


**serbia**  
**smart**  
**solution**



ICT is one of the most vibrant and fastest growing sectors in Serbia, with a two-digit annual growth in the years prior to the crisis.

In 2010, the ICT market is awakening and domestic 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**

# Enter Serbia's IT Sector

## Introduction

Over the past few years, the development and promotion of IT services (such as mobile internet technologies and applications, 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 programme codes, 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 the foreign markets.

As the world market for IT 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.

“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 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
- Intel
- Redhat
- Ericsson
- Microsoft
- SAP
- Hewlett Packard
- Motorola
- Siemens
- IBM
- Oracle
- Telenor

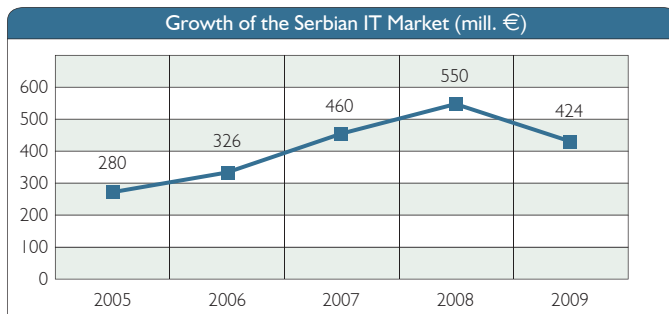
# Facts and Figures About Serbia's IT Market

A large number of Serbian IT companies offer very strong technical skills that have attracted partnerships with international firms and won them a place in high value market niches.

## IT Market in 2009

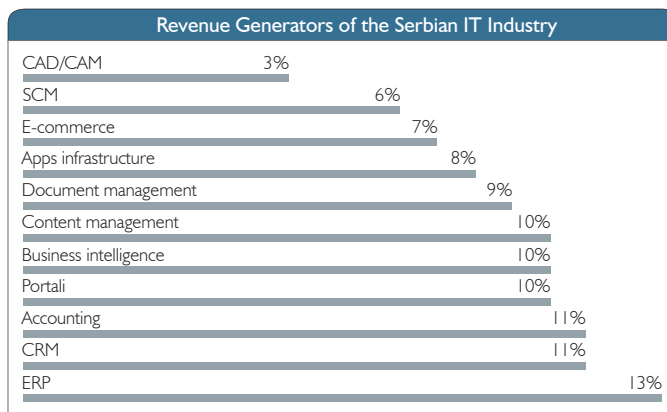
- There were around 1,544 Serbian IT companies with more than 12,000 employees.
- The average number of full time employees per company was 7.
- IT market revenue lowered to €424 million from 550 million in 2008.
- Export of IT services was around €130 million.

## The IT sector experienced explosive growth before the recession



Source: Mineco

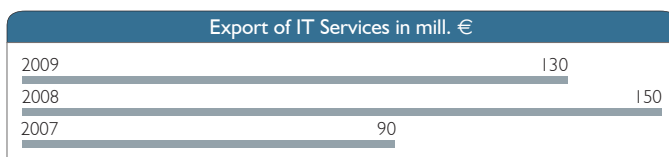
## IT sector growth of 11% p.a. 2005-2009 (37% in 2007)



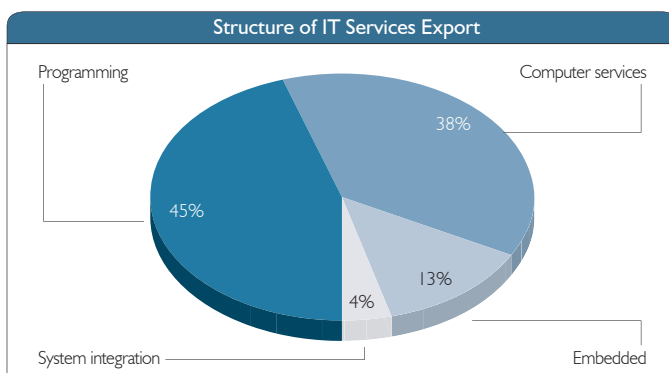
Source: Serbian Chamber of Commerce

## Serbia IT sector is well diversified across products and services

## Export of Services in the IT sector of Serbia



Source: Serbian Chamber of Commerce



Source: Serbian Chamber of Commerce

**Structure of IT Services Export in mill. €**

Computer services	47
System integration	0.5
Embedded	17
Programming	65
<b>Overall</b>	<b>129.5</b>

