Serbia ICT

Smart Solution

Serbia ID Card	
Official Name	Republic of Serbia
Form of State	Democratic Republic
Political Structure	President Unicameral assembly with 250 seats
Area	88,361 km^2
Population	7.1 million
Geographic Position	South East Europe, central part of the Balkan Peninsula, at the intersection of Pan European Corridors N^0. 10 and N^0. 7
Border	In the east–Serbia borders Bulgaria, in the northeast–Romania, in the north–Hungary, in the west–Croatia and Bosnia-Herzegovina, in the southwest–Montenegro, and in the south–Albania and Macedonia
Climate	Temperate continental, with monthly average temperatures ranging between 0.7°C in January and 17.5°C in July
Official Language	Serbian
Main Religion	Christian Orthodox
Other Religions	Roman Catholic, Islamic, Jewish, Protestant
Major Cities	Belgrade: 1,576,000; Novi Sad: 298,000; Nis: 250,000
Currency	Dinar (RSD)
GDP (2010)	€29,343 million
GDP pc (2010)	€4,016
Time Zone	Central European Time (GMT + 01:00)
Internet Domain	.rs

"After a lot of research, we found Belgrade to be highly suitable for the needs of our clients".

Mr. Jitu Virwani
Chairman, the Embassy Group

ICT is one of the most vibrant and fastest growing sectors in Serbia, with a two-digit annual growth rate in the years prior to the crisis (37% in 2007 and 19% in 2008). In 2010 steady growth continued and Serbian ICT companies are pushing hard to gain new business opportunities especially in the field of outsourcing.

"Serbia has great potential in the IT industry, that is why the world's biggest software company decided to open a development centre in Belgrade".

Mr. Christopher Brennan
Central Eastern Europe General Manager, Microsoft

Serbia is becoming one of Europe's most attractive IT hot spots. Over the past few years, the development and promotion of IT services (such as mobile internet technologies and applications development, outsourcing and data transfers) has increased significantly. The number of economic entities using and dealing with IT in Serbia is also growing. On the global market, IT companies from Serbia are mainly engaged in the outsourcing of software development, testing software and designing websites, but also providing solutions in embedded industry. The main markets for outsourced industry are Germany, USA, Great Britain and Netherlands. There is a recognized trend among outsourcing companies from Serbia to try and make their own products that have high export value on foreign markets.

Engineering education in Serbia is particularly strong, with app. 33% of all university graduates coming from technical schools. The industry employs highly skilled workforce, out of which 86% completed a university level of education. Serbian engineers are competent in a broad range of technologies that support an effective development of first-class software and systems integration. These professionals have extensive expertise in developing front-end, back-end and middle-ware components, but are also very proficient in understanding client requirements and creating tailored software and systems solutions.

As the world market for ICT continues to evolve and outsourced software engineering, offshore systems design and integration continue to grow, Serbia is well placed both geographically and structurally to provide a cost effective and reliable alternative to other, already established markets. An outstanding pool of intellectual capital, attractive labour costs, excellent worker skills, a good communications network and a high fluency in English are just some of the key competitive advantages that should persuade international companies to expand their businesses to Serbia.

ICT World Leaders in Serbia

There are many leading global ICT firms that have already made a decision to set up their businesses in Serbia:

- Cisco Systems
- Ericsson
- Google
- Hewlett Packard
- IBM
- Intel
- Microsoft
- Motorola
- Oracle
- Redhat
- SAP
- Siemens
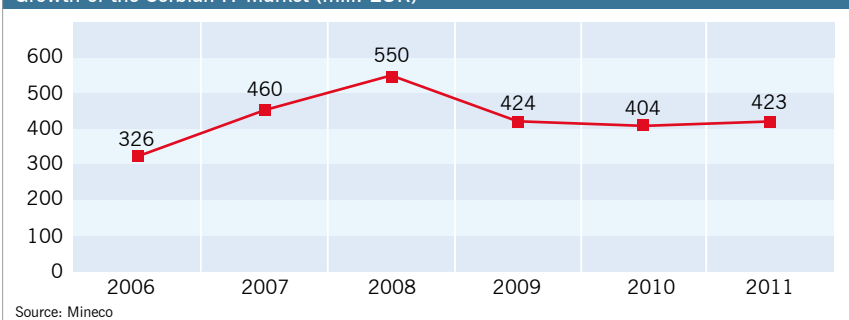- Telenor

FACTS AND FIGURES ABOUT SERBIA'S IT MARKET

IT Market in 2011
- There were around 1,600 Serbian IT companies with more than 14,000 full time employees. (Source Mineco)
- The average number of full time employees per company was 9.
- IT market value had growth of 5% from €404 million in 2010. to €423 million in 2011.
- Export of IT services was around $200 million. (Source National bank of Serbia)

A large number of Serbian ICT companies offer very strong technical skills that have attracted partnerships with international firms and won them a place in high value market niches.
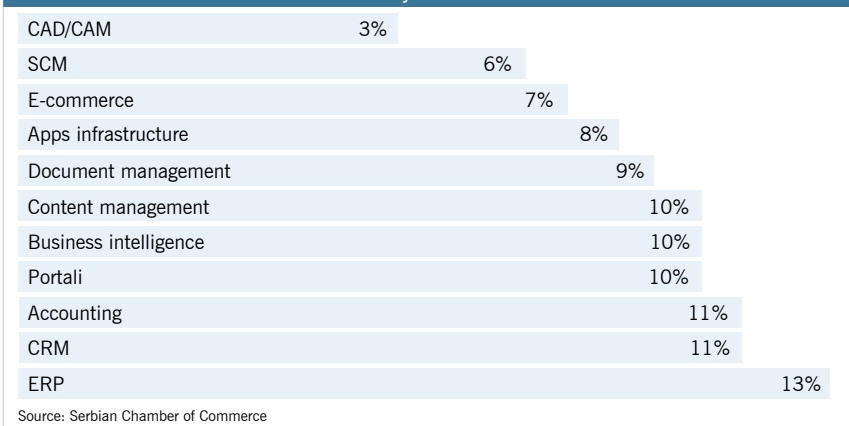
IT sector experienced explosive growth before the recession

Growth of the Serbian IT Market (mill. EUR)

Year	Value
2006	326
2007	460
2008	550
2009	424
2010	404
2011	423

Source: Mineco

Market value growth of 34% 2005-2011 (37% in 2007).

