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Knowledge management modeling to e-learning excellence

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Abstract

This paper presents basic principles/elements of original, hybrid developed 3D model for knowledge management with IT for E-learning, concerning 12 key aspects/criteria on the level of quality management and with the aim of excellence modeling, supported by the examples of LMS - tool Moodle. The possibilities of E-learning improvement and implementation are shown by quantitative and qualitative analysis, through basic influential model factors: 1) terminology and leadership, 2) organization, 3) personnel, 4) development, 5) standardization, 6) environment, 7) innovations, 8) processes management, 9) resources and technologies, 10) evaluation and interface, 11) knowledge preservation, as well as 12) application results.

Survey research covers all relevant factors. Process approach is supported by the results of original hybrid model application for knowledge management towards E-learning excellence with LMS Moodle.

Key words: E-learning, Knowledge management (KM), Excellence modeling, LMS Moodle

1. Introduction

In the last few years, the concept of knowledge management, which has its roots in organizational learning, has been used in various disciplines.

In the international classification of standardization E-learning is ranked within multidisciplinary IT (ICS = 35 - IT... = subfield: 35.240.99 – *Applications of Information technology for E-learning*), [1].

In modern IT and artificial intelligence, knowledge - 28.01.03 is the third standardized term in

the first part of the 28th vocabulary - a collection of *facts, events, beliefs*, and rules, organized for systematic use, according to ISO/IEC 2382-28:1995, [2].

Modern IT can collect information, systemize structure, store, combine, process, distribute and represent important information, followed by suggestions for problem solving (12), as it is shown in Figure 1.

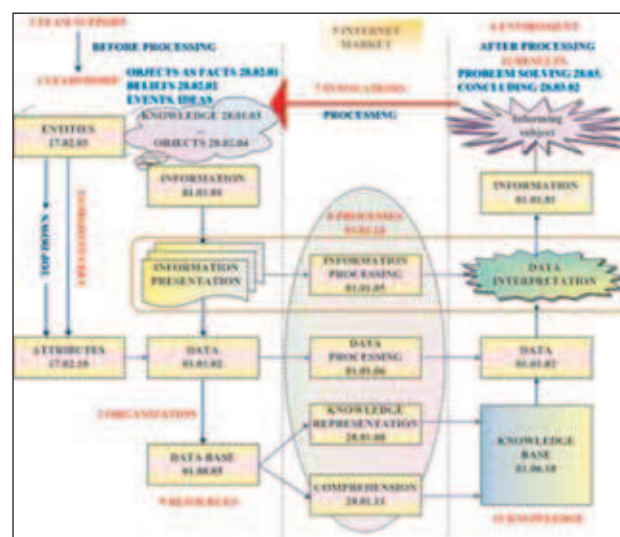


Figure 1. IT and interrelations of basic terms in knowledge based systems, [3]

IT and knowledge bases can be successfully integrated through different stages, including 12 areas of standardized IT, in interaction through 12 aspects of knowledge management model towards E-learning excellence.

In order to form and select key criteria of knowledge management model during modeling, the study analyzes many literature reviews, ISO/IEC standards, book analysis, Internet, journal papers and conference proceedings. Descriptive and exploratory methods have been used in this research.