Source: Serbian Chamber of Commerce

**Structure of IT Services Export in Number of Companies**

Computer services	114
System integration	22
Embedded	66
Programming	260
<b>Overall</b>	<b>462</b>

Source: Serbian Chamber of Commerce

**Structure of IT Services Export in Number of Employees**

Computer services	2,143
System integration	1,020
Embedded	369
Programming	1,847
<b>Overall</b>	<b>5,379</b>

Source: Serbian Chamber of Commerce

# Main Capabilities and Expertise of IT Sector

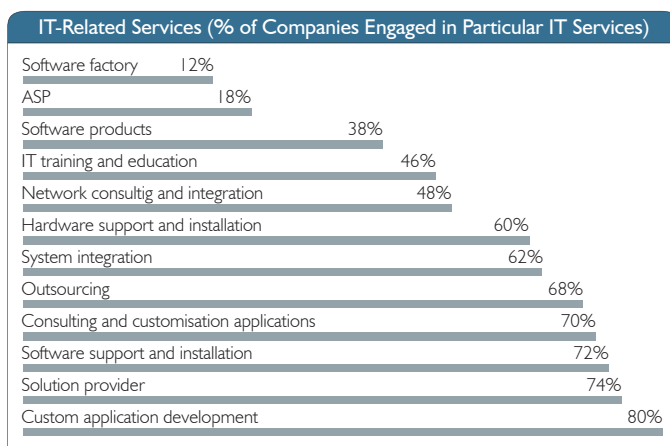
Serbian IT companies offer a number of operating solutions that provide them with a competitive advantage in the European market. For example, pervasive English language skills amongst the workforce and a business culture that has much in common with companies in the nearby EU markets. Serbia also possesses 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.

## IT-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 IT companies. The most common are:

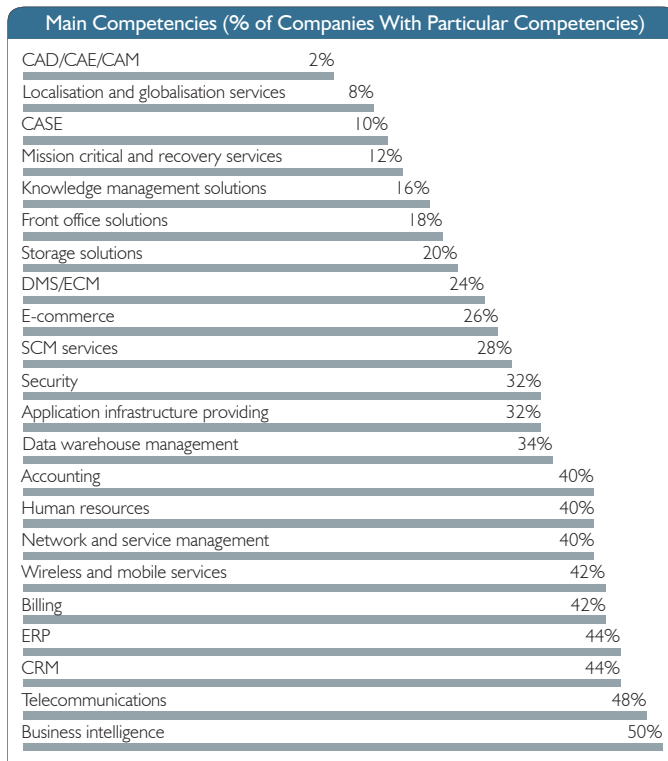
- custom application development;
- solution providing;
- software support and installation;
- consulting and customisation applications;
- outsourcing;
- system integration and others.



