information system structure development plan, development plan of the information infrastructure and information function, investment to the IT-infrastructure plan, enterprise IT-department plan); 4) enterprise behavior instrument in the competitive environment (instrument of conducting competitive information battle, instrument of gaining information space).*

**Keywords:** *information, strategy, competition, innovation, IT infrastructure.*

**General problem formulation.** Considering rapid pace of information technologies development that contribute to the profound changes in whole

system of economic relations and uprising of new economic activity forms that based on information and knowledge, we are able to identify significant influence of information on all sectors both economy or management. The importance of research on the role of information in the functioning of a modern economy became crucial, therefore recognized as new paradigm of economics and management.

In modern dynamic competitive environment sustainable management of informational resources was established as an instrument of competitive enterprise capacity enhancement, in other words when information is interpreted not only as an important and specific resource, but also as information strategic capacity element – there is a need for any enterprise to determine and formulate own information strategy. Importance and need to develop and implement information strategy in the enterprise due to not only the evolution factors paradigm of information-oriented society and theory of strategic management development but also foremost due to the acquisition of additional features ensuring profits by well-grounded information imperfection market usage and management.

**Recent research and publications analysis.** Within worldwide scientific community has been formed a large group of scientists and practitioners who attach great importance to research on effective usage of information in the field of strategic management, and as a result – formulation of the information strategy essence, its necessity and high-meaning for every organization. Among aforementioned scientists are J. Ang, J. Braun, P. Burakov, G. Valdsham, Ya. Varyvoda, R. Hal'yers, P. Ville, V. Efremov, M. Zyrianov, I. Kulyniak, D. Kurochkin, A. Lederer, M. Mokker, A. Mikhailov, T. Omelyanenko, F. Pavri, M. Rummyantsev, R. Toibner, D. Fink, K. Hildebrand, G. Sheptalin, N. Shou, M.J. Erl and many others. However, the unified clear understanding of the information strategy for the company still has not been created. Fragmented data character, we know from recent research on problematic issues of information strategy, determines importance of consideration of data in all aspects and of generalization and structuring of its specific characteristics.

**Purpose of article.** The purpose of article is a study of basic scientific and theoretical approaches to defining the essence of concept determination "enterprise information strategy", their generalization and systematization. For purpose achievement following tasks to be performed: identify main problems of information strategy meaning formulation, identify main aspects of the content of the information strategy of enterprises, generalize ideas of national and foreign scientists on classification and systematization according to level of details and approaches to concept formulation "enterprise information strategy."

**Main research information.** Various effects of total informatization are extremely large. We can easily notice them in different (business, scientific, educational, etc.) sectors. One of these effects is emergence and confirmation of the "information strategy" concept. In modern conditions information strategy is an integral part of the overall strategy and must emphasize and develop key success factors and winning features of the company. Information strategy should come out from business enterprise strategy.

While business strategy reflects what the company must do to achieve its objectives – information strategy answers the question: how, in terms of information technology, enterprise should work, that is, information strategy defines long-term goals and direction of the enterprise in the field of information technology. Successful operation of enterprise is a result of appliance and usage of information strategy [1].

Owners (shareholders) and top managers of enterprises must be requestors and active developers of information strategy, heads of IT departments – must be co-authors and principal organizers of its implementation [2].

Core problem of information strategy content determining is separation of main strategic objectives from technical problems of implementation, that is, first of all should be defined long-term goals and direction of the company in the field of information technology.

These most important and significant aspects should be determined with the necessary level of details. Moreover, within information strategy should be considered possibility of flexible response to external and internal factors of business environment influence. The rest can be attributed to implementation problems. Information strategy should facilitate making decisions process, that there must be fundamental answers to important questions are possible to accrue in future. What kind of questions – depending on the situation.

Main aspects of enterprise information strategy content should be focused on the definition [3]: articulated strategic objectives in core business field, related to information technology and implemented, including, through the use of aforementioned technologies; strategic objectives of information technology – generally based on business objectives and functions of IT department / IT staff of enterprise; role of IT departments / IT staff of enterprise, analyze the state of IT department / IT staff concerning enterprise; common approaches to the implementation of strategic objectives (ways to implement projects – development, outsourcing etc.; approaches to maintain main IT services (traditional,

SLA); organizational aspects and so on); main criteria of core strategic objectives successful resolution for information technology implementation.

The term "information strategy" as well as initial words "strategy" and "information" which together create word-combination have different meanings depending on the context.

