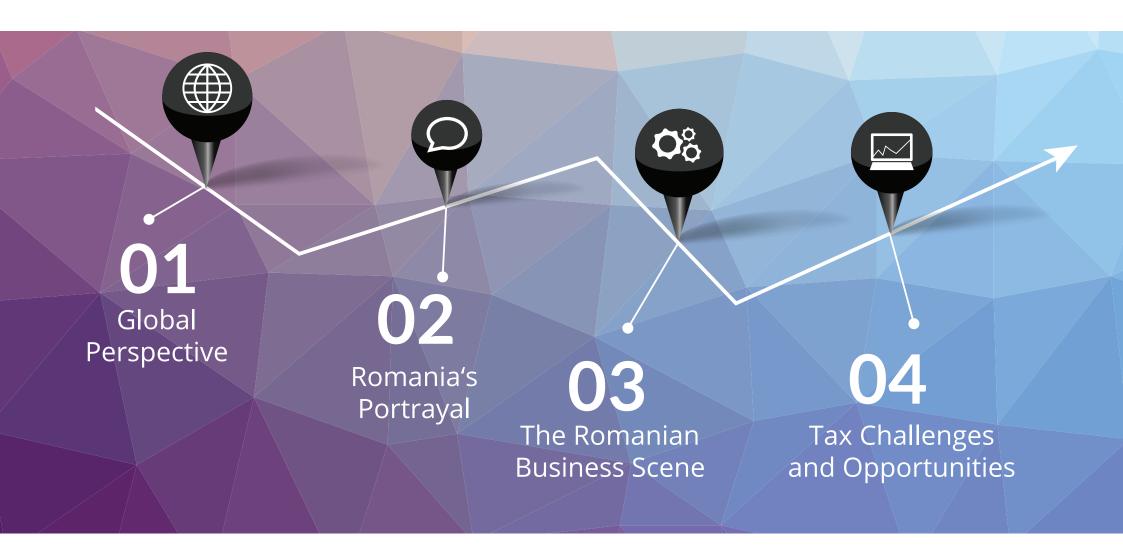
## ROMANIA'S SOFTWARE MARKET & ITS POSITION ON THE GLOBAL MAP







### **Foreword**

Dear Partner,

We are pleased to present you our first report on an industry segment, i.e. Romania's Software Market and Its Position on the Global Map.

With its specific regulations and exemptions, the software market intrigued us, so we started to investigate it both from the macro and micro point of view and it turned out to be an exciting area to explore. We discovered paradoxes, new - maybe unthought of by many - competitors for Romanian software companies, valuable insights from people representing the workforce demand and offer, i.e. companies and university, the country's huge, but latent, potential. Based on the TPSoft database, we found out that the average number of employees for Romanian software companies is between 5 and 19, that the computer consultancy sub-sector (NACE code 6202) has been the most efficient in 2013 - i.e. average revenue/ employee - and we have been able to illustrate the evolution of operational losses by NACE codes from 2009 to 2013.

This report also includes the tax challenges and opportunities witnessed by IT companies. As transfer pricing specialists, we focused on the transfer pricing issues encountered by software companies part of a group and it includes valuable insights comments regarding the expected profitability of a captive software service provider by the Romanian tax authorities.

It is only with your input and your support that we can improve this paper and add value to the following ones. Your feedback and comments will be much appreciated, so please let us have your opinion to adrian.luca@transferpricing.ro and roxanageorgescu@icloud.com.

A special word of thanks to the contributors to this project, who accepted to take part to discussions on the software market.

With best regards,

Adrian Luca Partener - Transfer Pricing Services Roxana Georgescu International Market Research Expert & Innovation Strategist





## **Contents**

Foreword	<b>&gt;&gt;</b>	02
Global Perspective	<b>&gt;&gt;</b>	04
Romania's Portrayal	<b>&gt;&gt;</b>	12
The Romanian Business Scene	<b>&gt;&gt;</b>	26
Tax Challenges and Opportunities	<b>&gt;&gt;</b>	38
Conclusions	<b>&gt;&gt;</b>	41
References	<b>&gt;&gt;</b>	42



## **Global Perspective**

- >> Regional Distribution of the Software Market Revenue
- >> Global Outsourced Services Revenue by Service Type
- >> Global IT Trends
- >> Global Outsourcing Trends for 2015
- >> The CEE Shared Services and Outsourcing Market Quick Look
- >> Romania's New Competitors on the Outsourcing Market





IN THE SOFTWARE INDUSTRY, LOOKING IN YOUR OWN "YARD" IS NOT ENOUGH.

