Hidden Champions of Serbia

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Overview

Official name:	Republic of Serbia
Type of government:	Republic
Population in 2011:	7,258,745
Land area:	88,460 km ²

History

1918/1929	Unification of the former Austro-Hungarian Southern Slavs with
	Serbia in the Kingdom of Serbs, Croats and Slovenes.
1929	The kingdom becomes known as Yugoslavia.
1941/1945	Germany attacks Yugoslavia; Belgrade and other cities are bombed.
	The occupation has divided the country. Tito's government abolishes
	the monarchy and in 1946 declares a People's Republic of Yugoslavia
	with six states.
1948	Tito separates Yugoslavia from the Soviet Bloc and seeks economic
	assistance from the United States and Western Europe.
1989	Slobodan Milosević becomes president of Serbia.
1991/1992	Slovenia, Croatia, and then Macedonia declare independence.
1992	Bosnia and Herzegovina declares independence and a civil war starts.
	Formation of a new Federal Republic of Yugoslavia consisting of
	Serbia (with Kosovo and Vojvodina) and Montenegro.

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1995	Serbia accepts about 620,000 refugees (Serbs expelled from Croatia
	and other states).
1995	Dayton Peace Agreement.
1999	NATO bombing of Yugoslavia.
2000	The opposition beats Milosević in the elections.
2003	New official name of the country: State Union of Serbia and
	Montenegro. Prime Minister Zoran Djindjić is assassinated.
2006	Montenegro declares independence and Serbia is constituted as an
	independent state.
2008	The Stabilization and Association Agreement (SAA) is signed.
2009	Serbia applies for EU membership; EU unfreezes the trade agreement
	with Serbia and drops the visa requirement for Serbian citizens.
2010/2011	The European Parliament and many other countries ratify Serbia's
	SAA.

1 Introduction: Context

Serbia is located at the crossroads of Central and Southeastern Europe. This is considered a good position to develop as a transportation hub. Roads in Serbia provide the shortest link between Western and Central Europe on the one side, and the Middle East, Asia, and Africa, on the other. The country has a population of around 7.3 million. The Republic of Serbia has good potential for economic development, as the country is fortunate to have many natural resources and a lot of arable agricultural land. Belgrade, with a population of 1.6 million, is the capital city and Serbia's administrative, economic, and cultural centre.

In the former Yugoslavia, Serbia had the most developed automobile industry among all the countries of Central and Eastern Europe (CEE). Its annual production exceeded 100,000 vehicles. These were exported to the United States (as the "Yugo" brand) and many other countries around the world. Since the turbulent 1990s, Serbia's economy has been going through a transition towards a well-functioning market economy. A program of democratic and economic reforms has provided the basis for economic growth. In the period from 2001 to 2008, significant economic growth was achieved, (average annual economic growth was 5.24 %), together with reduced inflation, increased foreign exchange reserves, and exchange rate stability (Bosnjak 2011; World Bank 2013). GDP per capita shrunk by 3.1 % in 2009. Some data on economic growth are shown in Exhibit 1 below.

The main generators of growth were the service industries: trade, transport, storage and communications, financial intermediation, postal services, and telecommunications. Agriculture and manufacturing also contributed to economic growth to a certain extent. Rising living standards followed the growth of economic activity; GDP per capita in 2009 was almost four times higher than in 2001 (Serbian Chamber of Commerce 2011). The business community of entrepreneurs and SMEs in Serbia makes up 99 % of all enterprises. This sector employs two thirds of the total number of workers, and creates around 60 % of GDP. A comparative analysis of the

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	1999	2000	2001	2002	2003	2004	C002	2006	2007	2008	2009	2010	1107
GDP per capita (current \$US)	2,338.43	809.28	1,518.03	2,013.67	2,613.53	3,168.88	3,391.37	3,942.63	5,276.93	6,497.84	5,484.05	5,269.64	6,310.37
GDP per capita growth (annual %)	-10.88	5.68	5.48	4.17	2.94	9.56	5.72	4.01	5.83	4.24	-3.11	1.36	2.43
Long-term unemployment (% of total unemployment)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	71.13	n/a	n/a	n/a
Foreign direct investment, net inflows (% of GDP)	0.64	0.85	1.56	3.76	7.19	4.35			8.81	6.27	4.82	3.49	5.89
GDP (current \$US m)	17,632.71	17,632.71 6,082.79	11,390.47	11,390.47 15,102.57 19,550.78	19,550.78	23,649.85	25,234.41	23,649.85 25,234.41 29,221.08	38,952.09	47,760.58	40,147.70	38,952.09 47,760.58 40,147.70 38,423.27 45,819.56	45,819.56
Exports of goods and services (current \$US m)	3,086.44	3,086.44 1,451.06	2,425.99	2,962.73	4,359.10	5,556.70	6,606.11	8,729.78	11,884.36	14,842.27	11,800.40	11,884.36 14,842.27 11,800.40 13,406.75 16,531.73	16,531.73
Exports of goods and services (% of GDP)	17.50	23.86	21.30	19.62	22.30	23.50	26.18	29.87	30.51	31.08	29.39	34.89	36.08
Merchandise exports (current \$US m)	n/a	n/a	n/a	n/a	n/a	3,523.36	4,482.00	6,428.00	8,824.70	10,972.08 8,345.08	8,345.08	9,795.10	11,776.70
												ټ	(continued)