Revenue Generators of the Serbian IT Industry

Category	Percentage
CAD/CAM	3%
SCM	6%
E-commerce	7%
Apps infrastructure	8%
Document management	9%
Content management	10%
Business intelligence	10%
Portali	10%
Accounting	11%
CRM	11%
ERP	13%

Source: Serbian Chamber of Commerce

Serbia IT sector is well diversified across products and services.

Export of IT services

Structure of IT Services Export

Source: Serbian Chamber of Commerce
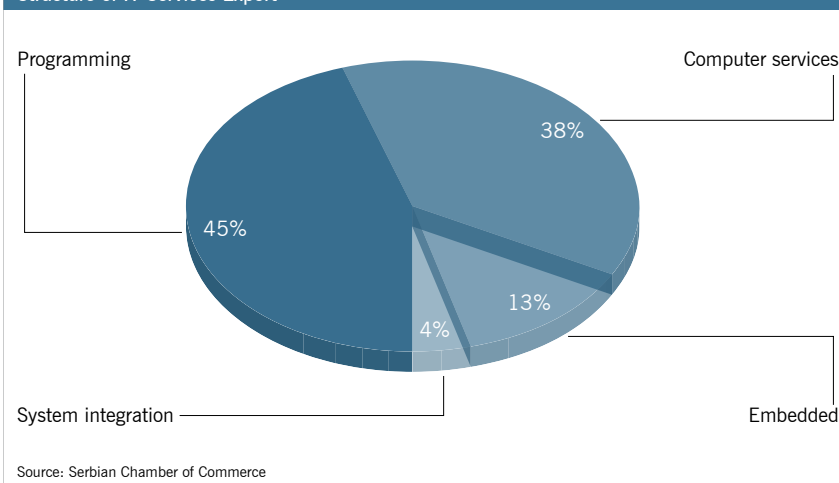
Structure of IT Services Export in mil. EUR

Computer services	47
System integration	0.5
Embedded	17
Programming	65
Overall	**129.5**

Source: Serbian Chamber of Commerce

Structure of IT Services Export in Number of Companies

Computer services	114
System integration	22
Embedded	66
Programming	260
Overall	**462**

Source: Serbian Chamber of Commerce

Structure of IT Services Export in Number of Employees

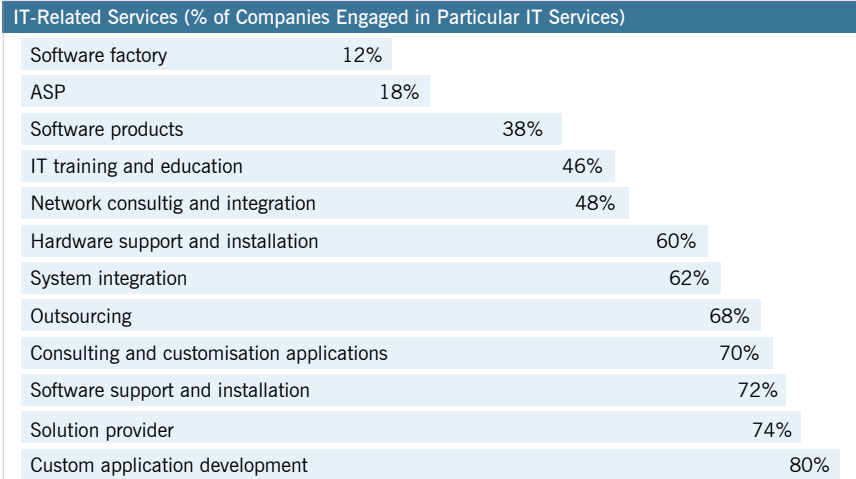|	
Computer services	2143
System integration	1020
Embedded	369
Programming	1847
Overall	**5379**

Source: Serbian Chamber of Commerce

Main Capabilities and Expertise of IT Sector

Serbian IT companies offer a number of operating solutions that provide them with a competitive advantage in the European market. For example, pervasive English language skills amongst the workforce and a business culture that has much in common with companies in the nearby EU markets. Serbia also possesses highly skilled engineers, competent in a broad range of technologies, who support an efficient development of high quality software and systems integration. The highly skilled personnel have extensive expertise in developing front-end, back-end and middle-ware components but are also very proficient at understanding client requirements and creating tailored software and systems solutions.