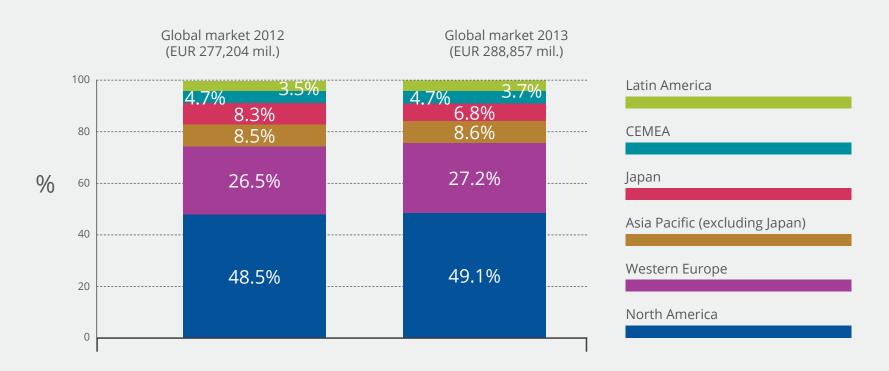
ONE MUST GET TO KNOW THEIR OWN "VILLAGE", AS WELL AS OTHER "VILLAGES".





## Regional Distribution of the Software Market Revenue 2013 vs. 2012

In 2013, the global software market experienced an EUR 11,653 mil. increase vs. 2012, the big contributors being North America and Western Europe. Asia Pacific, Latin America and CEMEA covered 80% of Japan's decrease. With the highest positive change, Latin America gained 7.03% more than in 2012, compared to CEMEA's 3.80%.



Data source: Statista

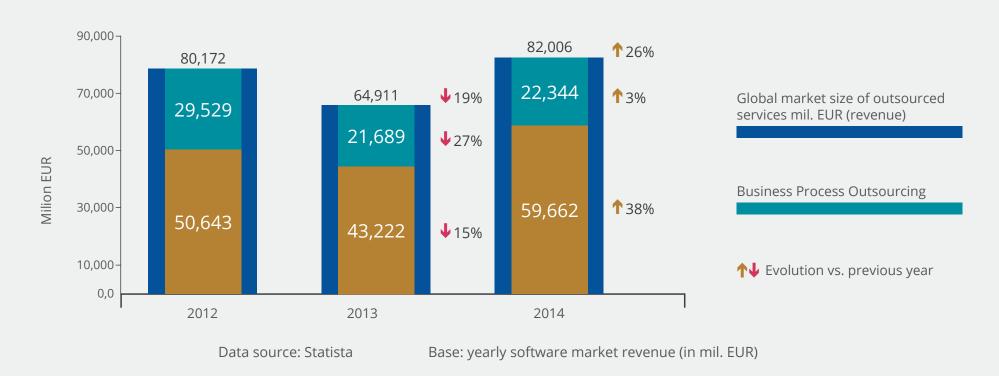
Base: yearly software market revenue in EUR mil.





# Global Outsourced Services Revenue by Service Type 2012 - 2014

Business Process Outsourcing (BPO) was affected by the global economic slowdown, decreasing with 27% in 2013 and managing to rise only by 3% in 2014. Overall, the outsourcing market recovered in 2014, with 2.3% above the 2012 level, thanks to Information Technology Outsourcing and coming mainly from Europe, the Middle East and Africa, followed by the Americas. A much smaller share of global revenue came from the Asia Pacific region.







#### **Global IT Trends**

According to Computerworld's Forecast Study 2015, as businesses will show more interest in implementing new technologies, IT budgets will increase with 13.1%, on average, to be allocated to security technologies, cloud computing, business analytics, application development, upgrades or replacement, mobile/ wireless devices and mobile device management systems.

Areas¹ where spending is expected to decline include hardware, legacy systems modernization/ replacement, data centre consolidation/ optimization, on-premises software, unified communications technologies such as email, instant messaging, telephony and videoconferencing, storage.