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

The main competencies of Serbian IT companies include:

- business intelligence;
- telecommunications;
- CRM;
- ERP;
- billing;
- wireless and mobile services;
- network and service management;
- human resources;
- accounting;
- data warehouse management and others.

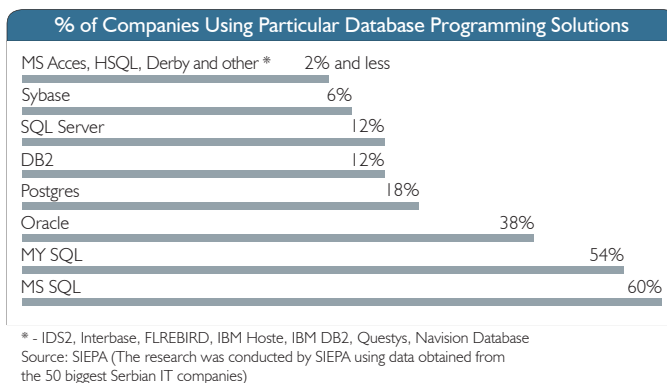
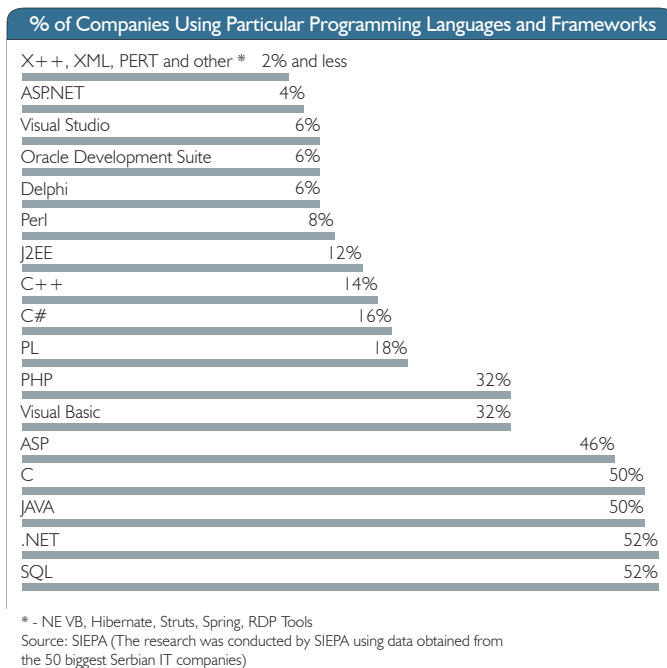


Source: (The research was conducted by SIEPA using data obtained from the 50 biggest Serbian IT companies)

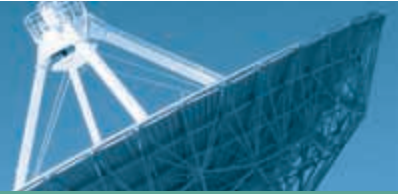
## Programming Languages and Database Solutions

Serbian IT 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. 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.



## ICT Infrastructure



89% of households in Serbia have fixed telephone lines, and the number of cell-phone users surpasses the number of population of Serbia itself by 30%, accounting to 9.60 million users (7.39 million citizens). 46.8% of households have computers, 39% use the internet, and 42% have cable TV, which puts the country ahead of certain member states of the EU. The Internet is mostly accessed by DSL (ADSL) connections (47.30%), followed by other Cable/LAN connections (24.50%) and WAP/GPRS (20%). In 2010, Internet access through modem/dial-up connections has decreased by 11.8%, as a direct result of recent investments in broadband infrastructure.

