

**SOFTVER ZA MALA I SREDNJA PREDUZEĆA  
U POGRANIČNOM REGIONU RUMUNIJE I SRBIJE: PREGLED PROJEKTA**

**SOFTWARE FOR SMALL AND MEDIUM ENTERPRISES  
IN THE ROMANIAN AND SERBIAN BORDER REGION: PROJECT REVIEW**

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**Sadržaj** – *U pograničnom regionu Banata između Rumunije i Srbije, registrovan je veliki broj malih i srednjih preduzeća (MSP). Uprkos činjenici da postoji značajan broj IT i softverskih kompanija koje rade u tom regionu (uglavnom na rumunskoj strani), upotreba softvera i IT tehnologija je veoma niska. IT kompanije su uglavnom orijentisane na klijente u inostranstvu ili locirane izvan regiona. Projekat "Softver za konkurentna mala i srednja preduzeća" RO2006/018-448.01.01.20, finansiran od strane Phare CBC 2004-2006 Romania-Serbia programa, usmren je u istraživanju ponude IT u regionu, u cilju promovisanja upotrebe softverskih alata u MSP sektoru i u uspostavljanju kontakata između softverskih proizvođača i korisnika. Ovaj rad opisuje projekat, sa fokusom na web platformu koja je razvijena u okviru projekta.*

**Abstract** - *In the border region of Banat between Romania and Serbia, a large number of small and medium enterprises (SME's) are registered. Despite the fact that a significant number of IT and software development companies are functioning there (mainly in the Romanian side), the usage of software and IT technologies in regional economy is rather low. The IT companies are mostly oriented towards developing software solutions for clients abroad or located outside the region. Project "Software for competitive SME's" RO2006/018-448.01.01.20, financed by Phare CBC 2004-2006 Romania-Serbia Program, aimed to research the IT industry offer in the region, to promote the adoption of software instruments in the SME sector and to facilitate contacts between software producers and users. This paper describes the project, with a highlight on the web platform developed to support project*

**Ključne riječi:** *softver, MSP (mala i srednja preduzeća), web platforma*

**Keywords:** *software, SME (Small and Medium Enterprises), web platform*

## 1. INTRODUCTION

The Serbian-Romanian border region has a large number of registered small and medium enterprises (SME's). Despite this fact and considering that also in the same region exists a significant number of IT and software development companies (mainly in the Romanian side), the usage of software and IT technologies in regional economy is rather low.

The one of the reasons is probably, because IT companies are mostly oriented towards developing software solutions for clients abroad or located outside the region, e.g. outsourcing for foreign companies, or developing software for the larger cities and larger economical centers outside the region. Project "Software for competitive SME's" tried to change this.

The focus of this project is the area of Romanian-Serbian border region of Banat. This region is administratively organized as follows. In Serbia it is divided in three districts:

- *North Banat District* with land area of 2,329 km<sup>2</sup> and population of 165,881 (census 2002). Major centers are Kanjiža, Senta, Ada, Čoka, Novi Kneževac and Kikinda.
- *Central Banat District* with land area of 3,256 km<sup>2</sup> and population of 208,456. Major centers are Novi Bečej, Nova Crnja, Žitište, Sečanj and Zrenjanin.
- *South Banat District* with land area of 4,245 km<sup>2</sup> and population of 313,937. Major centers are Plandište, Opovo, Kovačica, Alibunar, Vršac, Bela Crkva, Pančevo and Kovin.

This gives us a total population of 659,512 inhabitants.

In Romania this region is divided in two counties (total population of 992,731)

- Timiș County, with the total population of 659,512 (2004) and area of 8,697 km<sup>2</sup>. Main centers are Timișoara - capital city (population: 305,977), Lugoj, Buziaș, Ciacova, Deta (6,582), Făget, Gătaia, Jimbolia (11,605), Recaș, Sânnicolau Mare (13,298).
- Caraș-Severin County, with the total population of 333,219 and area of 8,514 km<sup>2</sup>. Main centers are Caransebeș, Reșița - capital city (86,383), Anina, Băile Herculane, Bocșa, Moldova Nouă (15,112), Oravița and Oțelu Roșu.

In this paper is presented this project and also the web platform as its final result.