Hidden Champions of Serbia

Merchandise exports to high- income economies (% of total merchandisen/an/an/aexports) of total merchandisen/an/an/an/aof total merchandisen/an/an/an/aMerchandise exports)n/an/an/an/aMerchandise exports to developing economies in Europe & conomies in Europe & evorts)n/an/an/aMerchandise exportsn/an/an/an/aMerchandise evortsn/an/an/aMerchandise evortsn/an/an/aMerchandise evortsn/an/an/aMerchandise evorts15.5914.15n/aMerchandise evorts2.6115.59n/aMerchandise evorts14.1512.15n/aMerchandise evorts5.744.06n/aMerchandise evorts2.6916.9716.4223.14	2002 2003 20	2004 2005	2006	2007	2008	2009	2010	2011
n/a n/a n/a n/a 12.61 15.59 14.15 12.15 4.58 5.74 4.06 4.00 21.62 16.97 16.42 23.14	n/a	0.00 99.82	59.37	58.45	59.28	58.11	56.50	n/a
12.61 15.59 14.15 12.15 4.58 5.74 4.06 4.00 21.62 16.97 16.42 23.14		0.18	31.20	32.19	31.57	31.35	32.48	n/a
4.58 5.74 4.06 4.00 21.62 16.97 16.42 23.14	n/a	9.20	11.29	10.29	n/a	n/a	n/a	n/a
xports 21.62 16.97 16.42 23.14	n/a	3.98 2.97	2.31	2.04	n/a	n/a	n/a	n/a
incretationse exports)	n/a	20.62 19.75	19.04	18.61	n/a	n/a	n/a	n/a

Fuel exports (% 2.38 of merchandise exports)	2.38	0.26	2.64	3.41	n/a	2.40	3.66	3.51	2.62	n/a	n/a	n/a	n/a
Manufactures exports (% of merchandise exports)	58.80	61.42	62.73	57.30	n/a	61.71	64.15	63.68	65.93	n/a	n/a	n/a	n/a
High- technology exports (% of manufactured exports)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

Source: World Bank (2013)

Iron and steel	9.6 %
Non-ferrous metals	7.0 %
Cereal and products	5.8 %
Vegetables and fruits	5.4 %
Miscellaneous manufactured articles, dominated by weapons and various products	4.9 %
Clothing	4.2 %
Footwear	2.1 %

Exhibit 2 Serbian exports

Serbian SME sector and that of the EU has shown that Serbia is similar to the EU in terms of average number of enterprises, SME employment, turnover, and contribution to GDP. It is below the EU average in terms of turnover per employee, added value per employee, and profit per employee (Hadzic 2011; Szabó et al. 2010).

One of the main characteristics of Serbian foreign trade in 2010 was an export value growth of 25.1 %; Exports of goods amounted to 7,446.9 million euros. This growth stemmed mostly from higher exports of ferrous and non-ferrous metals, as well as agricultural products (see Exhibit 2). Serbia's most important trade partners are the EU countries, accounting for 4,272 million euros of exports or 57.4 % of the total. The country's second most important group of trading partners are the CEFTA countries, with whom Serbia had a 1,090.6 million euro trade surplus in 2010.

The ICT industry in Serbia is small, but with great potential. About 250 new ICT companies are set up every year, and more than half of that number are engaged in providing computer-programming services. The number of ICT companies increases by 20 % each year. There are many leading global ICT firms that have already made a decision to set up their businesses in Serbia, namely Cisco Systems, Ericsson, IBM, INTEL, Microsoft, Motorola, Oracle, Redhat, Siemens, and T-Mobile (SIEPA 2011). Microsoft opened its fourth R&D centre in Belgrade; the other three are in the US, China and India. Serbia is becoming one of Europe's most attractive ICT hot spots with a growth rate in the ICT sector of 18.9 % in 2008 (Serbian Chamber of Commerce 2011). Over the past few years, the development and promotion of ICT services, such as mobile telecommunications, Internet technologies, and data transfers, have increased significantly. The number of economic entities using and dealing with ICTs in Serbia is also growing, and currently there are around 2,700 ICT companies (SIEPA 2011).

Three groups of companies have been identified in Serbia: strong Hidden Champions (HCs), prospective HCs, and start-ups with emerging competitive advantages. The first group includes companies such as RT-RK CBS and EXECOM. The second group includes Novkabel, Duochem, PrviPartizan, and Copper Mill Sevojno. Serbia's start-up companies with an emerging competitive advantage, one of which is PlusPlus New Technologies, do not appear to have an analogue among Simon's HCs.