ICT-Related Services and Main Capabilities

Software development and IT services have the biggest export potential in the ICT sector. Serbian IT companies are already collaborating with companies from the USA, England, Ireland, Germany, Russia, the Netherlands, Canada, France, Croatia, Slovenia, Finland, Sweden and others. There is a whole spectrum of services that are offered by Serbian ICT companies. The most common are:
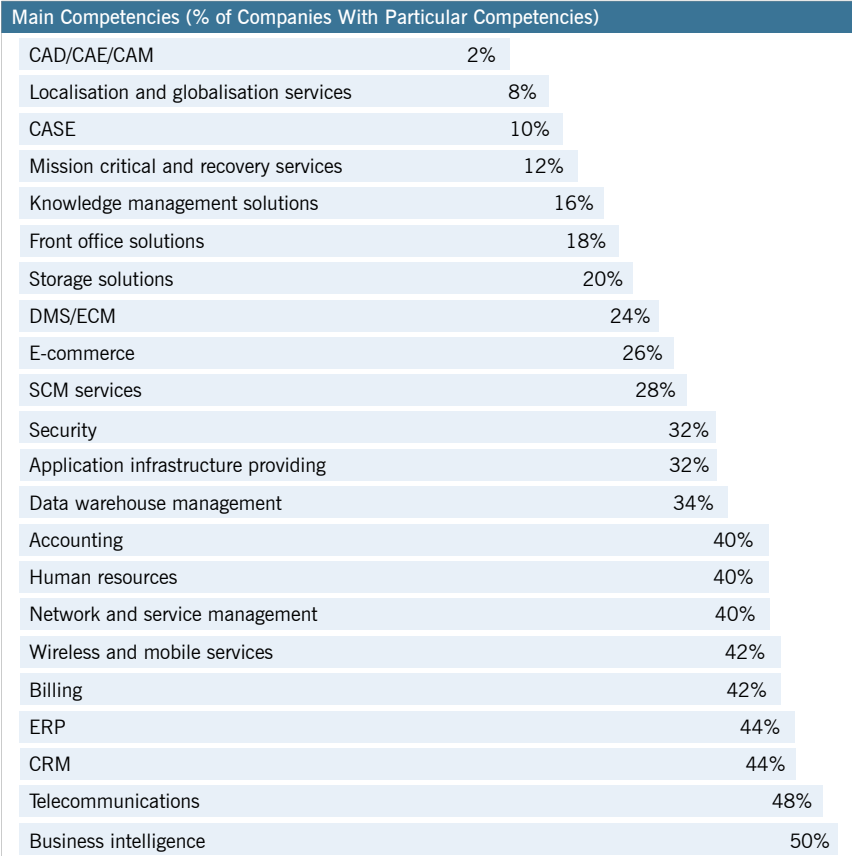- custom application development,
- solution providing,
- software support and installation,
- consulting and customisation applications,
- outsourcing,
- system integration and others.

IT-Related Services (% of Companies Engaged in Particular IT Services)	
Software factory	12%
ASP	18%
Software products	38%
IT training and education	46%
Network consultig and integration	48%
Hardware support and installation	60%
System integration	62%
Outsourcing	68%
Consulting and customisation applications	70%
Software support and installation	72%
Solution provider	74%
Custom application development	80%

Source: SIEPA (The research was conducted by SIEPA using data obtained from the 50 biggest Serbian IT companies)

The main competencies of Serbian ICT companies include:
- business intelligence,
- telecommunications,
- CRM,
- ERP,
- billing,
- wireless and mobile services,
- network and service management,
- human resources,
- accounting,
- data warehouse management and others.

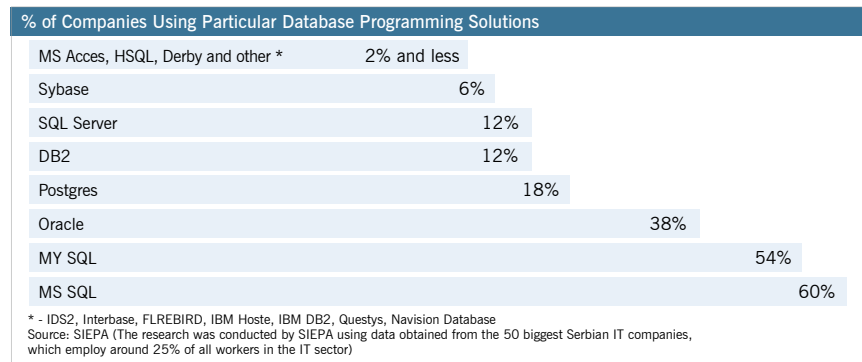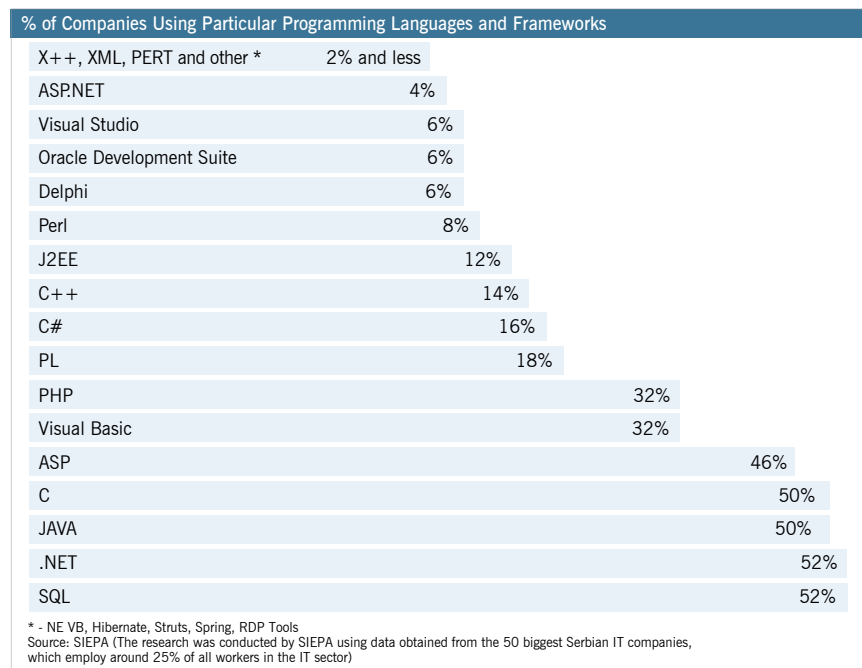| Main Competencies (% of Companies With Particular Competencies)	
CAD/CAE/CAM	2%
Localisation and globalisation services	8%
CASE	10%
Mission critical and recovery services	12%
Knowledge management solutions	16%
Front office solutions	18%
Storage solutions	20%
DMS/ECM	24%
E-commerce	26%
SCM services	28%
Security	32%
Application infrastructure providing	32%
Data warehouse management	34%
Accounting	40%
Human resources	40%
Network and service management	40%
Wireless and mobile services	42%
Billing	42%
ERP	44%
CRM	44%
Telecommunications	48%
Business intelligence	50%

Source: SIEPA (The research was conducted by SIEPA using data obtained from the 50 biggest Serbian IT companies, which employ around 25% of all workers in the IT sector)

Programming Languages and Database Solutions

Serbian ICT companies possess exceptional expertise in all of the popular programming languages and frameworks such as MySQL, .NET, Java, C, C++, ASP, Visual Basic, PHP, Perl, XML and others (see the graph below). The telecommunications, banking and process manufacturing sectors were the top purchasers of software products, together comprising nearly 53% of the market share. The government, finance and telecommunications sectors will remain the most important source of demand for software applications on the Serbian market in the medium term.