However, some of its interpretations are generalized (e.g., information strategy – a set of ways to achieve strategic goals of the enterprise, its profitability and competitiveness through active usage of information resources and creating information products, that establishes a set of priority initiatives in information technology field that will facilitate development information support for enterprise production and management [5]), others – in theory of enterprise strategy and in practice of business development management are more narrow or specific for different fields of application of the term "information strategy" – what is the reason to review and systematize.

Generalization of the ideas of native and foreign scientists on the approaches to the formulation of the concept of "enterprise information strategy" allowed separating and systemizing those approaches according to level of details, what defined its essence (pic.):

**1. Information strategy as part of higher level strategy (sub strategy):**

1.1. Description of the main vector of how the information strategy maintains the general enterprise strategy is reflected in the review of the information strategy as main enterprise-wide sub strategy that allows seeing how and through what kind of infrastructure information is used to maintain activities of enterprise [1].

1.2. With the fact that information strategy must maintain and facilitate the process of enterprise business strategy implementing – interrelation of enterprise strategic goals and objectives and strategies of enterprise informatization can be described as following: business strategy defines the main direction of enterprise activity and causes movement in this direction, strategy of informatization identifying information technologies that are needed to maintain and optimize business strategy and shows how information technology and systems can be implemented within an enterprise [2].

Based on this aspect of interrelation, *information strategy is seen as part of enterprise business strategy*, which now administers the way of using information for adding value in dynamic business environment.

**2. Information strategy as part of functional enterprise strategy:**

2.1. Information strategy as part of the production is determined by such core decisions as: product – final result is an intellectual product,

performed in informational form; process, technical and technological – creation of intellectual product by using information – communication technologies and computer technology. Successful implementation of the information strategy as the strategy for producing an information product corresponds to new-type enterprises.

This information-technological enterprise is an enterprise, where "production base is based on a set of electronic transactions and processes that use internet and information technologies, and the main activity of which is aimed to creating high-tech information products" [3, p. 5]. Despite the fundamental difference between production and information strategies, determined, first of all, by character of product (material/information), these strategies can be compared [4, p. 80].

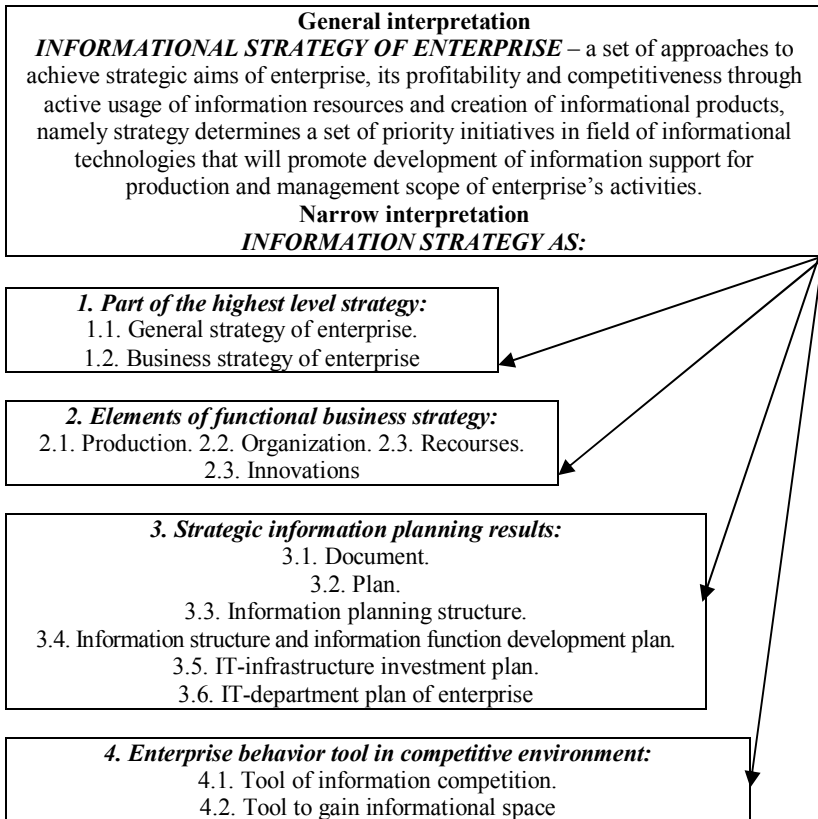
2.2. *Information strategy as part of organizational* is determined by core decisions that require new organizational forms.

As industrial activity highly virtualized – big part of technological operations implemented via the Internet; due to this fact operation of information production can be carried by geographically distant workers, who perform their functions in real-time while being physically in different regions of country or even in different countries.

