Dear readers,

Welcome you to the new issue of the Journal of Systems Integration. In this issue you can find again five interesting articles focused to a miscellaneous problems of information technology and information management.

First of all I should like to draw your attention to the topic of unstructured data. Businesses across all industries are gathering and storing more and more data on a daily basis. But when it comes to assessing the benefits and challenges of big data, sometimes it is easy to overlook one key point: Most of the business information in use today does not reside in a standard relational database. An often-cited statistic is that 80% of business data is unstructured, be it in word processor, spreadsheet and PowerPoint files, audio, video, sensor and log data, or external data such as social media feeds. There is as much value in unstructured data and we can get huge benefit from them. One excellent example how to use unstructured data analysis to improve the quality of IT services is described in the article “How to Measure Quality of Service Using Unstructured Data Analysis: A General Method Design” written by Lucie Sperkova, Filip Vencovsky, Tomas Bruckner.

An essential attribute of a business process is the process goal which means that the business process is always an intentional process. Its primary purpose is to achieve the stated goal and all its behavior has to be targeted to this goal. Contemporary process modeling methodologies leave a gap within modeling principles, which could be filled by concentrating to negative feedback in processes to focus to meet process goals. Using design science approach, Vaclav Repa and Tomas Bruckner propose in their article “Methodology for Modeling and Analysis of Business Processes” methodology which eliminates this problem.

A key element of IT governance is the alignment of business and IT in order to achieve the desired business outcomes. Achieving this alignment requires implementation of a suitable governance framework for IT management. In the paper “Extending MBI Model using ITIL and COBIT Processes” written by Sona Karkoskova and George Feuerlicht are analyzed three IT management frameworks (ITIL, COBIT and MBI) with the objective to identify the relationships between these frameworks, and mapping ITIL and COBIT processes to MBI tasks.

Greenstone Digital Library Software (GSDL) is a suite of software for building and distributing digital library collections. It provides a way of organizing information and publishing it on the web. GSDL can handle both the old format .doc, and the current .docx format. The processing means converting the source format to HTML and to GSDL archive format, including automatic encoding and language detection. But in processing Word format .docx in GSDL, it follows that the language detection often fails. Can we assume the cause lies in the similarity of the language models?. More you can read in the article “Automatic Encoding and Language Detection in the GSDL – Part II”, written by Otakar Pinkas, which follows-up article published in this journal one year ago.

Data streams are usually of unbounded lengths which push users to consider only recent observations by focusing on a time window, and ignore past data. In the paper is paper of “Event Streams Clustering Using Machine Learning Techniques” written by Hanen Bouali and Jalel Akaichi is proposed a new algorithm for clustering multiple data streams without requiring any significant storage or multiple passes over the data. The algorithm uses a sliding window model for the most recent clustering results and data representative points to model the old data clustering results.

I am convinced that in this issue you will find again interesting articles that will help you in your professional life.

I thank you for reading the Journal, and your cooperation

Zdenek Molnar – Editor in Chief