All strong HCs in Serbia are computing and telecommunication technologybased companies, established by professors and engineers from the Faculty of Engineering at Serbia's University of Novi Sad (See Exhibit 3). These companies

Name	Market leadership definition	Revenue 2010 (in €m)	Revenue 2000 (in €m)	Employees 2010
RT-RK	For the last 4 years a leader in EU, USA, Turkish, Israeli, and Russian markets in providing cost efficient software and hardware solutions for automating functional testing of multimedia devices, especially set-top boxes and TV sets	8	0.5	250
EXECOM	A leader in the Custom Software Solutions Market in Western Europe for the past couple of years	1.7	0.043	55
Novkabel	A leading cable producer, mostly for the electronic and telecommunications industries in former Yugoslav republic. From 2010, a leader in the CEFTA countries	2.5	25.5	600
DUOCHEM	A leader in biocides, rodenticides and insecticides in Serbia, with a 60 % share of the market	0.9	n/a	12
Prvi Partizan	Number one in Serbia in producing ammunition for the military, sport shooting, and hunting. In the top 5 in the North American and Western European market with its main products, ammunition up to 12.7 mm	45	12	708
Copper Mill Sevojno	First in Ex-Yugoslav republic region, and in the top 3 in Italy and Austria, in the production of construction sheets and industrial strips, made of copper and copper alloys	260	68	1,000
PlusPlus New Technologies	Leader in ex-YU countries as teletext system producer. Their teletext covers 100 % of the Serbian market and is present in all ex-YU countries (Montenegro 100 %, Macedonia 100 %, Bosnia 70 %, Croatia, and Slovenia). The market has expanded to Cyprus	0.1	n/a	6

Exhibit 3 Serbian hidden champions

Source: Authors of the chapter

were established during the turbulent times of the 1990s, characterized by embargoes and hyperinflation, or soon after that. To be profitable in those times, they turned to the ICT sector since it requires low investments, returns income from day 1, and in the long run yields scalable products.

2 Seven Case Studies

2.1 RT-RK Computer Based Systems LLC (RT-RK CBS)¹

Overview

Address:Fruškogorska 11, 21000 Novi Sad, SerbiaTel:+381 214801100Email:info@rt-rk.comWeb:http://www.rt-rk.com

Company Information

Industry:

Year of establishment: Sales revenue in 2010: Sales revenue in 2000: Average number of employees in 2010: Brain(s) behind the company: Computer programming, consultancy and related activities and partly research and experimental development in natural sciences and engineering 2005 €8 million €500,000 250 CEO Prof. Vladimir Kovačević

2.1.1 Nature of Market Leadership

RT-RK for the last 4 years has been a leader in the EU, USA, Turkish, Israeli and Russian markets, providing cost-efficient software and hardware solutions for functional testing of multimedia devices, especially set-top boxes and TV sets.

2.1.2 Nature of Competitive Advantage

The company's competitive advantage is its capability for design of both hardware and software solutions while competitors are focused on either of the two. This capability has been established through a strategic partnership and close ties with the University of Novi Sad. It has a twofold value: a strong advantage regarding price, and educating students in specific expertise needed by the company.

¹ http://www.rt-rk.com

2.1.3 Core Lessons Learned on the Path to Business Success

- 1. Establish strong discipline and a professional approach among employees. RT-RK has employed over 250 engineers capable of handling projects of different complexity and magnitude.
- Invest in innovation and close cooperation with universities. This ensures availability of experts and expertise.
- 3. Create a total product, integrating software and hardware.

2.1.4 RT-RK: Strong Hidden Champion

Until now there has been no standardization or single application capable of supporting all verification and testing processes in TV and set-top box production. Currently available solutions mainly take care of either the hardware or software part of the system and test management.

RT-RK CBS software engineers possess full-system knowledge of those devices, which is rarely the case, and are thus capable of providing full-device testing solutions. The advantages of its BLACK BOX TESTING² over other testing frameworks include reusability of existing infrastructure with different software IP blocks and hardware solutions. This provides significant cost and time savings.

RT-RK CBS's management team recognized a dramatic change on the market. The switch from analogue to digital transmission opened up many new opportunities but also changed and affected some of RT-RK CBS traditional customers, as today there are basically no TV manufacturers left in Europe.

"Having this in mind", said Nikola Teslić, CTO of the company and the mastermind behind its success, "our goals have been to develop different technologies that would address different markets, thus eliminating the single market threat. For example, in 2010 we brought our DLNA testing suite to the market, and the plan for 2011 is to have one of the first test suites for HbbTV, the new European standard for interactive services over the Internet. Externally, new-niche, highly specialized production facilities intended to serve solely EU markets, could be a great chance for us. If this trend continues, we will have greater opportunities, as the customer base will broaden to the 'neighbourhood'. Last but not least, our goal is to deepen cooperation with our biggest clients, ensuring stability of the core business".

From the beginning, RT-RK CBS has been an R&D company for product development in consumer electronics, communications, and multimedia. The focus is on excellent customer support during the project and product lifecycle, as well as close joint work on customers' products, sharing of successes and risks on the market, and providing attractive prices for different business models. To a large extent, RT-RK CBS is an ODM for big clients.

RT-RK CBS was officially founded in 2005 as a daughter company of a University spin-off named FTN-IRAM-RT, incorporated in 1991. In 2009 RT-RK CBS acquired a major ownership stake in MicronasNIT, a company owned by

² http://www.bbt.rs

Germany's Micronas GmbH, in order to consolidate its own operations and leverage sales in foreign markets.

"We have been able to increase exports using our relationship with Micronas GmbH. This joint venture has opened new markets and business opportunities through Micronas GmbH and their worldwide subsidiaries and business partners around the globe", Nikola Teslić said.

For the last several years, RT-RK CBS has been one of the leaders in providing cost-efficient software and hardware solutions for automating functional testing of multimedia devices, especially set top-boxes and TV sets, and has been actively serving markets in the EU, USA, Turkey, Israel, and Russia.