Serbian IT producers use different database programming software, mainly MS SQL, MySQL, Oracle, Postgres, DB2, Sybase and others.

% of Companies Using Particular Programming Languages and Frameworks
X++, XML, PERT and other * — 2% and less
ASP.NET — 4%
Visual Studio — 6%
Oracle Development Suite — 6%
Delphi — 6%
Perl — 8%
J2EE — 12%
C++ — 14%
C# — 16%
PL — 18%
PHP — 32%
Visual Basic — 32%
ASP — 46%
C — 50%
JAVA — 50%
.NET — 52%
SQL — 52%

* - NE VB, Hibernate, Struts, Spring, RDP Tools
Source: SIEPA (The research was conducted by SIEPA using data obtained from the 50 biggest Serbian IT companies, which employ around 25% of all workers in the IT sector)

% of Companies Using Particular Database Programming Solutions
MS Acces, HSQL, Derby and other * — 2% and less
Sybase — 6%
SQL Server — 12%
DB2 — 12%
Postgres — 18%
Oracle — 38%
MY SQL — 54%
MS SQL — 60%

* - IDS2, Interbase, FLREBIRD, IBM Hoste, IBM DB2, Questys, Navision Database
Source: SIEPA (The research was conducted by SIEPA using data obtained from the 50 biggest Serbian IT companies, which employ around 25% of all workers in the IT sector)

TELECOMMUNICATIONS NETWORK: AN OPEN SPEEDWAY

Market overview

Telecomm Market Overview
According to the Agency for Electronic Communications the telecommunication market in Serbia nominally grew by 6.4% in 2010 to $2.12 billion. The market comprised fixed and mobile phone services, media content distribution, Internet services and VOIP had average annual growth of 13.9% in the four preceding years.Expansion and further liberalization of the industry is a priority for the Government as it seeks to begin membership talks with the European Union. The competition on the market is ever growing and will be even more in favor of users after the sale of the largest telecomm service provider in Serbia - Telekom Srbija.

Internet Access
Broadband Internet access is widely available in Serbia. ISPs offer a variety of broadband internet access options at speeds of up to 16 Mbps on the retail market. Best sellers are those at 1024 kbps, 1536 kbps 2048 kbps speed which account for 57% of all broadband connections. Due to the increased competition among ISPs and ever rising needs of end users, the price of internet access is decreasing over time. For example, in 2009 the monthly fee for cable internet access at the speed of 2 Mbps was around €14, the same amount for twice faster access in 2010.

Number of ISPs by Access Type	2007	2008	2009	2010
Dial-up	60	48	36	42
Cabl Internet	14	22	20	22
Optical Cable	-	-	3	11
Ethernet	-	-	24	25
Wirless Internet	118	82	78	115
ADSL	23	21	27	23

Source: RATEL

Total Number of ISPs	2007	2008	2009	2010
Number of ISPs	159	197	199	192

Source: RATEL

"What we found in Serbia is a highly educated and highly motivated workforce with a very strong work ethic. They are always willing to go the extra mile".

Mr. Mike Smart
MD Gowigroup Ltd

- Technical education in Serbia is particularly strong, with 33% of university graduates coming from technical schools.
- High-quality technical education is largely based on elementary and high schools, which offer more advanced curricula in technical sciences than those in most other CEE countries.
- Serbia has the highest percentage of English speaking working population (49%) in the SEE region.
- Highly skilled ICT workforce; 70% are University graduates
- Over 1500 of creative and talented IT professionals produced yearly
- Impressive number of prizes at the World Science Olympiads: more than 220 since 1968.

Educated and Technicaly Skilled Human capital

On average, universities in Serbia annually produce around 43,500 college and university graduates. High-quality education is chiefly a result of primary and secondary schools offering more advanced curricula in natural and social sciences than the majority of other countries. For example, students from Belgrade's Mathematical Gymnasium alone have won more than 100 prizes at World Science Olympiads. The most recent success was the achievement of a six-member team of mathematicians from Serbia winning one gold, two silver and one bronze medal and a commendation at the 52nd International Mathematics Olympics in the Netherlands in 2011. A total of 105 countries participated in that Olympics.

In order to further enhance the quality of teaching provided, domestic universities have implemented substantial reforms in line with international standards. More flexible and diversified curricula, along with hands-on training and new textbooks, are aimed at equipping students with the fundamental problem-solving skills required in the business world.

Total Number of Enrolled Students 2009/2010: 54,510 (Selected universities)					
School of Economics	Philology School	Law School	Faculty of Organizational Sciences*	Mechanical Engineering	ICT and Electrical Engineering
1,483	1,380	1,527	732	583	828

* Management and software development
Source: Statistical Office of the Republic of Serbia

Total Number of Graduates* (2009,): 42,988					
ICT	Electronics	Engineering	Management/ business	Law	Philology
2,397	644	1,556	12,681	2,900	1,355

* College graduates, university undergraduates, graduates and postgraduates
Source: Statistical Office of the Republic of Serbia

Knowledgeable in Foreign Languages
English, French, Russian and German languages are mandatory subjects throughout primary and secondary education in Serbia. English usually begins to be taught from third grade as the primary language, whilst French, German and Russian are taught from fifth grade as secondary languages.

