

# **ECONOMIC INFORMATION SYSTEM “SAP SDU” AS A TRAINING TOOL**

**Bohuslav Martiško**

Faculty of Economics, Matej Bel University, bohuslav.martisko@umb.sk

## **ABSTRACT:**

This contribution deals with the possibility of using the economic information system SAP SDU in the educational process at Slovak universities. This tool increases training quality of university graduates for professional experience. It can be mainly used for economic studies but also for IT oriented studies.

## **KEYWORDS:**

Economic information system, educational process, SAP SDU (Slovak Demo University), functionality of economic system, company/enterprise/business process, business area.

## **Introduction**

In daily press, we recently read articles with following headlines: “Unprepared graduates are coming from universities” [1], “For better performance University degree is not enough” [2], “The main problem of education system is that everyone can finish university” [3], etc. These topics bring uncertainty to awareness of studies applicants, their parents and also students themselves and they negatively affect university reputation. These themes are widely discussed in general public. It makes very bad reputation to all universities (public or private) and professors who teach at those schools. If we admit that there is always little true on those statements, we also have to partially accept headlines and articles in the press. The authors of these articles are right in some aspects but some of the statements are incorrect. For example, not all universities/studies educate graduates which are not suitable for professional career. It is generally known, that medical science, pharmaceutical and technical studies have a very good level. In some cases, economical studies can be seen as problematical, as we can generally state that their graduates lack practical experience. Even if they manage to start working in any business organization, they will not be allowed to work in real economic system. This system will be their working tool but during their training (if they do any) they are only allowed to observe the system and at the university, they do not meet this at all.

There is also another problem. A big amount of graduates in the Slovakia and a small labor market cause their excess at the market. This automatically decreases their starting salary and also their chance to find the job, even if at minimum salary. Therefore the employers prefer such graduates, who already have practical knowledge and experience in the area, where they apply for the job. Universities should therefore offer the possibility to get not only theoretical knowledge but also basic practical experience, which would help them to get the job not only at the Slovak and Czech labor market but also at European and possibly world market. For this, English is an absolute must, but it is not sufficient itself. Also professionalism and practical experience are necessary. In next chapters of this article, an option how the students during their economic oriented studies can gain practical knowledge which can significantly help them as graduates to get well paid expert job not only in Slovakia but also abroad, will be suggested.

The article briefly describes economic information system SAP SDU (Slovak Demo University). This teaching tool was created within SOFIA project and was updated in SOFIA II project.

## 1 Development procedure of SAP SDU within the SOFIA II project

Economic system SAP SDU was developed with the help of technological system SAP TDMS (Test Data and Migration System), Figure 1. Input for the SAP TDMS was live economic system SAP UMB (University of Matej Bel) and the output was SAP SDU System (Slovak Demo University).



Figure 1

Two runs of the TDMS system have been used: first with scrambling algorithm 1 and afterwards with algorithm 2.

Scrambling 1 consisted of following scenarios:

Human Resources: scenarios with standard HR Scrambling – ERP Initial Package for HCM Personnel Dev. PD & PA

Other modules: scrambling programming according to UMB management instructions.

Data in all modules have been reduced according T and T-1 model: scenario type “ERP Initial Package for Time based Reduction”. With this, significantly lower data volume has been achieved, system became more flexible and required less resources.

Scrambling 2 was run according standard scenario “ERP Initial Package for Master Data & Customizing”. With this scenario only Master Data, Customizing and UMB organizational structure have been transferred into output system SAP SDU.

## 2 Main functionalities of the teaching tool SAP SDU

Main functionalities which are available in economic information system SAP SDU are:

- Accounting and Finance – basic functionality of each economic system
- Controlling – currently is this tool used also in public area, in the private sector it is utmost necessary
- Long-term property
- Logistics (inbound – suppliers and material management and outbound – customers)
- Human resources (personal management and accountancy)
- Budget management (PSM – public sector management)
- Business trip management
- Other areas

## 3 Documentation and other information resources for SAP SDU

Economic IS SAP SDU is developed according to live SAP UMB system, which is used for economic processes running in the real organization (public university UMB - Matej Bel University at Banska Bystrica). SAP SDU organizational structure (also from the accounting

point of view) and information system settings is absolutely the same as in the live system. Only the data are different, master data are scrambled and transaction data are missing. You can see a great value added and an advantage of SAP SDU for the students. Added value are the real settings of the system as in the live system and the advantage is, that the students can communicate with economic employees of UMB – users of the SAP UMB system, as they are directly available. With this, a contact with the praxis during the studies can be established at the workplace of UMB. Experience from the praxis are very important for the students, the students can compare these experience with the theory they are being taught during professional subject. So the students collect practical experience right at their university. Two practical information sources are available for them: UMB employees and real documentation for the SAP UMB and a big amount of theoretical sources.

### 3.1 Cooperation of the teachers and employees for the students benefit

At the first view is this kind of cooperation of employees and teachers easy and effective. Both groups shall help the students to learn the praxis right at their university. Students can visit selected UMB workplaces and find out (in the form of an interview) real flow of business processes (i.e. purchase long-term property). Students have to process this information, describe the processes, analyze and visualize them (e.g. with help of Aris Express tool). Further they have to define which activities within the process are processed in SAP UMB automatically and which have to be done manually. Task for the students is to discover ineffective processing course of selected process and suggest its optimization. Processing progress of such mapped processes can be tested in SAP SDU by the students themselves. They can log into educational SAP SDU system from the lecture room at the faculty, from their laptop or their home PC. The cooperation teacher – employee – student significantly puts burden for the employees. This issue has to be solved by employee motivation. E.g. a student would have an employee (consultant) assigned, consultations would be paid according to workload (seminar work, bachelor work or diploma work).