The main customers are the Tier-1 companies in the ICT industry, namely silicon vendors and OEM/ODM companies such as Micronas (15 years), Cirrus Logic (6 years), Vestel (5 years), Zoran (3 years), and others. Using a main transition wave,³ RT-RK CBS has positioned BLACK BOX TESTING as reliable software of so-called military quality.

Next, the short transition wave technology offers value for the clients by shortening time to market to only 3 to 4 months, and offering higher value for less money. Last but not least, this technology requires less severe investments into clients' fixed assets.

"In pursuit of a price-optimized testing solution, we developed two pricing models. Customers with well-defined requirements and project schedules are best satisfied with a 'fixed-price' business model. Why? Because in using this option, the customer pays a pre-negotiated fixed price for the turnkey project, with pre-set project deliverables. The second version is the 'time and material' pricing model, developed for long-term projects where the total effort cannot be estimated reliably in advance, and the scope of work varies considerably during the implementation", said Milenko Berić, CFO of the company.

To sum up: The company has fine-tuned the pricing models for big clients in such a way as to best meet their needs and create the most value with the smallest amount of resources. Such congruence can be reached only if all internal operations and employees' capabilities are matched to the requirements of the pricing models. First, all RT-RK CBS employees are strongly self-disciplined and highly educated; they have all the necessary expertise. In particular, the company employs 250 committed engineers capable of handling a variety of projects of different complexity and magnitude. Next, investment in innovation is a core driver behind the company's overall business model. In particular, more than 15 % of income is reinvested back into R&D. The company owns 30 patents and, remarkably, has created an average ROI of more than 80 % over the past 10 years. Last but not least, such a burst of innovation and creation was possible only because of a close partnership with Serbia's University of Novi Sad, which creates the latest ICT knowledge and supplies well-educated IT experts.

³ From CRT's to flat panel TVs, which meant a big change in the architecture of chips for flat panel TVs.

2.2 EXECOM⁴

Overview

Address:Bulevar Kralja Petra I 89, 21000 Novi Sad, SerbiaTel:+381 214770500Email:info@execom.euWeb:http://www.execom.eu

Company Information

Industry:	Computer programming, consultancy
	and related activities
Year of establishment:	1995
Sales revenue in 2010:	€1.7 million
Sales revenue in 2000:	€43,236 million
Average number of employees in 2010:	55
Brain(s) behind the company:	Managing partners Petar Ulić and
	Branko Milikić

2.2.1 Nature of Market Leadership

A leader in designing custom-made software solutions in Western Europe for the last few years.

2.2.2 Nature of Competitive Advantage

EXECOM builds its competitive advantage on standardized processes, investment in young people, building dedicated cells around clients, and keeping communication channels open and transparent inside and outside the company. The company is committed to satisfying the most demanding client requirements regarding ICT issues.

2.2.3 Core Lessons Learned on the Path to Business Success

- 1. Enter a niche market with solid domain knowledge. This will equip you with the capability to pursue more demanding, and hence more profitable, business opportunities.
- 2. Always stand out with the quality of your services and your expertise.

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⁴ http://www.execom.eu

- 3. To stay competitive, work with verified technologies. This will improve the software development process.
- 4. When working closely with clients, the need for innovation is driven by both parties. This mutual drive process creates an innovative approach resulting in efficient and reliable solutions.

2.2.4 EXECOM: Strong Hidden Champion

Deloitte ranked EXECOM in 2009 as the 10th fastest growing technology company in Central Europe, based on the percentage of revenue over a 5-year period. This growth has been generated through three main categories of software solutions: (1) for technical automation, (2) for telecommunications, and (3) for various data analyses, and processing and visualization. In general, the growth has been achieved because the company manages to come up with novel or improved ICT solutions in each of the three areas. One can say the growth was fuelled by continuous creation of innovative ICT solutions.

In the area of technical automation in particular, the company has developed a novel software platform for clinical and chemical analysts that can shorten the work time of operators by more than 25 %. Being a platform solution, its applicability extends to a wide range of analysts for different industry sectors.

In the telecommunications market, EXECOM created a novel back office solution for Telecoms, which enables faster and more efficient files exchange between operators, a clearinghouse, and inner partners. Next, it supports call event processing rules, and increases the efficiency of fraud management systems. Last but not least, the company has created a set of solutions that manage satellite communications, enabling efficient Internet and telephone access to vessels. This technology allows prepaid phone cards to be sold online aboard clients' vessels, and is instrumental in solutions for remote assistance to companies and other users of web platforms.

This wide range of innovative ICT products, and the growth of the company over the last 5 years, is to some extent a reflection of market dynamics. Over the last decade, the market for custom software solutions has been growing significantly, both in turnover and in prices. This trend has been most apparent in Western Europe, the core market region for EXECOM. Put differently, EXECOM's business system is well designed to satisfy ICT system requirements for any company, however unique in its demands.

Mr. Petar Ulić, a EXECOM managing partner, emphasized the importance of relationships with clients: "Our business logic is fairly simple: we build unique relationships with our clients, which results in a growing network of partners. To implement this business logic successfully, we invest a lot in our young experts. We train them and expose them to a wide range of challenging projects, where they can gather experience in ICT knowledge frontiers. Dealing with state-of-the art technologies is a powerful motivation; therefore, we practically have no braindrain, though our people are trained professionals and employable all over the world".