## 2. ABOUT PROJECT

The project "Software for competitive SME's" RO2006/018-448.01.01.20 is financed by Phare CBC 2004-2006 Romania-Serbia Program. The goal was to research the IT industry offer in the region, to get more information about IT needs of regional non-IT SME's, to promote the adoption of software instruments in the SME sector and to facilitate contacts between software producers and users. One of the final results of this project was building the web platform to support this project.

The leading partners in this project were Romanian Association for Electronic Industry and Software – Timisoara branch (ARIES-TM) and Technical Faculty "Mihajlo Pupin" Zrenjanin. Two business incubators, Timisoara Software Business Incubator (UBIT) and Zrenjanin Business Incubator (BIZ-ZR), also supported this project.

One of the first steps of this project was establishing the network of supporting institutions. This network is established in the first kick-off meeting on February 2009 in Timisoara. The following institutions joined the network.

- Regional Development Agency, Timișoara
- Chamber of Commerce, Industry and Agriculture, Timișoara
- Regional Federation of Small and Medium Enterprises, Timișoara
- Deta Municipality
- Jimbolia Municipality
- Moldova Nouă Municipality
- Oravița Municipality
- Sânnicolau-Mare Municipality
- Millenium University, Timișoara
- "Politehnica" University of Timișoara, Automation and Computers Faculty
- Zrenjanin Municipality
- Kikinda Municipality
- Vrșac Municipality
- Regional Chamber of Commerce, Zrenjanin
- Regional Chamber of Commerce, Kikinda

- Regional Center for Socio-Economic Development Banat, Zrenjanin

Total of 8 municipalities, 3 development agencies, 3 chamber of commences and 2 universities joined this network and supported project execution.

## 3. PROJECT ACTIVITIES

The major activity of the project was collection of data connected to the software development companies in the region. The first obvious notice was a huge disproportion in number of Romanian and Serbian companies. Within the Romanian side there are 525 registered IT companies for software development and IT services in Timis and Caras region. Only 17 similar companies are registered in Serbian part of Banat region. We have to point out that our target groups are strictly software development companies.

During the data collection process 164 companies from Romania agreed to participate in the project. They had to complete survey and to give basic info about their companies, also to attempt to describe one of their best practices, and to show how their software helped to some SME to improve their business. In the Serbian side only 12 companies participated in the project.

The data they had to give in the survey are:

- basic company info (address, contacts, number of employees),
- area of their interests (what kind of software they produce) and
- successful story.

Also, they have to define in what field they are offering services. These fields were as follows:

- tools (utility software, backup, etc.)
- multimedia application and presentations
- management in traffic and transportation
- databases, ERP, CRM
- testing and diagnosis
- drivers
- games
- web hosting infrastructure
- desktop environment
- search engines, data processing
- business software, project management
- software sales
- promotion and Internet marketing
- computer and hardware component sale
- software purchase consulting
- network security software
- developing software
- accounting software
- educational software and IT courses
- specific industry applications
- data processing
- web application
- web design

In the success story section they had opportunity to present one particular case how software they had developed improve the business of their client, to gave brief explanation of their products and services, to explained the communication process with the client before and during the development of the software, and at the end, the implementation and maintenance process.

After the collection of information the web site and the supporting brochure [1,2] were designed. The brochures are printed in two versions. One Romanian-English version is printed with the list of Romanian companies and success stories for both regions. The other brochure is Serbian-English version, covering in the directory only the Serbian companies and success stories for both regions.

This material is promoted over local media (radio and TV) situated in Timisoara, Zrenjanin, Vršac and Kikinda. After the media promotion, 8 conferences were held in the 5 Romanians small towns (Deta, Jimbolia, Sănnicolau Mare, Moldova Nouă, and Oravița) and in 3 cities in Serbia (Zrenjanin, Vršac and Kikinda).

In the Table I is presented total number of the participants in all 8 towns and cities together with number of representatives of SME's, network support institutions (Support) and representatives of IT companies (IT). Total number of participants was 257, with 124 representatives of SME's, 63 representatives of supporting institutions and 30 representatives of local IT companies.

