



INNOVATION OF THE KNOWLEDGE ABOUT STANDARDIZED COMPUTER NETWORKS AND COMMUNICATIONS

Živadin Micić, Vladimir Mladenović

Department of Information Technology, Faculty of Technical Sciences, Čačak, University of Kragujevac, Serbia

Abstract:

In this paper, the part of multicriteria analysis of road knowledge innovation in ICT subfields are segregated and grouped according to the international classification standards (ICS). Correlations between innovation and standardization of communications, local area networks (ICS-2 = 35.110), the global communications and the internet (ICS-2 = 35.100) are presented.

Presentation of research innovation sources of knowledge are based on the result of years of study. Results from the overall population of creativity with over 72.340 standardized knowledge sources (ISO standards and SRPS) are segregated for these standardized subfields. Clustering, PDCA methodology (Plan-Do-Check-Act) and other research methods are applied. The focus is on the subfields of the highest intensity of innovation. There are original results: trend analysis, original dimensions, quantity indices, indices of setting values, indices of innovation knowledge resources, etc. The results indicate a correlation of standardization and innovation in the time dimension of the concept of PDCA.

Key words:

computer network,
ICT,
improving of learning,
knowledge-based innovation,
PDCA.

INTRODUCTION

The needs for innovation of individual and team skills are diversified, especially in the ICT networks. Roads of knowledge lead from knowledge resources through innovations in the standardization of the collective knowledge base. Searching of innovations of examples of in the global ISO/IEC and local SRPS platform (standards in Serbia), is adapted with the needs of education by using PDCA methodology. Many years of research and monitoring trends of development and standardization of ICT enable the representation of their specificity correlated with innovation.

ISO/IEC - SRPS platforms are compared using by statistical sampling and multi-criteria analysis. Analysis by subfields are presented according to the International Classification of Standards (ICS) in ICT, global communications and ISO/OSI model Internet (ICS-2 = 35.100) and local area networks (ICS-2 = 35.110), with a comparison with related sub/box fields international studies with the aspect of [1], [2], and local standardization point of [3]. In this paper, some studies/ research are shown, and segment statistical analysis of trends SRPS and ISO standardization by the specified subfields ICT are separated comparatively.

As part of long-term research and monitoring of standardization, significant details (the results) are pre-

sented in the paper: a comparison of trends of knowledge, the analyzed subfields, directions for further development of new units of knowledge through new projects, as well as possibilities of comparison with the ISO standardization mere local (national) level in the same in all other fields of creativity (for ICS = 01 to 99).

Initial hypotheses and objectives of the work leading to the innovation of the knowledge base, through the implementation of activities in the PDCA quality spiral.

Plan-hypothesis

Predictions of future resources, activities, financial need for units valued knowledge and responsibilities in the subfields of ICT innovations are possible. It is possible responses on the question of who will plan and which resources to research "layers" of standardized collective knowledge of computer networks and communications, taking into account trends in innovation ISO/IEC and SRPS database as a source of knowledge.

Do- hypothesis

Research and evaluation of knowledge units provide creation of explicit mathematical relation as regression lines of trend knowledge. It is possible to response on the questions about the scope of adaptive learning and how