EXECOM embarked on international expansion in 1999. Consequently, big clients were found in the Netherlands, Germany, Sweden, the UK, France, Switzerland, Austria, the Czech Republic, Italy and Russia. Each regional customer created a new set of business opportunities through word-of-mouth recommendations. In parallel with its internationalization, the company established offices in the Czech Republic in 2001 and the Netherlands in 2006.

EXECOM is striving to make the right strategy decisions. Ms Aleksandra Popara, the Marketing and Communications Manager, says: "We thoughtfully consider competitors, as well as present and potential barriers to entry, before committing ourselves to entering a specific niche. In general, the less competition, the better. Next, the closer the niche to our knowledge domain, the better". In that way, despite continuous expansion to novel niches, the company manages its risks. EXECOM enters only low-competition niches for which it has the required knowledge.

EXECOM teaches us that innovation, expert knowledge, flexibility in handling a diverse customer base, integration into customers' business systems, and expansion into new low-competition niches, where the required knowledge corresponds to the company's expertise and the existing competition is weak, appears to be a winning formula in the ICT business. Many of the elements of this formula may work effectively in other industry settings as well.

2.3 Novkabel⁵

Overview

Address:	Industrijska bb, 21000 Novi Sad, Serbia
Tel:	+381 21442852
Email:	info@novkabel.com
Web:	http://www.novkabel.com

Company Information

Industry:

Year of establishment: Sales revenue in 2010: Sales revenue in 2000: Average number of employees in 2010: Brain(s) behind the company: Electrical machinery and optical equipment 1921 €2.5 million €25.5 million 600 CEO, Dragan Cvetković

⁵ http://www.novkabel.com

2.3.1 Nature of Market Leadership

A leader in the production of cables, mostly for the electronic and telecommunication industry in the Western Balkan region. Since 2010, the company's market leadership has expanded to CEFTA countries. The business has also expanded to Russia by developing a new type of cable, customized to suit customer needs.

2.3.2 Nature of Competitive Advantage

The company is concentrating on contract manufacturing and focusing on specific types of cables and sub-specialization. After signing a preliminary agreement, development of a particular type of the cable is carried out together with the client. Novkabel's flexibility and expertise in manufacturing, along with entrepreneurial business skills, are its key business competence.

2.3.3 Core Lessons Learned on the Path to Business Success

Novkabel is a company whose products are input components for other manufacturers. It operates mostly in markets where there are a small number of large customers. To succeed in this environment, try to:

- 1. Increase market share through a proactive approach and strong leadership. Persistency and belief in success are important.
- 2. If doing business with big powerful clients, customize your products to meet their needs completely; and above all, exceed their expectations, meet deadlines, and provide quality superior to that of your competitors.
- 3. Nourish strategic business relationships with core customers as you would with your own children.

2.3.4 Novkabel: Prospective Hidden Champion

Founded in 1921, Novkabel is the oldest cable producer in the Balkans. Being one of many companies that produce components for everyday products, it can be said to be in the commodity business. Its products are used in a wide range of industries: construction, power distribution, telecommunication, oil industry, mining, automobile, railways, shipbuilding, and aeronautics. Exports go mainly to industries located in CEE, where transportation costs do not exceed the benefits created by a favourable cost/price ratio. However, Novkabel is an absolute leader in terms of market share in the ex-Yugoslav Republic, especially in supplying cables for the electronics and telecommunication industries.

In the beginning, when Tayloristic scientific management was still in its infancy, production was mostly artisan; only 14 workers produced simple cables. The company continued to develop its management expertise and cable technology, and in the 1960s it built new facilities. During the 1980s the factory went through a second phase of development and expansion, which included a longer list of products, and thus created considerable growth in sales. In parallel with the transition of the political regime, the ownership of Novcabel changed in the 1990s. In 1998, the company was transformed from a collectively-owned business entity to a joint-stock company. During the last decade it went through another major business transition and survived the turmoil. In particular, the transition

period until 2009 had led to falling levels of production and loss of markets. In 2009, restructuring and new investments brought about a successful return to a competitive position in CEE.

So, what was the entrepreneurial spirit that created such a comeback for Novkabel? First and foremost, the company leveraged the advantage of its inherent knowledge and years of experience in the cable business, and added these to novel marketing approaches. Most importantly, Novkabel created a passion for growth and development among its employees.

To some extent a tipping point was reached when the company's management made the decision to serve as an ODM for big customers; that is, to design new cable solutions when large quantities of specific products are requested. The company has also extended into contract manufacturing, creating some novel technological solutions along the way.

To sum up: company's flexibility and expertise in manufacturing are its key business competencies. Novkabel has the capacity to satisfy the cable requirements of a diverse range of customers. Now, the main strategic direction is to build up close, trust-based strategic partnerships with customers, so as to share the risks and be successful in an unpredictable future.

2.4 DUOCHEM⁶

Overview

Address:	Ruzveltova 38, 11120 Beograd, Serbia
Tel:	+381 113440493
Email:	office@duochem.rs
Web:	http://www.duochem.rs

Company Information

Industry:

Year of establishment: Sales revenue in 2010: Sales revenue in 2000: Average number of employees in 2010: Brain(s) behind the company: Manufacture of pesticides and other agrochemical products 2000 €900,000 n/a 12 CEO and founder, Suren Husinec

⁶ http://www.duochem.rs

2.4.1 Nature of Market Leadership

A leader in the marketing of biocides, rodenticides and insecticides in Serbia, with 60 % of market share.