### **Broadband Access**

As far as the internet is concerned the most represented way of access to the broadband internet in Serbia is ADSL with the whole infrastructure for the access to the final users is the property of "Telekom Srbija". Still more than 20 internet providers in Serbia have license for international interconnections while the total number of internet providers in Serbia is 119. Business users can get optical cable connection in all major cities. Besides this, the connection to internet is possible by the cable modem i.e. the network developed and constructed by the cable operators, by the wireless networks with free usage of frequency bands on 2.4 GHz and 5.8 GHz frequencies and by the UMTS (3G) network of mobile operators. There are also other access possibilities by usage of new technologies like CDMA, HSPDA and IPTV.

### **Mobile Phone Networks**

Mobile phone networks in Serbia are widespread, geographically covering 90% of the country. Currently, there are three active providers – Telekom Srbija's MTS (owned by the Serbian Government) with 58.8% market share, Telenor (owned by Norway's telecommunications group) with 32.3% market share and Mobilkom (owned by an Austrian mobile operator; the latest provider to enter the marketplace) with 8,9% market share.

Reflecting this competitive situation, all of the providers are planning further infrastructure investments that will enable broadband services. Under such a scenario, demand for the Internet may skyrocket as people start using 3G connections to access the Internet and make good quality VOIP phone calls, as well as utilising the other features that the use of broadband offers.

### **Telephone Access**

Serbia has a relatively good voice telephone access, with a penetration rate of about 38% higher than the South East European average. Telekom Srbija provides a fixed telephone service in Serbia, together with two new operators, Telenor and Orion Telekom. Following major investments during the past few years, the company's operating system is now 97% digitised and some cities like Novi Sad are 100% digitised. Costs of basic telephone services are lower than in other South East European countries. Serbian consumers and businesses that only require very basic services enjoy low cost telephone rates for domestic calls throughout the country. Prices for international calls to countries in the South East European region are at an average level. There are more than 40 VoIP operators present on the market.

## ICT Education and Workforce

- 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 1,500 of creative and talented IT professionals produced yearly;
- Impressive number of prizes at the World Science Olympiads: more than 220 since 1968.

“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.

### Educated and Technically Skilled Human Capital

According to Skills Gaps Study which was done by USAID in 2008 technical skills are strong and stable (software development, hardware design, IT services and system integration), with total number of graduates in the technical areas relevant to ICT being 26,963 in 2005.

There are 17 universities in Serbia, 8 of which are state owned. Information technologies or related sciences can be studied in 4 state and 3 private universities. Most importantly IT and technical sciences remain popular among young people ensuring steady human capital supply to the industry.

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.

The good example is 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 have the turnover higher than 18 million € in 2007 and export more than 50% of their revenue.

Number of Graduate Students, Master of Science, and Phds					
Year	2005	2006	2007	2008	2009
Undergraduate Degrees	19,678	20,872	21,915	23,229	23,925
Masters Degrees	1,154	1,038	1,089	1,154	1,188
PhD Degrees	468	401	421	446	459

Source: SIEPA

## 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 €1,000
Full engineer (2 - 5 years of exp.)	Net salary €900; Gross salary €1,500
Senior programmer (over 5 years of exp.)	Net salary €1200; Gross salary €2,000

Source: SIEPA

## Development centers and scientific-technology parks

In September 2005, Microsoft established the 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 synergy 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;
- Law for Protection of Personal Data;
- Consumer Protection 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.

The image features a blue-tinted background of a circuit board. A large, solid black circle is centered on the page, containing the text "ICT Success Stories" in a white, bold, sans-serif font. The circuit board's traces and components, including a multi-pin connector at the top and a component with a glowing light at the bottom, are visible around the central circle.

**ICT Success Stories**

# 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 Jevrosimović**, President of ComTrade Group

# 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 Americas.

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

## 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 custom software solutions market. In 2009, Deloitte ranked EXECOM as 10<sup>th</sup> fastest growing technology company in Central Europe.

Since the establishment EXECOM developed partnerships with: Chess ibusiness, Vizada (ex. France Telecom Mobile Satellite Communications), Nedap, Vital Scientific, an ELITech Group Company, Thermo Fisher Scientific, ITRIS, WCC Group, Deep Blue, Icomasoft AG / Switzerland, IT Peak Networks / Germany, Salland Electronics, Clinical Data / USA, Vodafone / Czech Republic, MTS – Mobile TeleSystems / Russia and Belarus and many more.