2.3. *Interpreting of information strategy as part of resource enterprise strategy* lies in the fact that resource strategy determines the behavior of enterprise on the resource markets, forms and methods of acquiring resources, distribution priorities between different directions of activities.

Considering information strategy as resource strategy it appears as separated such that has an independent status but is closely linked with others (raw material, technical, etc.) resource sub strategy. Its specific areas of focus are following: character of enterprise behavior on information resources market; requirements for the volume and quality of information resources; methods of acquisition, accumulation, storage and usage [5].

2.4. *Interpreting of information strategy as part of the innovation strategy* sets targets to select the most effective directions and ways for introduction of new technologies, types of equipment, methods of organization and so on. Innovation perspective represents enterprise information strategy as innovative sub strategy, which is concentrated on: product innovations – introduction of innovative information products; process innovation field – introduction of innovative information technologies; organizational and managerial innovations field – introduction of innovative automated management systems [5].



**Fig. Approaches to the essence of “enterprise information strategy”**

**3. Information strategy as a result of strategic information planning (of plan / document).**

3.1. *Information strategy as a document* defines role of information system in implementation of its strategic plans and describes how this role should be performed [10].

This document gives an idea of the content of the enterprise information strategy and consists of four main sections: enterprise business strategy (summary of basic enterprise development strategies with which the information strategy should be consistent and provide support);

enterprise information strategy (description of the strategic directions and basic principles of enterprise information systems as elements that form the context for current and future IT initiatives with core evaluation criteria of functioning and development of information system); IT enterprise initiatives (specific IT projects to be implemented within the implementation of information strategies); information strategy implementation management (delegation powers and responsibilities to managers who implement enterprise information strategy).

3.2. Since the system of strategic information planning is defined as the process in result of which emerging information strategy that represents outcome of decisions based on a specific analysis and is influenced by both internal and external factors.

Description of the strategic direction and basic development principles of information system together with main evaluation criteria of functioning and development of information systems that are elements, forming context for current and future IT initiatives, determines *information strategy as plan (planning document)* [8].

3.3. *Information strategy as structuring information system plan* – document which determines role of enterprise information system to realize its strategic plans and consists description of how this role should be performed.

3.4. Scientific approach of R.A. Toibner and M. Mokker on structuring enterprise information infrastructure, which should be supplemented by information resources planning and tasks about usage and maintenance of IT infrastructure, and present complex of tasks organizes an information function. According to this approach, *information strategy is long-term development plan of enterprise information infrastructure and information functions* [9].

3.5. *Information strategy as plan of investments in IT infrastructure*, that is planning technical and / or software and the amount and sources of investment their purchase / or personal development and production, as well as planned funding of enterprise information component improving.

3.6. Depending on type of activities, role of enterprise information technology can range from basic support to ensure the smooth operation of the information infrastructure and services – to defining and vital business processes [11].

Consequently, IT department supports efficient operation of enterprise and its innovative services based on timely implementation of effective and efficient information systems and provides technological leading of enterprise, its partners and clients. Based on this, it is possible to consider *information strategy as plan of IT department*.



#### ***4. Information Strategy as a tool to conduct businesses in a competitive environment:***

4.1. Term "information strategy" often used in the case when it comes to ways of implementing information and communication policy of a particular company. This is caused by realization that: if earlier security business considered only within three aspects – organizational, economic and social – today was added the fourth one – informational [6].

Herewith, information strategy becomes a kind of weapon – intangible but very significant to gain a competitive advantage in the confrontation. Based on such factors, *information strategy is seen as tool of information competition* [7].

4.2. *Information strategy as a tool to gain information space.* This general pattern of behavior, calculated for long-time perspective, allows achieving desired state by means of detailed action plan on information management and ensures stable flow of news about enterprise in media.

The common feature of the following views on the information strategy – a clear focus on information technologies and their applications, which emphasizes the role of information and communication technologies as a tool for information dissemination and communication in business, as well as on usage of information technologies and their organizational business integration.

However, in our view, given the importance of the information strategy in the strategic planning and management, it should be allocated as an independent functional strategy and not as part of the enterprise functional strategies (the second approach).

**Conclusions.** Enterprise development and its information-technological complex in modern economic conditions should be implemented through developed information strategy, why is highly important proper understanding of conceptual-categorical apparatus.

Most of the categories are not clearly defined neither in foreign nor in national scientific literature, and appropriate paying attention to generalization and systematization of approaches to determining the significant concept of "enterprise information strategy".

Proposed systematization of approaches to defining the essence of enterprise information strategy as a top-level strategy, functional strategy, plan, behavior tools in a competitive environment – is theoretical basis for further research to develop methodological tooling of its formation.

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