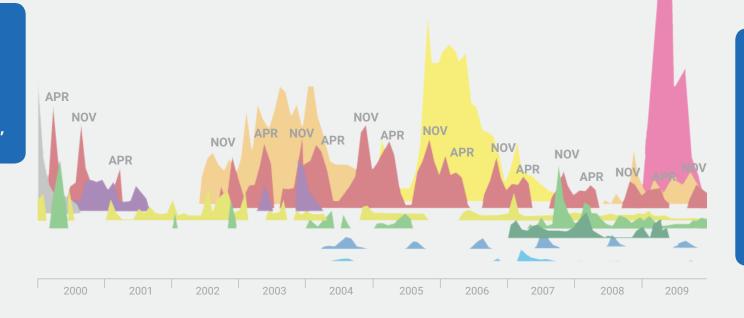
When it comes to new technology,

business leaders

don't know what

they don't know.

Barr Snyderwine, Hargrove Inc.



The demand for Big Data and Machine Learning is rising. Some colleagues have been invited to train Adobe and BitDefender's staff.

> V. P., Lecturer, Universitatea Politehnica Bucuresti<sup>3</sup>

<sup>&</sup>lt;sup>1</sup> Computerworld Forecast Study 2015 <sup>2</sup> Image: A Timeline of media global panic from "The Beauty of Data Visualization", David McCandless, TED Talks. <sup>3</sup> Personal interview





### **Global Outsourcing Trends for 2015**\*

**PARTNERSHIP** Customers are looking more for real partners, not just service providers

**CLOUD** Will continue to be a trend in 2015, providing accessibility, scalability and cost efficiency. More general cloud

computing and storage solutions will progress down to two distinct paths: a faster one, for new applications designed to optimise the cloud infrastructure just from the start, and a slower one, on which existing applications

are ported to the cloud infrastructure

**STANDARDISATION** Cloud, utility computing and virtualisation will converge in 2015 and wil create the new paradigm for IT outsourcing

**RENEGOTIATION** According to Stanton Jones, ISG, more than EUR 92 billion worth of outsourcing contracts will be renegotiated

**SUPPLIER RISK** Companies will be more attentive to their IT supplier's risk, as a result of the political and economic instability in

countries such as Russia and Ukraine

**MULTISOURCING** "The number of service providers each company uses will grow dramatically, driven by growing popularity of cloud,

in general, and Software-as-a-Service (SaaS), in particular", considers Scott Feuless, ISG. "Integration is absolutely

critical and is likely to be the key differentiator between one organisation's IT effectiveness and another's."

**BUSINESS CUSTOMERS** More technology services will be purchased by business leaders rather than the IT sector

**RFP'S FADING** With new emerging technologies becoming more and more popular, the traditional IT procurement process will

result as too costly and time consuming. Thus, big companies will need to figure out a way of implementing them

by closely working with their IT suppliers

**DATA DRIVEN DECISIONS** "As the complexity of sourcing rises and clients become increasingly sophisticated, the need to find the next set

of opportunities and optimization will benefit greatly from analytics and not just expert advice.", Atul Vashistha,