**Table I – participants of the 8 promotional events**

Town / City	Participants	SME	Support	IT
Sannicolau-Mare	30	16	7	6
Deta	31	12	6	3
Jimbolia	31	22	5	3
Zrenjanin	34	15	11	5
Kikinda	34	11	12	2
Vrsac	34	10	12	6
Oravita	30	23	4	2
Moldova Noua	33	15	6	3
<b>TOTAL</b>	<b>257</b>	<b>124</b>	<b>63</b>	<b>30</b>

Finally, at the end of project two final conferences are held. One in Timisoara, one in Zrenjanin. Number and the structure of participants are presented in the Table II.

**Table II – participants of the two final conferences**

Location	Timisoara	Zrenjanin	Total
Participants	101	78	179
SME	12	17	29
Support	23	34	57
IT	24	13	37

### 3. WEB PLATFORM

The web platform [3] is designed after the data collection and before the promotional activities and conferences (Figure 1). This platform is presented at all conferences. The platform is trilingual with separate sections in Romanian, Serbian and English language, considering the international character of this project. The structure of this Web portal is briefly presented in the following text.

The web site has several sections with basic info related to the most important facts about the project. For example, the first section is *About the project*. It contains all relevant information about the project including purpose and objectives, partners and associates, project team, project results and activities. Similar section is *Support network members* listing all institution involved in support network with responsible persons and contact info.



Figure 1. Banatsoftware web platform

One of the central sections on the platform is *Successful implementations*. This section is built on the information submitted by the software companies during the survey and cover the case studies on concrete collaboration between companies developing software and their customers. This information includes assessments of the benefits obtained by customers, descriptions of the process of identifying needs, defining solutions, solution development and implementation, and their current use by the beneficiary.

From a collection of 25 case studies that reflect an advanced level of development of IT industry in the region, we selected 9 most relevant success stories that show the value added to their customers by using software and the effect produced by their business.

The main criteria that were the basis for the selection of the success stories are:

- Innovative software products, services and solutions
- Software products, services and solutions implemented in a SME from the Romanian - Serbian border region
- Software products, services and solutions that offered customers added value and contributed to their business development

The central section is a *directory of IT companies* which includes companies that develop software applications in the Romanian-Serbian border region, more accurately the companies agreed to participate in this project (164 Romanian and 12 Serbia companies). This directory is searchable in several criteria (by location, by their offer and by keyword). The sample of requested data about a small software company is listed with rudimentary info (Fig 2.).

## Company Directory: INFO-SIM SRL

Contact person:	Dorina Carmen Simion
Address:	Str. Rodnei, Bl.2, Sc.C, Ap.5
Location:	Caraș-Severin
Town:	320209-Reșița
Telephone:	+40255224639
E-mail:	isimion7@yahoo.com
Website:	
Services:	Business applications (accounting, project management, human resources etc.)

Contact this company

Figure 2. Basic info about IT company

This platform includes glossary of basic IT terms to help potential clients (SME's) to fully understand companies offer and other related stuff. This platform will be active at least five years after the project completion.

This platform is also promoted on the Web sites of institutions that participated in project realization. Some information about the project, Web platform and usefull links can be foud at Web sites of the following institutions:

- ARIES-TM Timisoara, Romania [4],
- Technical Faculty "Mihajlo Pupin" Zrenjanin, Serbia [5],
- Timișoara Software Business Incubator [6]
- Business Incubator Zrenjanin [7].

## 5. CONCLUSION

The Web platform was launched in April 2009. During the project realization Web platform was presented on all events and promoted in local media in Banat region in Romania and Serbia. Insight into the portal usage statistics showed us that during the promoting activities for project events the portal usage was more intensive that in other periods.

The traffic statistic about the usage of this platform in the period from April 4, 2009 to February 22, 2010 is:

- Number of visitors - 4,070 (from 42 countries/territories)
- Number of unique visitors - 2,869
- Number of visited pages - 19,998
- Number of pages per visit - 4.91

- Average time per visitor – 3 min 38 sec

Although this platform is proved to be successful in offering required information and considered very useful by the all visitors in promotional events and conferences, the general opinion is that the major disadvantage of this platform is that it's not quite successful in encouraging the SME's members to find solution for them.

The SME's members need more efficient introduction of IT technology and extensive consulting considering this issue. That's why, apart from successful completion of this project, some further activities may be pointed towards building efficient support for helping SME's to define and find their IT needs and solution specification. Also, important direction for further activities is related towards continuous promotion of this platform in the Banat region.

## ACKNOWLEDMENT

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