Foreign languages – usually English, French and German– are also mandatory modules at colleges and universities, with a special focus on vocabulary used in the specific scientific areas being taught.

University spin-offs

Universities in Serbia are making a substantial contribution, particularly on a regional level by linking industry and academic institutions and generating flows of knowledge between these two partners. In the university regions of Novi Sad, Nis, and Belgrade, an entire series of spin-offs has already been founded.

Findings suggest that spin-offs in Serbia are mostly created to exploit commercially technical know-how, technology-based ideas or research results developed within an academic institution. University spin-offs are usually focused on technology and development of state-of the art solutions.

A good example is the University of Novi Sad, where more than 40 successful spin-offs have been developed in last 5 years. New companies are created based on knowledge and know-how developed at the University through research projects. These companies employ more than 850 young well educated people and had a turnover higher than 18 million € in 2007 and exported more than 50% of their revenue.

Wide range of competencies at competitive rates

The cost competitiveness of engineers is another advantage of doing business with or from Serbia. Compared to salaries in the country, IT specialists earn more than average but compared to their European colleagues the situation is quite different. Net salaries range from €600 to €1,200 per month for highly qualified university educated personnel, while gross salaries range from €1,000 to €2,000 per month.

Average monthly salaries for developers	
Junior programmer (0 - 2 years of exp.)	Net salary €600 - Gross salary €1000
Full engineer (2 - 5 years of exp.)	Net salary €900 - Gross salary €1500
Senior programmer (over 5 years of exp.)	Net salary €1200 - Gross salary €2000

Development centers and scientific-technology parks

In September 2005, Microsoft established its Development Centre in Belgrade. It started as a small operation focused exclusively on projects related to Tablet PC technology under the name Tablet PC Development Extension. Recently the Centre has intensified efforts on Tablet PC projects as well as taken on new projects unrelated to Tablet PC. In order to reflect the broader scope of projects and the growth of the staff, the name has changed to Microsoft Development Centre Serbia (MDCS)

The main MDCS projects are:
- Language Handwriting Recogniser "Factory";
- Handwriting Recognisers for Special 2D Domains;
- Windows Live Components;
- SQL Server Spatial Libraries.

There are numerous ongoing initiatives for establishing scientific-technology parks in Belgrade, Novi Sad, Nis and Kragujevac. There is also a technology park in Vrsac. Those scientific-technology parks are designed to encourage public-private synergies between universities and the business sector, often supported by local self-government and line ministries. Beside, they are also established with the aim of creating a good base for innovations in the field of advanced technologies, including IT.

INTELLECTUAL PROPERTY PROTECTION

Intellectual property protection is critical to the security and success of ICT companies and their clients. Domestic legislation in the field of IP rights is harmonised with the rules of the EU and WTO, i.e. trade-related aspects of intellectual property rights (TRIPS Agreement).

Serbia has met the IP challenge head on, developing a robust set of laws to govern and enforce copywriting and trade-marking legislations.

The Law on Copyright and Related Rights from 2004 provides software products in Serbia with full intellectual property protection.

A law with a special mandate regarding protection of intellectual property rights from 2006 prescribed very rigorous penalties for the violators.

However, in order to aid the quick development of the ICT sector, several more important laws have been adopted:
- Electronic Signature Law;
- Patent Law;
- Trademark Law;
- Legal Protection of Design Law;
- Protection of Integrated Circuit Topographies Law;
- Protection of Personal Data Law;
- Protection of Consumers Law;
- Access to Information Law;
- Amended Criminal Code;
- The Law on Copyright and Related Rights.

Together, these laws ensure that the Serbian government has developed a strong legal framework for intellectual property protection.

In March 2005, the Serbian government started a campaign named "Zero Tolerance for Piracy", where an obligatory instruction to all public prosecutors' offices was issued on conducting pre-criminal procedures and prosecuting perpetrators of related crimes. In April of 2005, Serbia signed the International Convention on Cyber Crime that greatly improved cooperation with the EU member states.

Microsoft

Development Centre Serbia.
A Home of the World's Technical Revolution!

Based in the very heart of Belgrade, Microsoft's Development Centre Serbia (MDCS) has existed since September of 2005. Since then Microsoft has invested millions of dollars in its Development Centre employing more than 45 professionals who have been contributing to the global efforts of the Microsoft Corporation by developing software components built in Windows, MS Office, SQL, and Live Search software.

By participating in the development of Live Search – MDCS has actually positioned itself on the front lines of technological development, shaping and influencing the world as we know it.

After realising that a very high number of their software experts in the USA come from this region, Microsoft decided to explore this source of IT talents and utilize Belgrade's central position in the region for the benefit of their global efforts – hence MDCS was set up. The additional incentive was the lowest corporate gain tax in Europe (10%) and the fact that there is no VAT on importing IT related technology.

Serbia has an abundance of educated and talented, young IT professionals and a developed taxation system that favours investors. Compared to other Microsoft Centres in the world, MDCS's progress reports have always been among the most impressive ones – a result that was achieved by dedicated work of the local workforce. Local talent made it possible for MDCS to develop Cyrillic handwriting recognition software for tablet PC, On Line Book Search components for Live Search, Math Equation Recognition software and many other software solutions incorporated in Windows and MS Office packages. Microsoft Development Centre Serbia praises its local partners for providing top of the range services and finds them extremely professional and an immense source of reliable support to its operations.

Microsoft will certainly continue to invest in its Development Centre in Serbia by increasing the number of employed IT professionals and by increasing the number of projects developed at the centre. MDCS plans to stop the national "brain drain" abroad by inviting even more young professionals to return to Serbia and work at the Microsoft office in Belgrade.