Neo Group

\*"Outsourcing Trends to Watch in 2015", www.cio.com, Jan. 2015



Roxana Georgescu

# The CEE Shared Services and Outsourcing Market – Quick Look

- >> In the past 10 years, more than 300,000 jobs have been created in the CEE, out of which 110,000 only in Poland¹;
- >> According to the Tholons survey on the top 100 destinations for outsourcing investment, CEE is gaining on Asia;
- At the beginning, the main attraction for outsourcing investments was very low salaries (25% of the level in Western Europe). Now, salaries range from 33% to 50% of Western European levels. The current main driver, thus, is the quality of a well-educated, multilingual labour force<sup>1</sup>;
- The CEE's shared services and BPO sectors will continue to grow at a 15-20% rate, yet global investors are still confused and struggle with the choice of location. Eastern Europe is also seen as a go-to location for Indian IT players, both for talent and captives TCS, India's largest IT outsourcing firm, has a centre in Hungary and they are using the CEE as a delivery location to cater to Western Europe because of the favourable time-zone<sup>4</sup>;
- >> Eastern Europe is growing as a destination for captives, according to research by Loughborough Business School<sup>4</sup>;
- **Romania:** the BPO sector grew from 10,000 to 35,000 jobs between 2009 and 2011. It is the most popular in the region, together with Poland<sup>1</sup>. "Especially the banking sector is expanding in the shared service centre environment, but there are also new entries from other industries such as retail and the energy sector"<sup>2</sup>;
  - Outsourcing main beneficiaries: US, France, Italy, Germany, Benelux, UK and, more recently, the Middle East<sup>3</sup>
  - About 50 centres owned by large international vendors<sup>3</sup>:
    - ✓ > 50% BPO centres
    - ✓ 30% IT service related centres
    - ✓ < 20% R&D facilities
      </p>
  - Outsourcing employees: 15,000 in 2007, about 50,000 in 2014<sup>3</sup>
- >> Czech Republic and Slovakia: more expensive than the rest of the region<sup>1</sup>;
- >> Hungary and Bulgaria: not preferred because of political instability1;
- **Ukraine:** was starting to see new investments<sup>1</sup>, but it is now severely affected by political and economical instability.

¹Outsourcing: Skills in demand to fuel service centre boom, Financial Times, Nov. 2013 ²Alexander Weigl: There is room for more SSC& business outsourcing in Romania, Romania-Insider.com, Apr. 2014 ³Romanian Software Index 2014, ANIS, Nov. 2014 ⁴CEE Shared Services and Outsourcing Directory 2014, www.CEEOutsourcingAwards.com





## Romania's New Competitors on the Outsourcing Market - LatAm

It becomes increasingly popular the idea that India is no longer Romania's main competitor, but Latin America, since countries like Nicaragua, Panamá and Brazil, the "king" of outsourcing in LatAm, are now seen as the future for BPOs by certain sources.

#### **ARGENTINA**

> Huge talent pool> Low costs> Incentives for software companies

#### **COLOMBIA**

Old perception of high risk
 BPO operating revenues of USD 2.5 bn. in 2012, 78% more than in 2010
 BPO exports grew by 77% between 2010 and 2012
 3rd on Ease of Doing Business in LatAm, after Chile and Peru

#### **BRAZIL**

Outsourcing services revenues in 2012:
 USD 5.39 bn.
 Growth driven by domestic market
 Effective & innovative solutions for a variety of industries
 Incentives for IT companies
 Unfavourable labour regulations
 Economic difficulties

#### **COSTA RICA**

Bilingual work pool
 Free Trade Zone
 Average increase of IT labour force:

 6.5% since 2005

 Pressure on labour force by increased demand
 Poor roads in some areas
 High energy costs

#### **CHILE**

1st in LatAm according to World Bank's
 "Ease of Doing Business" survey
 Skilled workforce
 Political stability

 Free trade agreements with US, Canada,
 Australia and China

#### **MEXICO**

Proximity & cultural affinity
 to the US
 Member of NAFTA
 Software and IT Development
 Program (PROSOFT)

Wipro's ranking<sup>2</sup>: Colombia (the cheapest & most business friendly), Brazil (the biggest market, the highest costs), Chile, Argentina and Mexico.

Gartner: annual growth in the market will average nearly 10% through 2017, up from 5.3% in 2013, led by Colombia, Mexico and Chile<sup>3</sup>.

<sup>1</sup>Latin America: New Land of Outsourcing Opportunity, Customer Experience Magazine, Oct. 2012 <sup>2</sup>Latin America - Fastest Growing Outsourcing Destination, Flatworld Solutions <sup>3</sup>A New Latin Rhythm: The Transformation of the Global Outsourcing Business, KPMG, May 2014





## Romania's Portrayal

- >> Romanian Outsourcing Summit 2015 Insights
- >> The Romanian Software Market
- >> Romania's IT Services Offshore/ Near-shore Market vs. IT Services Exports
- >> Main Locations for BPO/ SSCs
- >> The Romanian Programmer
- Points of View on the Relationship between Universities and Companies
- >> The Romanian Software Market SWOT Analysis





ROMANIA'S SOFTWARE
INDUSTRY IS AN UNPOLISHED
DIAMOND THAT NEEDS ITS
LOCAL TALENTED CRAFTSMEN
TO TAKE CARE OF IT.



