

OPPONENT'S STATEMENT ON MONOGRAPHY

Title of the monograph: Service Orientation of Enterprises - Aspects, Dimension, Technologies

Opponent: Assoc. Prof. Ing. Elena Šúbertová, PhD, University of Economics, Faculty of Business Management, Dolnozemska Street No 1/b, 852 35 Bratislava, Slovak Republic

The monograph „Service Orientation of Enterprises - Aspects, Dimension, Technologies“ (in the publication as “SOE”) has 294 pages, divided into Preface, two main parts and 10 chapters. It contains 16 tables and 69 figures.

In the first part of the monograph “SOA Aspects and Dimensions” in chapters 1 to 5 the authors introduced the subject of their research, and focuses on the values dimensions and measurable sub-dimensions of IT architectural paradigmas as key area of interest decisions makers. The main goal is to keep SOA to measure the business value dimensions for growth of SOA and its investments.

In the second part – chapters 6 to 10 – the authors elaborate in detail on processes of the business value analysis and identified cost-reductions and performance-enhancing opportunities. They showed the business benefits of an enterprise’s information management in the business environment and characterized Service Oriented- Enterprises business value.

Each of the two main parts of the publication summarizes sources and literature used for background information. It amounts to 120 Slovak and foreign sources in total. The number of sources is 64 sources in part 1 and 54 sources in part 2.

Evaluation of the monograph:

a) Topicality of the monograph

The publication dealt concurrently with three mutually interlinked current SOE issues:

- Identifying SOA Value Dimensions,
- Criteria and Features in Defining of SOA Business Value, and
- Methodologies in Defining and Measuring of Building Service-Oriented Enterprise (SOE) in merge with other Key Technologies.

The monograph systematically deals with Requirements, Features, Practices and Methodologies and other aspects of SOE. The authors demonstrated how SOE can provide business value for entrepreneurs.

SOE is about a fundamental restructuring of software systems so it can improve business services. It is practically unthinkable to imagine starting operations in a large enterprise without running a fast, strong and reliable automation.

Therefore I consider this monograph to be very timely.

b) Meeting the goals of the publication

The primary goal of the monograph was to elaborate on such service-oriented architecture which would increase operational efficiency through functional automation. There were also auxiliary objectives in relation to this main goal – for example an evaluation how SOA can be changed, how the new services are created, and how to manage technical and business aspects of entrepreneurship. It also shows in which way integration reduces complexity of the system and cost of managing distributed service platforms.

All objectives of the publication were fully completed.

c) Chosen methodology

Authors wrote the publication in systematic and logical manner.

It was used a range of different forms of research and analysis of current information - own observations, standardized methods (synthesis, induction deduction and abstraction), and combined it with use of graphics (69 figures and 16 tables). Use of the methods mentioned above was optimal and well interlinked. The authors came to conclusions and recommendations both for Service Orientation of Enterprises theory and practice, well-grounded in their research.

d) Contributions of the publication

Scientific contributions:

1. Documenting – by using Service Orientation of Enterprises - that the most important prerequisites for success are:
 - abilities to act and react fast to new opportunities and challenges – much faster than competitors,
 - responsiveness to integrate clients' and partners' requirements – abilities to integrate them more directly to company's internal business processes, and transparency of all internal business processes and ability to monitor and optimize performance in real time.
2. Presentation of effectively implemented SOA solutions, which can provide a balance between tactical and strategic projects.
3. Presentation of justification for investment in SOE showing that such an investment is not different from any other investment from the ROI (return on investment) point of view.

e) Contributions for applications and recommendations for practice

1. The major application contribution of the monograph is proving the importance of SOA for companies.

- Major advantages of the SOA in comparison with other software architectures used in the past are that SOA enables faster adaptation of software to changing business needs,
 - And, in turn – cost reduction in the integration of new services, as well as in the maintenance of existing services.
2. Based on the knowledge were calculated “Benefits of Continuous SOI Improvement”, “Distributed SOA application environment”, etc.
 3. The results were systematically processed in the form of clear table and figures with appropriate comments, e.g. “Vizualization in the SOA Lifecycle”.

Questions that need to be answered in discussion:

1. Page 237 presents connection between Agile methodology and Service-Oriented Architecture (SOA). Currently, software development and IT management are based on Agile approaches. What major problems are managers dealing with in SOA projects? In which ways use of Agile influences these projects?
2. What are the new features and approaches that SOA brings into decision-making processes in companies? What major challenges are CIO (Chief Information Officers) and IT managers facing nowadays?
3. Chapter 9 presents cloud as challenge and as a potentially very useful tool for Service-Oriented Enterprises. What are other current trends and challenges in use of e-services in SOA?

Summary:

The monograph “Service Orientation of Enterprises - Aspects, Dimension, Technologies” is well written as to its contents as well as formally. After successful defence monograph I recommend to grant RNDr. Michal Greguš, PhD.

scientific – pedagogical title:

Docent (Assoc. Prof.)

Bratislava, May 1th, 2016

Assoc. Prof. Ing. Elena Šúbertová, PhD.