2.4.2 Nature of Competitive Advantage

DUOCHEM's advantage is its in-house production of basic raw materials, which gives the final products an advantage over those of competitors in terms of quality and price. In addition, the company's manufacturing process complies with highest environmental standards, which places DUOCHEM miles ahead of its local competition. Furthermore, the company has developed partnerships with other providers so that customers can buy whatever chemical product they need at one outlet.

2.4.3 Core Lessons Learned on the Path to Business Success

- 1. Build up knowledge, experience, and professional networks in top academic and industrial labs all over the world (Serbia, Scotland, USA, France and Armenia).
- 2. Leverage a strong scientific background in business by promoting your scientific innovation in professional circles that can provide you with good business opportunities. Then, pursue these opportunities.
- 3. Be demanding but fair; be modest, motivated, and persistent. Be willing to implement the highest standards whether manufacturing products for global or niche markets.

2.4.4 DUOCHEM: Prospective Hidden Champion

Only a few companies in the world, including DUOCHEM, synthesize generic active ingredients⁷ for producing rodenticides; most are just formulators that buy active ingredients to manufacture, and then sell, final products.

"It may not be prestigious to be in the business of producing rodenticides and insecticides; hence the majority of companies in our business only carry rodenticides and insecticides as part of their product list. I spotted this low attractiveness of rodenticides and insecticides, and see it as an opportunity to use my expert knowledge in chemistry and turn it into something profitable", said CEO and founder of DUOCHEM, Mr. Suren Husinec.

As a scientist and chemist with an international reputation, Mr. Husinec has implemented a scientific approach acquired through years of experience in the world's best laboratories. While working as a scientific advisor at the University of Belgrade, he came up with an innovative technological process for producing basic raw materials, active ingredients, and finished products. The idea of applying this process to an unattractive product—where the competition is scarce—might be a formula for success, and so he founded DUOCHEM in 2000 as a spin-off company of the university's Institute of Chemistry, Technology and Metallurgy.

⁷ Coumatetralyl, Bromadiolone and Brodifacoum.

Rodenticides, a niche-market product, were introduced to markets outside Serbia through personal, academic contacts who recommended the company to major distributors all over Europe. These distributors are powerful companies, covering multi-billion dollar markets not only in Europe but also abroad.

Nowadays, DUOCHEM's market share in Serbia is 60 %, while the strongest local competitor has 20 %. DUOCHEM's share in CEE, Western Europe, and other parts of the world is still very small; however, the company's reputation is spreading rapidly and it is only a question of time, and maybe some luck, when this reputation will be transformed into market share. The problem of low market share is partly due to country-specific regulations.

As Mr. Husinec emphasized, "Such products are subject to local country registration procedure and hence regulation. This is a time-consuming process that requires heavy investment, sometimes not feasible for smaller companies. However, we have filed for a set of country registrations; so in 2012 we expect our exports to rise sharply".

In addition, the market of biocides, rodenticides and insecticides has changed over the last decade in terms of size, volume and prices, particularly in Europe. Newly introduced legislation in the EU, based on the safety of products and environmental protection standards for manufacturers, has resulted in a big cleanup of products and processes. Those products and manufacturers not complying with new safety and environmental standards will soon be forced out of this competitive game. Expectations are that prices will go up because of the heavy investment needed to meet new standards. However, DUOCHEM has an advantage over many of its competitors, being a relatively new and flexible company without the need for specialized investments. Its upfront design production capacity to deal with new environmental protection standards has created a cost advantage and competitive pricing.

Last but not least, though specializing in rodenticides and insecticides, DUOCHEM wanted to create a one-stop shop; hence it concluded a set of cooperative agreements with several well-known manufacturers across the EU. Nowadays, DUOCHEM can satisfy a range of customer demands in one place.

DUOCHEM's success story is different from that of the previously discussed HCs. It involves a set of strategic decisions that can be summarized as: (1) Innovating the process for manufacturing established product categories, (2) specializing in product categories that appear to be unattractive to the competition, (3) making investments that take into account future regulatory requirements, and (4) creating partnerships to build up customer satisfaction in the "one-stop" environment.

2.5 Prvi Partizan⁸

Overview

Address:Milosa Obrenovica 2, 31000 Uzice, SerbiaTel:+381 31563442Email:office@prvipartizan.comWeb:http://www.prvipartizan.com

Company Information

Industry:	Machinery and equipment production
Year of establishment:	1928
Sales revenue in 2010:	€45 million
Sales revenue in 2000:	€12 million
Average number of employees in 2010:	707
Brain(s) behind the company:	Dobrosav Andrić

2.5.1 Nature of Market Leadership

Prvi Partizan is number one in Serbia in the production of ammunition for the military, sports shooting, and hunting. Its main product—ammunition for guns below 12.7 mm caliber—places it among the top-five companies in its sector in the North American and Western European markets.

2.5.2 Nature of Competitive Advantage

The company has experienced, highly-educated and professional personnel who provide customer satisfaction in terms of quality, quantity, and conditions of production, as well as the ability to transfer knowledge, technology and equipment to a "turnkey" project.