## Romanian Outsourcing Summit 2015 - Insights (1)

In general, the present moment is extremely favourable to the Romanian software industry. Regardless the overall market evolution, this field will most probably continue its ascending trend, at a slower pace though, generated by an increased foreign demand.

Romania has all the cards needed to win the game: intelligent and talented people, who are open to other cultures and speak several languages (the average exceeds the European average), geographic position, tax exemption for IT companies, almost all major companies are present in at least one of the main IT hubs, Bucharest, lasi, Cluj, Timisoara.

Nevertheless, there are some little issues to solve:

- >> The bulk of the demand is foreign: the IT industry is rather a support industry, for which there is limited domestic demand in Romania since the local industry has been ruined after '89;
- >> The current demand is mainly for qualified low cost labour force only, while the IP (Intellectual Property) is owned by the foreign beneficiary;
- Many people have brilliant ideas, but most Romanian software companies lack visibility, don't have a solid promotion strategy and, as Mr. Varujan Pambuccian said, "If you stay on a mountain peak and shout to the world what amazing product you have, don't expect people to start climbing the mountain to buy your product.";

If you stay on a mountain peak and shout to the world what amazing product you have, don't expect people to start climbing the mountain to buy your product.

Varujan Pambuccian, Ex-president of IT Technology and Communication Commission within Chamber of Deputies





## Romanian Outsourcing Summit 2015 - Insights (2)

- >> A high demand puts pressure on the offer, especially in Bucharest: the size of the labour and IT graduates pool has its limits and can hardly honour the existing requests;
- >> The paradox companies expect from graduates: high levels of flexibility and adaptability are required together with a ready-to-work profile from day 1;
- >> Although 2<sup>nd</sup> and 3<sup>rd</sup> tier cities have good potential of responding to the increased demand of IT staff, office spaces are, in general, scarce and construction developers are not yet fully prepared to meet higher European building standards.

Industry associations, e.g. ANIS, Cluj IT, and other main players are willing to address these issues by changing Romania's image of a qualified, but cheap, human resources provider for software development to that of a country where innovative software projects are created, thus being the intellectual property owner.

Changing the perception abroad is not so important. We should change ourselves. As long as the great majority prefer to work as a doer in a big company because of the stability it offers, we'll still be seen as a low-cost labour provider. When people will start pushing their limits outside the visible horizon, only then we'll be perceived differently.

C. L., Senior Software Developer, 10+ years of experience

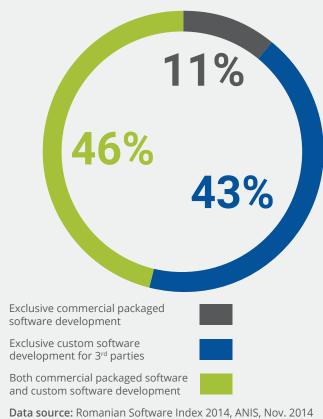
Speakers: Amalia Sterescu, Senior Business Consultant, Outsourcing Advisors; Radu Puchiu, Secretary of State, Government of Romania; Varujan Pambuccian, Member of the Commission for ITC of the Chamber of Deputies, Crina Ilie, Vice President, Genpact Europe; Mihaela Apostoleanu, EMEA Premier Support Business Operations, Oracle; Valentina Craciun, Financial Advisor, Auditor, Noerr Finance & Tax; Teodor Blidarus, Vice President ANIS, Managing Partner Softelligence; Roxana Tesiu, Europe HR Head, Wipro Technologies; Francesca Postolache, Partner, Audit Services, PwC Romania; Daniel Hernandez, Societe Generale European Business Services, Head of HR Shared Service Center; Catalin lorgulescu, Board Member of ABSL, Managing Director WNS Romania; Marius Scuta, National Director, JLL; Silviu Cretean, Services Division Director, TotalSoft; Alexandra Predeanu, Country Manager, ICAP Romania; Alexandru Tulai, President Cluj IT Cluster; Aurelian Deaconu, Executive Director, AROBS Transilvania Software; Dan Zaharia, Senior Leasing Consultant, EXTIND Management





#### The Romanian Software Market

In 2013, Romania had about 80,000 programmers/ software engineers, generating EUR 1 bn. revenues, compared to Silicon Valley's 170,000 professionals and its EUR 800 bn. revenues1. Moreover, only 29.5% of the earnings came from commercial packaged software development and sales<sup>2</sup>.