ComTrade Group

Serbia can be a software industry leader

ComTrade Group was founded in 1991 by Mr. Veselin Jevrosimovic. Today, ComTrade Group is one of the leading companies in the field of information and communication technologies in Southeastern Europe. Expansion in recent years in the markets of Western Europe, the USA, and the Middle East has transformed ComTrade into a global player in today's IT services market.

ComTrade Group's portfolio of products and services includes development and implementation of complete ICT solutions, distribution of ICT equipment, production and distribution of ComTrade Computers and other major brands of electronic devices, as well as retailing and advertising services.

In March of 2008, ComTrade Group acquired Hermes SoftLab, an IT leader in the areas of storage and systems management, embedded software, IT solutions relating to e-business, SOA/enterprise integration, IT modernization, and service management. With the inclusion of Hermes, the potential of ComTrade Group expands as the largest IT conglomerate in Southeastern Europe.

Spinnaker New Technologies, a member of ComTrade Group specializing in ICT solutions, will leverage Hermes expertise and unite resources with Hermes SoftLab, enabling the group to undertake a new caliber of projects across the world.

The resulting company has the ability to offer the widest range of ICT solutions and services in 14 countries spread over 3 continents, marking the continuation of its development on a global scale.

The new region-wide group has the human resources clout of over 1600 employees and expects to generate revenue of over €300.000.000 in 2008.

"The Group's strategy is based on development and on expansion into new markets, and we will continue to strengthen our position in the fast developing ICT Solutions segment through high-end technological competencies. Besides that our company intends to remain one of the most stimulating places to work in the region, for current shareholders it means a good value exit, and for our clients it means that they can expect a wider range of improved services".

Veselin Jevrosimovic
President of ComTrade Group

Success Stories

PSTech

In 1996 PSTech started developing solutions around the latest automated identification and data capturing (AutoID) technologies. They saw their chance to expand their business on an international level so in 2001 PSTech started providing software-outsourcing services. Their first customer was a Silicon Valley (California, USA) based start up company, Wanadu Inc. For this client, PSTech developed an eLearning content management system (LCMS) called iCreate. This platform included a cutting edge technology used to convert Microsoft PowerPoint presentations into Internet friendly, rich media content in Flash, as well as a Java based server to provide a full set of LCMS features. Over two years of development produced a successful product launch in January 2003. In 2004 PSTech started working together with Cisco Systems on Unified Communications related projects and their partnership has grown ever since.

Today, PSTech represents an export-oriented company with over 90% of its revenue generated on the international market. In 2007 alone, the company's export output amounted to 1.7 million euros. The company currently employs 62 individuals out of which 58 are software engineers who are developing new technologies for international clients and for PSTech's own needs. Since 2001, PSTech has developed projects and acquired expertise in the following areas:
  • Groupware and Collaboration (audio, web, video conferencing)
  • Media Streaming (audio and video streaming)
  • Unified Communications (VoIP, IP Telecommunications, call centres, clients)
  • eLearning (LMS, SCORM, rich media content development and delivery)

The list of PSTech's clients includes: Cisco Systems (USA), Latitude Communications (USA), Wanadu (USA), and PointeCast (USA). Besides software development, PSTech provides specific Unified Communications related training in cooperation with Cisco Systems. So far they have delivered their training programs in Serbia and Latin America (Mexico, Argentina and Brazil) to customers from all over Europe and the North and South America.

PSTech won the "SIEPA Exporter of the Year 2006" award in the category of Small and Medium Enterprises.

EXECOM

Quality and on-time delivery

EXECOM is a software engineering house offering design, development, testing and maintenance of complex software solutions in many vertical markets. Since 1995. custom made products are successfully delivered for partners in The Netherlands, Germany, Sweden, UK, France, Switzerland, Austria, Czech Republic, Russia and USA. Its academically qualified engineers have up to 15 years of experience in software development. The company has offices in Novi Sad (Serbia), Prague (Czech Republic) and Oosterbeek (The Netherlands).

Thanks to its advanced project management knowledge and top skilled workforce, the Company is recognized as one of the most reliable partners in the custom software solutions market. In 2009, Deloitte ranked EXECOM as the 10th fastest growing technology company in Central Europe.

Words from Deep Blue about the cooperation with Execom
Deep Blue was formed from the years of cooperation between Chess (Haarlem, Netherlands) and EXECOM. Chess focuses on large projects for the top-100 companies in the Netherlands and yet, there is a large demand for custom-developed software from smaller companies or companies with limited budgets.

After the positive experience of Chess, EXECOM was the logical choice for cooperation. One of the most important reasons is the availability of highly schooled employees. Also, because Serbia is relatively close to the Netherlands, travelling to EXECOM is not a problem and it is possible to have EXECOM employees come to the Netherlands. Communication is easy, using teleconference, chat and email.

In practice, by their own words, choosing a Serbia-based company has worked out great for Deep Blue. EXECOM is able to supply a whole team with all the necessary skills (project leader, architect, developers, tester and designer) and it is therfore possible to have EXECOM build software relatively quickly and with good quality. This way of working enables EXECOM to offer fixed price projects and take responsibility for the quality and on-time delivery.

The knowledge and way of working of EXECOM fits very well with the West European model. The lower costs per hour offer an additional advantage: it's much easier now to do something extra to please a customer, without having to charge a high additional fee. This is one of the important aspects that leads to happier (and returning) customers: do more than they expect.

GOWI

**Collaborative outsourcing –
a way to achieve the competitive advantage**

The Gowi software development team was founded in 2000 and over time it has built a growing international client base. The Gowi software outsourcing engagement model is flexible and adaptable depending on clients' business processes and the nature of business. During the last decade, thanks to the collaborative outsourcing approach Gowi has built a number of long-term business relationships with a number of foreign partners from the UK, Ireland and Germany.