2.5.3 Core Lessons Learned on the Path to Business Success

- 1. Exceed professional standards set by international regulatory bodies.
- 2. Invest in the development of a global network of customers. This network will attract new customers.
- 3. Relate brand visibility with the functionality and reliability of your products, and with competitive prices.

⁸ http://www.prvipartizan.com

- 4. Trace market trends and standards, especially in the area of environmental protection, and invest in them proactively, for example in research and development of so-called ecological ammunition.
- 5. Build up turnkey services. These have placed Prvi Partizan among the most important producers of ammunition in the world.

2.5.4 Prvi Partizan: Prospective Hidden Champion

Prvi Partizan has been a leading producer of ammunition for military, sports shooting, and hunting in Serbia for more than 80 years. Its strongest market position is in ammunition for guns below 12.7 mm caliber, where Prvi Partizan is among the top five companies in North America and Western Europe. However, this market leadership position was achieved only after the company gained the trust, and developed a global network, of customers and dealers. Potential clients were approached mostly at fairs. The company nowadays receives 97 % of its total sales revenue through exports, while 10 years ago this figure was only 30 %.

Overall, Prvi Partizan's ammunition is highly valued because of its quality, reliability, and safety in accordance with NATO standards. The company has built a state-of-the-art factory where, apart from ammunition, the production programme includes a wide range of commercial and military firearms, including pistols.

However, customers in core markets have recently become very choosy because of a decline in their purchasing power, especially for commercial ammunition. A core objective of the company is therefore to reduce operating costs and increase operation efficiency. Part of the innovation process involves the development of new, so-called ecological ammunition, done in collaboration with partners.

Prvi Partizan is one of the senior companies to have the potential to skyrocket among the real HCs, especially if it succeeds in its product innovations and experiences some luck.

2.6 Copper Mill Sevojno⁹

Address:	Prvomajska bb, 31205 Sevojno, Serbia
Tel:	+381 31594–340
Web:	http://www.coppersev.com

⁹ http://www.coppersev.com

Company Information

Industry:

Year of establishment: Sales revenue in 2010: Sales revenue in 2000: Average number of employees in 2010: Brain(s) behind the company: Manufacture of basic precious and other non-ferrous metals 1952 €260 million €68 million 1,000 CEO Marko Mitrović

2.6.1 Nature of Market Leadership

First in the Western Balkan region and in the top three in Italy and Austria in the production of construction sheets and industrial strips from copper and copper alloys.

2.6.2 Nature of Competitive Advantage

The company has vast experience in copper fabrication. Because of the important role of its products for customers' businesses—usually they create the A type of costs—maintaining and improving product quality are critical competencies and key to the company's success.

2.6.3 Core Lessons Learned on the Path to Business Success

- 1. If you are in a business where your raw material prices are determined by the economic situation of the region, and these prices can make the difference between success and failure, then develop close ties with your customers.
- 2. When external changes, such as drastic increases in the price of raw material or the actions of your competition, destabilize your business system, focus all your attention on maintaining system stability, both in terms of production and finances.
- 3. If you are in the commodity business, it is not enough to stay competitive only on price; make sure you are also superior in product quality, delivery, and payment terms.

2.6.4 Copper Mill Sevojno: Prospective Hidden Champion

Copper Mill Sevojno, as the name suggests, is in the business of manufacturing products from copper and copper alloys, including industrial sheets, strips, tubes, rods, and bars. These products are indispensable to a range of industries from engineering to electro-technics and electronics.

Copper Mill Sevojno is also one of the oldest ex-Yugoslav companies, set up in 1952 to support the industrialization of the country. Initial production capacity was around 25,000 t/year, delivered by 5,000 employees. This low productivity was subsequently improved over the years by expansion of capacities and technological improvements towards total automation of the production. In 2000, the company created 68 million euros in revenue with 1,000 employees and more than 60 % of its

sales were achieved abroad. In 2010 the company's revenue was approximately 260 million euros and exports had increased to 90 % of sales. This made Copper Mill Sevojno the largest copper and copper alloys manufacturer in the region, and one of larger factories of this type in Europe.

What drove such fast growth? The success was an outcome of years of experience in the copper business, technological improvements in the production process, increased market orientation, and flexibility in pursuing business opportunities. Recently, an increase in raw material prices and increased competition—partly induced by large fixed costs—refocused the company's attention on cost control and operational efficiency. As a consequence, the workforce was downsized and existing capacities were improved through reorganization. Altogether, these strategic decisions resulted in good business results for the company, including strengthening of relationships with customers.

Again, the case of Copper Mill Sevojno is one of those HC stories that teach us how to come out of a recession as a winner, and how to balance conflicting investment demands between customers and innovation with cost efficiency and control.

2.7 Plusplus New Technologies

Overview

Address:	38 Takovska St., Beograd 11120, Serbia
Tel:	+ 381 113294945
Email:	kontakt@plusplusnt.rs
Web:	http://www.plusplusnt.rs

Company Information

Industry:

-	and related activities
Year of establishment:	2002
Sales revenue in 2010:	€100,000
Sales revenue in 2000:	n/a
Average number of employees in 2010:	6
Brain(s) behind the company:	Gvozden Marinković

2.7.1 Nature of Market Leadership

PlusPlus NT was the first local teletext system producer in the Western Balkan market. It is a leader in the region, with its teletext covering 100 % of the Serbian and Macedonian markets and much of Croatia, and Slovenia. PlusPlus NT is now expanding into Cyprus and other countries in the region.