Currently, **Applications** dominate the packaged software categories developed and commercialised in Romania, while **System** Infrastructure Software and **Application Development and Deployment Software** are less successful.

IDC's forecast until 2017: the most dynamic software segments in Romania will be **Application Development and Deployment** (estimated CAGR - Compound Annual Growth Rate: 5.2%), **Applications** (estimated CAGR: 3.2%), System Infrastructure (estimated CAGR: 2.3%)<sup>2</sup>.

Base: No. of software companies in 2013





<sup>&</sup>lt;sup>1</sup> Piata de software & servicii in IT ajunge la un miliard de euro, AGERPRES, Nov. 2014

<sup>&</sup>lt;sup>2</sup> Romanian Software Index 2014, ANIS, Nov. 2014

# Romania's IT Services Offshore/ Near-shore Market vs. IT Services Exports

IT services (pure licenses excluded) accounted for 60.2% of the total offshore/ near-shore market in 2012, which was evaluated at about EUR 422 mil. Software on demand and support and testing services represented more than 60% of both offshore/ near-shore market and exports.



Base: Pie 1. Total offshore/ near-shore revenue; Pie 2. Total IT services exports





>> Custom

application

development services

>> Application customization services

# Main Locations for Business Process Outsourcing (BPO) / Shared Services Centres (SSCs)

Key indicator	Bucharest	Timisoara	Cluj-Napoca	lasi		
POPULATION						
Total population	1,883,425	319,279	324,576	290,422		
Unemployment rate	2%	2%	3.8%	5.1%		
EDUCATION						
Number of universities	36	8	10	10		
Number of students	140,000	39,000	50,000	47,000		
Number of graduates	44,000	8,000	12,000	11,000		
TARGET LABOUR POOL BY LANGUAGE SKILLS						
English	+85,000	+15,000	+21,000	+8,000		
German	+6,000	+2,500	+4,000	+300		
Spanish	+5,000	+1,000	+1,000	+300		
Italian	+5,000	+1,800	+2,500	+1,200		
SSC/BPO ATTRITION RATE						
Attrition rate	20-25%	15-20%	15-20%	15-20%		
LABOUR COSTS (€/FTE/MONTH)*						
Operator (0-3 years)	350-420	290-360	290-360	260-345		
Senior Operator (3-5 years)	450-530	380-450	380-450	365-440		
Team Leader (5-8 years)	650-780	550-680	550-680	530-640		
Overheads	36-43	33-40	33-40	30-37		
Recruitment fees (one-off fee)	1-1.5 salaries	1-1.5 salaries	1-1.5 salaries	1-1.5 salaries		
REAL ESTATE (CLASS A & B)						
Average rent per sqm.	12-18 EUR	10-13 EUR	9-12 EUR	7-11EUR		
Service charge per sqm.	3-5 EUR	2-4 EUR	2-4 EUR	1-2.5 EUR		

Source: "Competitive advantage of Romania as an SSC/BPO location", PwC, March 2015





<sup>\*</sup> Gross base salary, without company tax

### **The Romanian Programmer**

Programming is quite different from other jobs. Is is a creation kind of work and, at a certain point, it is a kind of art.

C. L., Senior Software Developer, 10+ years of experience

Romanian programmers excel in working excessively. When a big company needs 100-200 people for a not so highly intellectengaging job, they come here. Rather than being seen as experts, Romanian programmers tend to be seen as an intermediary option between US and India's programmers. [...] In order to be a successful programmer, you must sweat. You must be experienced and be passionate about these things.

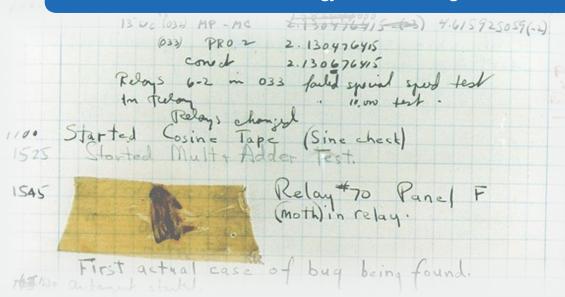
C. L., Senior Software Developer, 10+ years of experience

At 35-40 years old, you lose interest in "doing" bugs and go to the next level, i.e. team leader or project manager.