Today, GOWI employs 42 people, who are highly professional and skilled IT experts. The company is constantly growing, increasing its customer base and expending its business to new markets. In 2010 they have signed contracts worth over 2 million pounds and they are planning future investments that will ensure future growth.

In 2005, Gowi started working for Abacus e-Media, the leading facilitator of online publishing in UK. For over five years the Gowi team is involved in outsourced product development and maintenance of Directories, Subscription and Recruitment solutions. By working closely with Abacus team Gowi has developed the directories and subscription software solutions used by media groups such as UBM, EMAP, TSL, Centaur Media Plc, Newsquest, Ocean Media, etc. Beside solutions for media sector Gowi has developed recruitment management solution for the public sector, which is used by a number of British county and district councils. For Strictly Education Ltd Gowi has developed a market leading School Management and Resource Tool (SMaRT) that is designed to provide the education sector with a quick and logical method of producing an effective, strategic budget, which is linked directly to the School Development Plan. SelfNet Ltd has engaged Gowi team to develop the portal for new insurance products and to connect it with the financial systems, which processes all financial transactions.

The list of GOWI clients includes: Abacus e-Media, SelfNet Ltd, Strictly Education Ltd, TAH Ltd, EuroMoney Plc, Bond International Plc, Oyez Straker Ltd, Shell, Affinity Risk Management /Eirsk ltd, Avaya Communication UK, Cunard Seabourn, EGL, PS Financials, Tikit Ltd, Homecall +, etc The range of skills Gowi development team has at its disposal is: Project Management, Business Analysis, System Design, Web Application Development, Testing and Support. As Microsoft's partner GOWI provides business solutions and advanced software development services based on Microsoft platforms. The company has extensive experience in implementing a broad range of solutions across many vertical markets like: insurance, publishing, education, HR, finance, public sector, etc.

As a reward for the great business accomplishments on the international markets, Gowi won the prestigious prize "SIEPA Exporter of the Year 2009" in the category of Small and Medium Enterprises.

DMS Group

A spin-off becoming a giant

Several professors from the Department of Electrical Engineering from the Faculty of Technical Sciences, University of Novi Sad – scientists and entrepreneurs, together with outstanding engineers experienced in the technical and management field, invested decades of work and analysis into the design of DMS Software, a unique, innovative product, with the purpose to improve, monitor and optimize distribution networks. They established DMS Group L.L.C. Novi Sad in year 2000.

DMS Software, which first version was finalized in DMS Group, and it is now proudly owned by Telvent DMS L.L.C. Novi Sad, has been evaluated as the best technical solution at large word tenders, among other bidders' systems. Telvent (NASDAQ: TLVT) has been a DMS Group business partner for over 10 years and it is currently in the top 5 companies that compete in the area of SCADA/DMS software type of products. ESNA published that SustainableBusiness.com includes Telvent among the 20 Most Sustainable Companies in the World. The all-rounded cooperation between Telvent and DMS Group resulted in the joint venture Telvent DMS L.L.C. Novi Sad in 2008.

Today DMS Corporation comprising DMS Group and Telvent DMS, gathers a total of 700 experienced Engineers – specialists in information technology, power engineering and management, thus presenting the largest concentration of knowledge in the field of Smart Grid software aimed to distribute in the electricity network. It is exclusively dedicated to developing DMS (Distribution Management System) and EMS (Energy Management System, used for optimization of transmission networks) solutions, as well as the other aspects of Smart Grid solution.

Since 1999, when DMS Software was deployed for the Italian power utility ENEL, DMS software has been used in many countries in North and South America, Europe, Asia and Africa – including USA, Canada, Italy, China, India. More than 30 utility companies – including BC Hydro, PEC, Enel, Emasz, EVN, IDGC, that currently use DMS Software can testify about more than 40 functionality of DMS Software on more than 100 DMS installations worldwide manage over 60 Million customers.

DMS Software is a highly efficient solution that optimizes electricity networks and reduces power peak load, while significantly reducing implementation costs and providing advanced solutions for demand side load control. DMS Software is also used as an education tool at the Universities MIT and CMU in USA. It has the broadest set of power functions compared to any competitor's product, thus completely covering management of distribution networks. It is modular and scalable so that it can be used in a range of companies and electricity distribution networks. It also gives additional value to information and data in the company, since it is designed as part of a master integration platform for all technical and business IT systems .

Success Stories

IMP-Telecommunications

When Finsoft Limited, a UK company based in London, conceived an advanced Ethernet video device for its new STOS digital signage system, it began a search for companies able to meet requirements for such a development. After initial discussions, Finsoft (now a part of GTECH Group from the USA) recognized IMP-Telecommunications as a reliable and competent partner and subsequently awarded its custom development contract to it.

IMP-Telecommunications Ltd, a subsidiary company of the "Mihailo Pupin" Institute possesses long-term experience in the design and the development of custom embedded systems. Located in Belgrade, Serbia, this company of thirty-five employees specializes in digital signal processing, physical level communications, multimedia applications, high-speed hardware design and embedded software.

The STOS 3XGA device is an Ethernet thin client that has three independent video outputs suitable for use in digital signage and similar applications where there is a need to display graphical information on a large number of screens. This solution has a low price per channel and therefore attains the best price/performance ratio currently available on the market. It employs latest technologies in electronics development and production.

The STOS 3XGA device was designed and developed in just six months. The process included analysis of the necessary requirements, development of device architecture, detailed design, development of hardware and software, optimisation regarding the price and technology, prototype development and testing. Final testing of the device included EMC tests, which demonstrated conformance to European standards.

Finsoft was very satisfied with IMP's performance on this development project and it offered a manufacturing agreement between the two companies. This agreement included changes in device design to suit mass production, establishment of production procedures, procurement of production materials and initial small-scale manufacturing. In order to successfully fulfil requirements of this agreement, IMP-Telecommunications established business relationships with two other Serbian companies: IRITEL and SV-Line, both of them located in Belgrade.