Computer programming, consultancy

2.7.2 Nature of Competitive Advantage

PlusPlus NT is a small company experiencing stable development in a very competitive and dynamic ICT market. The most important competence of PlusPlus NT today is its ability to combine experience in different areas of ICT and design of teletext systems. Hence, the company's products and services are characterized by a good price-quality ratio.

2.7.3 Core Lessons Learned on the Path to Business Success

- 1. If you are a young and small company, be patient and persistently build up your experience, range of products, and service offerings. If you survive long enough, success will follow.
- 2. When trying to work out long-term partnerships, you need to meet all deadlines and quality requirements before the first transaction.
- 3. Successful cooperative development efforts are the best marketing tool to win more business.

2.7.4 PlusPlus NT: Start-Up Hidden Champion

When using teletext, one rarely reflects on how it is created, but people from PlusPlus NT know a great deal about its production. In fact, most customers from ex-Yugoslavia countries use teletext created by this small company from Serbia.

The company's origins go back to PlusPlus, founded in 2002 as a computer engineering company. It was a business incubator for PlusPlus NT. In the early 2000's, teletext services were relatively new on the Serbian market, and only a few imported expensive systems existed. In cooperation with a smaller hardware company, PlusPlus developed a user-friendly teletext solution based on open source technologies. In 2009, the company was incorporated and introduced these teletext systems and a wide range of other ICT products, including systems for live betting and Internet betting, software for traffic cadastres, portals for tourist agencies, systems for mobile marketing via Bluetooth technology, and systems for call centres. Employees were mainly young enthusiastic experts specializing in different ICT areas. They worked closely with engineers from the School of Electrical Engineering at the University of Belgrade.

This new teletext system has captured 100 % of the market share in Serbia, Macedonia, and Montenegro, as well as 70 % of the market in Bosnia. Furthermore, PlusPlus has the potential to take over market leadership in Croatia and Slovenia. The main buyers are TV stations that prefer the teletext system on a turnkey basis. Betting companies are also important buyers.

About 5 % of the company's average income is invested in R&D. However, PlusPlus NT does not have patents, as intellectual property rights are difficult to protect in the IT sector. Product development is often based on open-source technologies. The main drivers of innovation are the technological competencies of the company that it uses in its attempts to address under-satisfied customers. Apart from employees and their associates from the University, stakeholders are also often involved in the innovation process. Very often, clients finance the innovation process themselves, so that they are also heavily involved in generating ideas and requirements.

Cooperative, innovative networks between employees, external associates, customers and stakeholders appears to be the most important driver of success for many ICT start-up champions, not just PlusPlus NT. Together they create the product that they aspire to see.

Conclusion

Although there have been many historical turbulences in the region, we can conclude that Serbia has companies that can be globally competitive. It is difficult to come up with numbers and general conclusions when there are only two real HCs (RT-RK CBS and EXECOM) in our sample. Still, some interesting features worth mentioning.

In terms of growth and market leadership, Serbia's HCs have the same characteristics as Simon's (Simon 2009). The goals of Serbia's HCs are based on great visions, established very early on and maintained over the long term. Their flexibility is not sacrificed for efficiency. Their market leadership is based on superior performances, not aggressive pricing. Their revenues have increased consistently over their lifetime.

Serbian HCs operate in narrowly defined niches in which they invest all their knowledge, resources, and professional networks. The choice of market niches is based on professional knowledge, in-depth-understanding of the industry, and a passion to create novel products. Many HCs manufacture products that serve a wide range of industries.

Serbian HCs pursue globalization early on in their lifetime. They focus predominantly on Western European and CEE markets. They enter foreign markets either through their own subsidiaries or joint ventures. The latter strategy is preferred over the former when the partnership creates synergies in distribution or reduces the risks typical of new ventures.

Long and close relationships with customers are also an important driver of success. Customer requirements are usually both performance and priceoriented; hence Serbian HCs compete well in both fields. In general, dependence on core customers is high, since on average more than 50 % of the HCs' revenues are created by their top three to five customers.

Serbian HCs gain their market leading positions predominately through innovations. These are equally technology and market-driven. The two strong Serbian HCs, RT-RK CBS and EXECOM, invest 15–37 % of their revenues in R&D and have an average ROI of 56–80 %.

Serbian HCs are well-informed about their competitors in world markets. The ties that they have with the University and its student scholarship programs create excellent competitive advantages by educating and developing highly specific experts.

Serbian HCs are completely convinced that their companies are very attractive to highly skilled workers. CEOs have been staying at the helm for a long time. Their personalities, vision, and commitment are very strong drivers of success. As for the group of potential HCs (Novekabel, DUOCHEM, Prvi Partizan and Copper Mill Sevojno), three of them have been producing for their markets for 60–80 years. They have been through rough times and are now each finding a way to regain a market leadership position. They have sustainable business practices and growth because they pay attention to market trends, implement a marketing approach, make internal changes, find niche market products, and customize them to customer needs. Finally, they are all characterized by strong leadership or entrepreneurship.

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