A. M., Senior Software Developer and Analyst, 10+ years of experience

The quality of Romanian programmers is widely acknowledged, names are not so visible, though. Numerous companies opened offices in Romania especially for software development and testing. Many Romanians are working for Google, Microsoft, LinkedIn, Facebook.

F.N., Associate Professor of IT Management at Georgia Institute of Technology, Scheller College of Business



<sup>1</sup> Image: "First actual case of bug being found", http://www.opensourceforu.com <sup>2</sup> Personal interviews



Roxana Georgescu

# Points of View on the Relationship between Universities and Companies

#### **IT Experts**

- The education related issue is everywhere, in any country. The university can't provide you with a good enough background so that you can be a brilliant and productive programmer from your first working day. The difference between what you learn in school and what you learn during your first 10 years of work is absolutely striking! There is an enormous gap between a 10-row program and a 10,000 or 1,000,000-row program. When you write extensive programs which must be maintained for years, you come across problems that never appear when creating one that will be used for a couple of days and then thrown away. As long as they teach how to solve little problems, you'll never get to know the real challenges in the software world;
- Professors are out-of-date in terms of technology. And maybe this shouldn't even be their concern, but things are changing rapidly;
- >> University staff are neither well-prepared, nor motivated.

#### **University Staff**

- Companies are very interested in internships because of the fast ROI, but many consider them only as a way to cover a need for staff. They come to see what the university is like only when they need people the following day. Thus, we are encouraging students to keep coming to classes and accumulate experience through summer internships, instead of leaving school and getting hired, and companies to invest in our students on the long term;
- Very few firms invest in education: R&D collaborations with university staff, summer schools for junior years, endowment of laboratories;
- Professors are involved in the business environment: in companies' R&D projects, start-ups (e.g. the Vector watch), Innovation Labs (a pre-acceleration program that advances tech creativity and entrepreneurial drive among young professionals and students);
- Compared to 20 years ago, today's students are better prepared because computer science is taught in high school, but there are less tip-tops, as they go abroad before graduation.





## The Romanian Software Market - SWOT Analysis

#### **TRANSFORM**

#### **STRENGTHS**

- >> Language skills, especially Southern European
- >> Number of employees and students
- >> 3<sup>rd</sup> tier cities
- >> Cultural comparability to Western cultures
- >> Overall business environment
- >> Investment incentives
- Solution of Small businesses with good reputation in niche markets

#### **WEAKNESSES**

- >> Image of a low-cost labour provider
- >> Lack of visibility both national and internationally
- >> Lack of business knowledge among IT experts
- >> Lack of a national strategy for the software sector
- >> No entrepreneurial initiative among IT experts

#### **OPPORTUNITIES**

- >> Increased access to European funds
- » Businesses' increased tendency of outsourcing collateral activities
- >> Innovative technology trends

#### **THREATS**

- >> Insufficient legislation for IP protection
- » Overregulation of the business sector
- Specialisation in outsourcing rather than in proprietary products
- Massive recruitment of talented graduates by industry's foreign big names
- >> Ukraine regains its political stability
- » Rise of LatAm countries, especially Costa Rica, Chile, Argentina







## The Romanian Software Market - StrengthsWOT

Number of people employed in the sector, number of students in Science, Technology, Engineering and Mathematics (STIM)<sup>1</sup>

Competitive advantage over Poland, a major provider in the BPO and SSCs sector: Southern European language skills and IT skills

Regional "clusters" for different client needs, e.g. Cluj - German speaking, lasi – Russian speaking<sup>2</sup>

Growth potential coming from cities like Targu Mures, Sibiu, Craiova, which are wellestablished university centres and with high untapped potential in terms of labour force2 Lack of income tax for software engineers since 2004

> Real estate tax exemptions and and R&D centres<sup>2</sup>

Good reputation since big names such as Adobe, IP, Intel, IBM, Oracle, Accenture have at least one business centre in Romania<sup>2</sup>