In just four months IMP-Telecommunications redesigned the 3XGA device, optimised it for price and manufacturing, devised specific automated test procedures and established a production line on its premises. Relevant European norms for the production of electronic equipment were applied during the design and manufacturing process. As a result, the 3XGA device holds both the CE and the RoHS compliance marks.

The complete initial production of a thousand STOS 3XGA devices was exported to the United Kingdom, resulting in the continuation of the partnership between Finsoft and IMP-Telecommunications through new custom development agreements.

www.imptelecom.com

Euronet Worldwide

Customer Support Centre-Serving the World From Serbia

Euronet is a venture originating from the US, which has become a global leader in processing secure, electronic, financial and payment transactions with some 2500 employees worldwide. Euronet's presence in Serbia dates back to 2002 when the company started the distribution and maintenance of ATM's and launched the use of VISA and MasterCard systems in Serbia. While Euronet's investment decision was initially market driven, the company selected Serbia over other countries in the region for the following reasons:

• Serbia offers Europe's lowest corporate profit tax rate (10%)
• It provides access to large Southeast European markets (60 million consumers)
• It has a large pool of highly skilled labour.

In order to successfully operate a global Customer Support Centre, the company was looking for a location that would provide them with multilingual staff – thus Belgrade became the perfect choice, since Belgrade based operations were able to provide services to its clients in many different languages.

In 2004 Euronet opened its Customer Support Centre in Belgrade, employing over 55 multilingual operators and serving the world market in collaboration with the one in the USA.

The Euronet Customer Support Centre in Belgrade is one out of two global centres that the company runs, taking advantage of time zone differences between the USA and Europe and of the outstanding language skills of the local workforce. The Customer Support Centre staff demonstrated not only excellent skills and professionalism but also an exceptionally high employment loyalty (the staff retention rate is well above the average for the industry).

The Serbian market proved to be highly lucrative for Euronet. The introduction of VISA and MasterCard systems, the launch of the national DINA card system and the development of the ATM network in Serbia made the local Euronet branch one of the most profitable business units of the whole group. In addition, the Serbian market demonstrated a huge potential for further business expansion (the company expects 20% annual growth in revenues over the next five years).

Euronet plans to further expand its core business and introduce an additional 100+ new ATM's throughout Serbia over the next two years. Therefore, Euronet's operation in Serbia should soon number over a hundred employees, including highly specialised software programmers.

www.euronetworldwide.com

High Tech Engineering Center - HTEC

Rapid development of the IT start-up companies

Since its' founding in September 2008, HTEC has experienced fast growth in terms of engineering resources and "know-how" diversification. As a young but fast-growing company, employing highly skilled, qualified engineers, and having successful track of record of completed projects, in a relatively short period of time HTEC became acknowledged and a reliable R&D partner for its' international clients.

HTEC's core competency is design of embedded systems, mostly used for advanced digital signal processing applications. HTEC offers from the scratch prototype development, which includes development and integration of custom made hardware, PCB boards, drivers and application software, along with algorithm development with FPGA or DSP implementation. Developed solutions covered the set of applications and markets including security, automation, entertainment and medical devices.

In the second half of 2011, HTEC incorporated in-house software development team that focuses on development of web and mobile applications. Few months after its integration into company, first projects were successfully delivered. HTEC offers complete service in specifying, developing, maintaining, redesigning and integrating software applications in various technologies in web, desktop or mobile domain. The first client of the company, since it's funding was the company Silicon Hive from Eindhoven, the Netherlands, a Philips Research spin-off. HTEC was subcontracted from Silicon Hive until the end of 2011, performed dedicated team building and was extension of Silicon Hive's development team. Working remotely from Serbia or often on-site in the Netherlands, several projects were successfully completed, including DSP algorithms development and optimization, porting to specific DSP architecture and custom HW blocks development. Team formed in Serbia was integrated to Silicon Hive after two and a half years prior to Silicon Hive's acquisition by Intel Corporation.

From the set of other successfully conducted projects for EU and US companies, HTEC has delivered a prototype of new lighting system for PHILIPS Lighting, Eindhoven, The Netherlands, which integrates custom optics, algorithm and embedded electronics.

HTEC offers the flexible business models to its clients, thus being able to undertake complete independent product development or to supplement internal capabilities of its clients as external development partner or client team extension. As business becomes more competitive, time to market period and the price of engineering and development in addition with timeline become crucial, often the best solution for many companies is to outsource product development. That global trend was recognized by the HTEC and the company is now being able to offer complete service including:
- Software development (web and mobile applications),
- Custom Electronics, DSP and Embedded systems,
- Team Building.

www.htec.rs

About SIEPA

The Serbia Investment and Export Promotion Agency (SIEPA) was created in 2001 by the Government of the Republic of Serbia. Our mission is to support foreign companies seeking to set up or expand their presence in Serbia and Serbian companies doing business abroad. A staff of around 50 multilingual employees work out of the company's headquarters in Belgrade and handle projects from and to all over the world.

We provide professional consulting services to firms interested in setting up business operations in Serbia, focusing on all relevant issues in their decision making process. Our network of contacts can link investors to all levels of government as well as private service providers. We have created products such as suppliers databases and locations databases that enable us to provide quick and up-to-date information to our clients.

SIEPA also administers the most significant financial incentives program offered by the Government of Serbia. Between 2006 and the first half of 2010, we have granted €47 million to 114 projects which have created 17,000 new jobs and investments of over €600 million.

We would like to invite you to contact our expert staff which is ready to assist you and your business. SIEPA is ready to offer information on the general investment environment as well as targeted legal and industry-specific advisory services. Our services are tailor-made to best match your company's needs and requests. Working with us is simple, easy, and costs nothing.

Mr. Andrija Bednarik
ICT advisor

T: + 381 11 3398 644
andrija.bednarik@siepa.gov.rs

www.siepa.gov.rs