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Conceptual system in the modern information management

S.Yu. Eroshkin^a, N.A. Kameneva^a, D.V. Kovkov^b, A.I. Sukhorukov^{a*}

^a Plekhanov Russian University of Economics, 36, Stremyanny lane, Moscow, 117997, Russia

^b Peoples' Friendship University of Russia, 6, Miklukho-Maklaya str., Moscow, 117198, Russia

Abstract

The report provides an overview of the basic concepts of internationalisms in international information management. Systematization of the conceptual and categorical apparatus that is disclosed on the example of the use of information systems in management according to their hierarchy is proposed. There is justified the creation of a unified conceptual and categorical apparatus of information management, summarized in a logically connected international system, which will enable the manager to navigate the numerous international abbreviations.

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1. Introduction

In the 70-es of XX century, an international concept of information management as a special section of self-management in the economy was formed^{1,2}. Even though there is no strict definition of information management, but its essence lies in the title is information management in order to achieve targets. Taken into consideration the current state of the information society and the rapid growth of information technologies in the early twenty-first century, we can assume that the information management is the present and future of the world economy³. At this stage in the history Information management provides a permanent transformation of the business environment and identifies a successful business, i.e., core revenue growth of most companies⁴. Information management is the basis of the emerging concept of network economy, electronic or e-economy, i.e. such economic activities that are carried out via the control information electronic networks (digital telecommunications).

* Corresponding author. Tel.: +7-909-161-0956; fax: +7-499-237-8791.

E-mail address: Eroshkin.SY@rea.ru; Sukhorukov.AI@rea.ru

Currently one of the urgent topics in this sphere can be considered the creation of a unified conceptual and categorical apparatus of information management, summarized in a logically connected international system, which will enable the Manager to navigate the numerous international abbreviations, and will not just use their literal translation, and to understand correctly the essence. A hierarchical classification of systems of information management in accordance with their functionality will make it possible to consistently build the logic of the management of the company (model, paradigm) and according to the general rules to accompany its development in a formalized way with the help of modern information systems.

Practical importance of the proposed systematization of the conceptual and categorical apparatus is disclosed in the article by analyzing the information flows in the investment and construction business that is increasing share in the macroeconomics of Russia. Due to the specificity of this area of the economy, based on performance-oriented approach, as one of the most effective modern approaches to management, the main tendencies of development of systems management of construction projects in the General system of the global network economy are specified. For example, construction design introduces relevant concepts of the international system, discusses the various levels of such automated control systems, the relationship between the individual systems, their advantages and disadvantages.

The Russian science of management has always kept pace with the development of world science and has long had its own terminology. Currently, the borrowed abbreviation-internationalisms are increasingly used in the Russian language, which in the era of network economy make the conceptual apparatus available to the public and, in the opinion of marketing experts, provide domestic developers of various automated control systems with the best competitive opportunities in the international market.

2. Conceptual system in the information management

For the modern manager in the era of a global networked economy, along with such basic concepts as: information, binary arithmetic, digital technology, computer programs, programming languages, text and table processors, databases, visualization software and image processing, video, sound (multimedia), electronic mail services and electronic means of World Wide Web communication, highly specific management information English terms and international terms become commonly used.

First, these are modern concept, methodology and approaches used in modern information management:

- BPM (Business Process Management) is the concept of process management organization, or management of business processes;
- BPM (Business Process Modeling) is the concept of modeling business processes. Has the same abbreviators with the concept of "Business Process Management", but is only part of it;
- TQM (Total Quality Management) is total quality management, all-organization method of continuous quality improvement of all organizational processes;
- BPR (Business Process Reengineering) is an approach of revolutionary changes to business processes, reengineering of business processes;
- CPI (Continuous Process Improvement) is an approach of continuous improvement of business processes;
- BSC (Balanced Scorecard) is the methodology of strategy maps or the balanced scorecard". The mechanism is sequential bring to staff development strategies the company's goals and control their achievement through key performance indicators (KPIs, Key Performance Indicator).

Second, these are the systems and tools, through which modern concepts, methodologies and approaches are implemented:

- BI (Business Intelligence) is system "business intelligence" that implement on the basis of personal computers, components of DSS (Decision Support System - support systems decision-making) is obsolete and is gradually disappearing concept. In scientific literature one can find even more early name for this class of systems, out-of-circulation – EIS (Executive Information Systems - information systems Manager). BI systems use tools such as OLAP (Online Analytical Processing) – multidimensional analytical data processing and Data Mining – data mining function, which is sometimes also denoted by the term KDD (Knowledge Discovery in Databases) – intelligent knowledge discovery in databases;

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