Comment on the Critique of the paper „ERP and Management Accounting Changes of Industrial Enterprises in Serbia” *

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Summary:
The aim of the paper „ERP and Management Accounting Changes of Industrial Enterprises in Serbia” was to investigate one specific aspect of management accounting, precisely the changes of management accounting under the influence of modern information technologies. Therefore, our aim was neither to criticize nor to promote SAP (or some other ERP software). SAP is one of the best, most popular and most widely accepted ERP software in Serbia. That was the main reason for choosing SAP for our research. The main objective of this Comment is an attempt to point out the differences in expressed opinions, which are mainly the result of different ideas and aspects of the analysis and points of view of our paper. We consider the mentioned critique to be well-intentioned and useful, primarily for the authors of the paper, but also for the users of the results of our paper, as well as the reputation of the journal INDUSTRIJA.

Rezime:
1. INTRODUCTION

The role of accounting information systems and management accounting system has been changing during their evolution. The evolution was caused by many different factors. One of the new and most important factors of changes is the application of modern information technologies and information systems. The consideration of modern information technologies is impossible without mentioning the ERP (Enterprise Resource Planning Systems). There are a lot of different ERP software (BAAN, Oracle, Microsoft Dynamics and others). But one of the most widespread is SAP. The SAP is the leading business software, which is used by more than 105,000 different economic entities in 120 countries of the world. More than 2/3 of the companies from Forbes list -TOP 500 use SAP. Additionally, it needs to be pointed out that the users of SAP in Serbia contribute with more than 1/3 to the gross domestic product of the country. Bearing in mind the great SAP performances and fact that SAP is the most common software in Serbian market, only those industrial enterprises that are SAP users were interviewed for the research purposes.

The comment on the Critique of the Paper „ERP and Management Accounting Changes of Industrial Enterprises in Serbia“ by the authors: Malinić Slobodan, Todorović Mirjana and Jovanović Dejan (MTJ), published in April-June 2012 (Vol. 10(2), pp. 189-208) issue of the journal INDUSTRIJA is the answer on the Critique. We would like to stress that the objectives of the paper „ERP and Management Accounting Changes of Industrial Enterprises in Serbia“ are the identification, evaluation and analysis of the impact of SAP, as the leading business ERP software, on management accounting system and management accountants of industrial enterprises in Serbia. Our intention was only to assess the amount of the impact of SAP software solutions on the management accounting system changes and management accountants. The Comment has no hidden intention whatsoever to scientifically discredit Critique’s author or to diminish his/her contribution to the understanding of SAP software solutions, especially having in mind his/her obvious qualifications in the field.
2. THE ANALYSIS OF THE CRITIQUE AND ATTITUDES

Over the world there are many studies considering different ERP software effects on management accounting and management accountants. However, the results of these studies are not completely consistent. There are several reasons for this. The way in which different ERP software will influence the management accounting system largely depends on how the system is defined and understood. Poor or inadequate understanding of the ERP causes poor comprehension of its impact on management accounting. There are also other reasons for fragmented results, for example high level of data aggregation, the use of various research methods, different scope of research (whether it is conducted at the level of divisions or enterprises), etc. The most important conclusions from these studies, which were published in reputable international journals, are as follows:

- ERP is the factor of the improvement of organizational performances (sources: 2,10 and 22, from MTJ, 2012),
- Although present, there is no particularly significant impact of ERP on the practice of management accounting, i.e. ERP does not significantly contribute to the implementation of innovative accounting techniques in industrial enterprises, for example ABC, BSC, TC and others (sources:18 and 21, from MTJ, 2012),
- The basic accounting logic is not being changed under the influence of ERP and there are no dramatic changes in the accounting itself, but, in most cases, there are changes concerning the work of accountants. Their job becomes more complex and role broader and more demanding, even though some of the traditional accounting tasks are transferred to other employees in the enterprise (sources: 18 and 23, from MTJ, 2012),
- ERP increases the level of routine tasks, and there are more evolutionary than revolutionary changes in management accounting, therefore the changes are incremental. The case study of an Italian company from Milan shows that accountants spend less time on reporting because those tasks are mostly automated after the ERP implementation but they spend more time on complex business analyses, etc. (source: 3, from MTJ, 2012).

Bearing in mind these and other similar studies, our aim was to conduct similar research in Serbia. The aforementioned studies were based on different ERP software and we chose SAP for the reasons already mentioned.

Issues of the research in the paper „ERP and Management Accounting Changes of Industrial Enterprises in Serbia” are exclusively the changes that occur in management accounting and management accountants’ work.
under the influence of the SAP application as one of the leading ERP software. SAP is one of the software present on Serbian market, as highlighted in this paper: “Since the most common software in Serbian market is SAP only those industrial enterprises that are the SAP users were interviewed, as in the case of Hyvonen, 2003. (MTJ, 2012).

Company size as a factor that determines the organization and functioning of management accounting. There are many factors which significantly influence the organization and functioning of accounting information systems and management accounting. For example: economic environment, production methods, applied technology, location of a company, organization structure and many others. The enterprise size is one of the most important factors of the organizational structuring of accounting department. There are many different criteria in classifying the size of a company, for example: the size of capital, the number of employees, company results and others. The Law on accounting and auditing in Serbia of 2006 has made the difference concerning the company size according to the following criteria: the average number of employees, annual revenue and asset value determined on the date of the preparation of financial statements for the fiscal year. The fact is that the organization and functioning of accounting department in large enterprises requires more detailed division of all activities, which directly reflects the organization of human, material, financial and other resources within the accounting department. Also, there is a greater amount of specific transactions, the tasks of accountants are more complex and need subtle organizational and methodological solutions, and information management requirements are more frequent and more specific. All these facts are the reason for choosing large enterprises for the analysis of the changes in management accounting systems under the SAP application.