### 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. Deep Blue now serve this market, with access to knowledge and the network EXECOM and Chess have built.*

*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 (for instance during the project startup phase). Communication is easy, using teleconference, chat and email. All communication is done in English, which is well spoken by the people at EXECOM.*

*In practice, by their own words, choosing Serbia-based company has worked out great for Deep Blue. Because EXECOM is able to supply a whole team with all necessary skills (project leader, architect, developers, tester and designer) it is possible to have EXECOM build software relatively quick and with good quality. There is no need to continuously check progress or to steer the team on a daily basis. 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 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.*

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

Gowi software development team was founded in 2000 and over time it has built a growing international client base. 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 expanding its business to new markets. In 2010 they have signed the contracts worth over 2 mil pounds and they are planning future investments that will ensure the future growth.

In 2005, Gowi started working for Abacus e-Media, the leading facilitator of online publishing in UK. For over five years 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 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 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 partner GOWI provides business solutions and advanced software development services based on Microsoft platform. 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 doo

## 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 technical and management field, invested decades of work and analysis into 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 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 joint venture Telvent DMS L.L.C. Novi Sad in 2008.

Today DMS Corporation comprising DMS Group and Telvent DMS, gathers 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 distribution 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 that manage over 60 Million customers.

DMS Software is highly efficient solution that optimizes electricity networks and reduces power peak load, while significantly reducing implementation costs and providing advanced solution for demand side load control. DMS Software is also used as 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 .

<http://www.telventdms.com/>

# 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.

# 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.

# High Tech Engineering Center - HTEC

## **“Rapid development of the IT start-up companies”**

Since its founding in September 2008, HTEC has experienced the fast growth in terms of engineering resources and “know-how” diversification, and in relatively short period of time became acknowledged and reliable outsourcing partner for clients from EU and US.

The core of the company is a team of young engineers specialized for embedded systems design, digital signal processing, hardware and software co-design, as well as advanced DSP algorithms development. HTEC currently engages thirteen engineers and is looking forward to expand its team further.

Maintaining relationship with The Belgrade University, The Faculty of Electrical Engineering, offering trainings and internships for the best students, HTEC has the possibility to select the best within Electronics and Software engineering.

For the past two years HTEC’s engineers have been working on various projects in domain of embedded systems design, including advanced algorithms development with implementation on DSP or FPGA platforms targeting medical, security and multimedia devices.

From October 2008, HTEC has been subcontractor of the Netherlands company Silicon Hive, a Philips Research spin-off. Projects that were and are currently carried out for Silicon Hive have provided the unique opportunity for young professionals from HTEC to work on cutting edge technologies that span from high-speed hardware platform design to the most sophisticated algorithms for digital signal (image and video) processing, optimization for vector processors and (multi)processor systems.

Beside cooperation with Silicon Hive, HTEC successfully conducted several projects for EU and US companies, including development of a prototype of new lighting device integrating custom optics, algorithm and embedded electronics development for PHILIPS Lighting, Eindhoven, The Netherlands.

As business becomes more competitive, time to market period and the price of engineering and development become crucial, often the best solution for many companies is to outsource product development. That global trend was recognized by HTEC management team that has the goal to position the company on the global IT service market.

HTEC intention is to develop the highest quality design solutions that find their place in the next generation products world-wide thus putting Serbia on the world map of high technology system design.



SERBIA INVESTMENT AND  
EXPORT PROMOTION AGENCY


The Serbia Investment and Export Promotion Agency (SIEPA) was created in 2001 by the Government of the Republic of Serbia to support foreign companies seeking to set up or expand their business presence in Serbia and Serbian companies doing business abroad. A staff of 40 multilingual employees working out of the company's headquarters in Belgrade handles 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 database and locations database, available at no charge on our web site. They enable us to provide quick and up-to-date information to our clients.

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.



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