### 3.2 Access to SAP information sources and live operational documentation of SAP UMB system

Other unavoidable information source, needed for the individual students work, is operational documentation of live SAP UMB system. This is available in electronic form directly from the SAP SDU menu. Other theoretical information sources with SAP thematic are available in written at the EF UMB library or in electronic form at pages [4, 5]. At optional subject “Economic task processing in the economic SAP system”, students can discuss various topics with their schoolmates or with the teachers.

The cooperation contract between SAP company and University of Matej Bel enables to participate in trainings at the training facility of SAP Bratislava for selected students, which is other significant information source.

## 4 Possibilities of didactic tool usage for pedagogical/teaching process

Information system SAP SDU can be seen as a complex didactic tool which can be used as a support in teaching process in two main areas.

#### 4.1 Economic studies

SAP SDU didactic tool is possible to use mainly in economic studies but also in studies oriented in technological tasks connected to implementation and information systems operation generally.

For economic studies the tuition support consists mainly of following modules: accounting, finance management, controlling, human resources and other modules related to economic-administration processes.

#### 4.2 IT studies

Studies oriented at information technologies focus on subjects such as programming with help of CASE tools, administration of operational systems, database systems and application SW systems. In this case is the content of the IS not the main “target”, i.e. we are not interested in the processes, which are used by the system to manage the company, but we put the emphasis on technological issues connected with SW system development, its installation and implementation in the company, maintenance of the system and its security.

Above the intersection of these two studies, we are able to define subject content which shall integrate knowledge of both areas, economic and information.

All subjects, where SAP or SAP SDU will be used as a teaching tool, can have their English version. The main advantage is plenty of English sources for development of English mutation of the subject, as well as a big amount of professional e-learning trainings in English [4, 5]. The importance of integration of modern forms of tuition is stressed by source [9] Barochovsky, Laco (2006, p. 81).

### **CONCLUSION**

The article deals with brief summary of SAP SDU teaching tool and its usage possibilities of this economic system in the tuition process at the universities, mainly in economic and IT studies.

The main goal of this initiative is to secure fully qualified graduates, who would manage not only theoretical knowledge but who would also be able to use them in praxis and who have practical experience with economic system SAP.

Students' diploma work orientation at praxis with help of SAP SDU and managing SAP system at the level of experienced user help them to compete when searching job in students' field of interest where SAP skills are essential not only at Slovak and Czech market but also abroad.

Economic information system is used in every legal entity, big international organizations, production facilities, small and middle companies, public and private organizations, financial institutions. It is also high probable that the knowledge gained from economic information systems would the students use almost everywhere and everytime.

## LITERATURE

- [1] ČAVOJEC, J. Zo škôl vychádzajú nepripravení absolventi [online]., Bratislava: denník SME, 2011.Posledná zmena 14.9.2011 [cit. 29.3.2012]. Dostupné z URL: <http://ekonomika.sme.sk/c/6052655/zo-skol-vychadzaju-nepripraveni-absolventi.html>
- [2] FOLENTOVÁ, V. Vysokoškolský titul na lepšiu prácu nestačí [online]., Bratislava: denník SME, 2011.Posledná zmena 1.8.2011 [cit. 29.3.2012]. Dostupné z URL: <http://ekonomika.sme.sk/c/5998784/vysokoskolsky-titul-na-lepsiu-pracu-nestaci.html>
- [3] URBAN, V. Hlavný problém školstva je, že vysokú zvládne každý, Bratislava: denník SME, 2011.Posledná zmena 3.8.2011 [cit. 29.3.2012]. Dostupné z URL: <http://komentare.sme.sk/c/6002905/hlavny-problem-skolstva-je-ze-vysoku-zvladne-kazdy.html>
- [4] University Alliances. 2012. [online]. Dostupné z URL: <http://scn.sap.com/community/uac>
- [5] SAP Community Network. 2012. [online]. Dostupné z URL: <http://www.sdn.sap.com/irj/scn>
- [6] Zmluva o spolupráci SAP a UMB. 2012. [online]. Dostupné z URL: <http://www.crz.gov.sk/index.php?ID=386509&l=sk>
- [7] ŠMÍDA, F. 2007. Zavádění a rozvoj procesního řízení ve firmě. GRADA, 2007, 293 s. ISBN 978-80-247-1679-4.
- [8] ŘEPA, V. 2007. Podnikové procesy, procesní řízení a modelování . GRADA, 2007, 280 s. ISBN 978-80-247-2252-8.
- [9] BAROCHOVSKÝ, J. - LACO, P. 2006. Experiences and Visions of e-learning at the Faculty of Economics. In: E-learning jako metoda wspomagajaca proces ksztalcenia, Poľsko : Wydawnictwo Wyzszej Skoly Bankovej w Poznaniu, 2006, s. 81 -87. ISBN 978-83-7205-244-5