“Small and medium enterprises were not taken into consideration, which is compatible with similar research studies in the world” (MTJ 2012). The company SAP Inc. has developed many software solutions for large, medium, and small companies, as well as divisions and subsidiaries of larger companies. At the same time, about 75% of SAP users are small and medium companies. Therefore, the company size is not a limiting factor for the implementation of SAP solutions. Our assumption was that in the case of small and medium enterprises, the size of the enterprise may be a limiting factor in identifying the SAP effect on management accounting (not for the SAP implementation).

Previous studies in Serbia. During the research realization there were a lot of difficulties (MTJ 2012). Here, we have in mind only the studies which test the SAP effect on management accounting and management accountants in Serbia. We have not discussed the previous research necessary for the need of SAP implementation. The fact is that SAP could
not be implemented and examined in any company without carrying out a thorough market and industry-specific research.

**Multiple case method.** "The authors are aware of all possible limiting factors. Disputing may be small sample size, which consists of 10 large industrial companies, users of SAP" (MTJ 2012). However, the leading literature in this field indicates that for the research which is rather new and in the field with little previous research, it is advisable to use a multiple case study. The multiple case method is suited to researching unknown subjects, i.e., for getting in-depth and first-hand understanding of a particular situation. Unlike single case studies, multiple case studies permit replication and extension between individual cases, which helps researchers to understand patterns more easily, to eliminate chance associations, and to form better theoretical structure. While there is no ideal number of cases, a number between four and ten usually works. For this reason we have chosen 10 enterprises.

**SAP effects on management accounting in the enterprises of different industries.** The company SAP Inc. has developed numerous software applications for different types of industries. Furthermore, there are numerous serious studies and analyses considering the topic. The examples mentioned by the author of the Critique are very correct and may be interesting for a future research. However, our focus was only the SAP effect on management accounting in industrial enterprises. We did not consider other aspects of the SAP impact, because our objectives were oriented only towards the accounting. Additionally, in striving to increase the reliability of the results, enterprises of different industries and with different length of using SAP were selected. We have also noted that between companies of different industries there are no significant differences regarding the effects of SAP on management accounting: "the impact of ERP on management accounting system, especially its tasks, techniques and organization, equally refers to all the enterprises, even industrial ones" (MTJ 2012).

**The analysis of SAP’s information potential from the perspective of accountants.** Conducted research has not dealt with the technical (IT) aspects of various SAP modules. The authors were interested in different data and information obtained from the SAP software. Moreover, we have examined the overall SAP’s information potential and changes in accountants’ work in that sense. The SAP’s potential is enormous. The SAP reports are well known for their precision and reliability. The fact is that SAP improves and standardizes information flows. Also, it is very successful in the domain of transaction processing and efficient in the creation of numerous financial, manufacturing, statistical and management information. Research results show that there is the information which cannot be obtained directly from SAP, so it is necessary to use Excel, BI or other tools, which additionally increases the significance of management accountants. SAP directly provides a lot of information for the needs of
operational decision-making, but it is necessary to use the additional tools for creating information for the needs of medium-term and long-term decision-making. It is undisputed that the SAP database is the basis for obtaining this information. The authors concluded: “…confirms the statement on the high efficiency of SAP in the domain of processing and reporting for operational purposes” (MTJ 2012). Also the company SAP Inc. has developed the solution SAP Strategic Enterprise Management. The intention was to emphasize the increasing importance and role of management accountants, whose task is the production of the information. Once again we wanted to emphasize the role of management accountants and their work. Only in that sense and that context we gave the comment that SAP does not provide directly all the necessary information for a long-term and strategic decision-making. Therefore, the intention was not to criticize the SAP information support, but to emphasize the importance of management accountants in the process of information creation. Management accountants should be engaged in the preparation of necessary information and reports for the needs of middle and top management.

3. CONCLUSIONS

The objectives of the paper “ERP and Management Accounting Changes of Industrial Enterprises in Serbia” are the identification, evaluation and analysis of the impact of SAP on a management accounting system and management accountants of industrial enterprises in Serbia. Objectives were neither to criticize nor to promote SAP software. On the contrary, our intention was:

- To analyze and stress SAP impact on management accounting and management accountant,
- To explain the changed role of management accountant in modern era of networked computing,
- To emphasize the role and importance of management accounting and their work.

Our research analyze only one specific aspect of the SAP impact. As we mentioned in our paper we are aware of all possible limiting factors. During the entire work and in presenting the conclusions, we were guided by a similar research in the world. We are confident in the reliability of the results, particularly because the obtained conclusions largely coincide with the findings of similar surveys carried out in the world.

Finally, although critiques are usually not pleasant, in this case, we have analyzed them with an adequate care and attention. Also we have
discussed different views with sincere and collegial gratitude to the author. We express gratitude and respect to the author of the Critique particularly because he carefully and competently read and studied our paper and pointed out its possible weaknesses with suggestions for its better understanding and improvement. All this, especially multidisciplinary approach, hopefully, will help us to see further than its predecessors, previous researchers of this issue.

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