A growing number of small and very active IT providers that gained very good reputation in niche areas thanks to their size, which allows them to efficiently control organisational expenditures<sup>3</sup>

preferential tax deductions for the purchase of new technology

¹ Studiu ANIS: 11% dintre companiile de software, care dezvolta exclusiv produse, genereaza 30% din cifra de afaceri a sectorului, Market Watch, Nov. 2013 ² Alexander Weigl: There is room for more shared service centers & business outsourcing in Romania, Romania Insider, Apr. 2014 3 Romanian Software Index 2014, ANIS, Nov. 2014

**STRENGTHS** 





### The Romanian Software Market - SWeaknessesOT

Very few local companies sell own products, thus they are highly dependant on foreign budgets

Low awareness about local innovative projects among people with potential, thus many go abroad in pursue of interesting projects, not necessarily for the money<sup>1</sup>

Although very good engineers, Romanian IT people lack entrepreneurial initiative<sup>1</sup>

WEAK-NESSES

Local companies are still focused on custom development projects to have a quicker turnaround<sup>2</sup>

Low staff retention rates, limited marketing budgets for promoting new products, high R&D costs for creating proprietary software products<sup>3</sup>

Lack of structured information for foreign investors, as well as of a national strategy regarding the software sector

In some companies, mediocrity reigns and the environment tends to promote this mediocrity because of poor management. There is not enough focus on quality; things change momentarily when the upset client knocks on the door.

C. L., Senior Software Developer, 10+ years of experience

<sup>1</sup> Personal interviews <sup>2</sup> Romanian Software Index 2014, ANIS, Nov. 2014 <sup>3</sup> Studiu ANIS: 11% dintre companiile de software, care dezvolta exclusiv produse, genereaza 30% din cifra de afaceri a sectorului, Market Watch, Nov. 2013





### The Romanian Software Market - SWOpportunitiesT

The software market will expand more and at a faster pace than the overall IT industry, thus favouring companies involved in software development, customization and commercialization<sup>1</sup>;

Innovative technology trends such as Mobility, Cloud, Analytics, Social Media and the fast and continuous change of the global IT&C landscape are beneficial for small companies which can easily adapt to rapid change<sup>2</sup>;

In the following years, the local market will face a massive data volume, which will be hardly processed using the traditional software techniques<sup>3</sup>;



Forced by the competitive environment and fiscal context, companies tend to focus more and more on their core business and outsource collateral operations like HR, IT, accountancy to specialised providers<sup>4</sup>;

Considering that not even the current demand for graduates can be covered, professional reconversion could be a good solution<sup>5</sup>;

Some LatAm countries, like Peru, still have to clarify their legislation in the software area, thus a major threat from them is postponed.

Many foreign investors are interested in Romanian start-ups, but there are not enough those that manage to evolve. There is, though, high potential for innovation.

V. P., Lecturer, Universitatea Politehnica Bucuresti

<sup>&</sup>lt;sup>1</sup> Romanian Software Index 2014, ANIS, Nov. 2014 <sup>2</sup> Information and Communication Technology Market Research Reports, MicromarketMonitor, 2015 <sup>3</sup> Softelligence a inregistrat o crestere cu 50% a cifrei de afaceri in 2014, ANIS, Feb. 2015 <sup>4</sup> Wizrom: Ce asteptari are mediul de afaceri de la furnizorii de software in 2015, ANIS, Dec. 2014 <sup>5</sup> Personal interviews





### **The Romanian Software Market - SWOThreats**

Insufficient legislation for intellectual property protection inhibits the creation of proprietary software products<sup>1</sup>

The overregulation of the business sector restrains newcomers<sup>2</sup>

"Our big threat is that top people go abroad. About 30% leave the country 3 years after graduation. Google, Facebook, Bloomberg, Mozilla are massive recruiters" 3

"If Ukraine recovers its political stability, it's a huge threat for us because they have very good professionals" 3

"If a big company can find much lower costs elsewhere, they can easily



When the Indians and the Chinese will start speaking a decent English and the cultural gap to the Western culture will shrink, this industry here might very well disappear.

V. P., Lecturer, Universitatea Politehnica Bucuresti

¹ Studiu ANIS: 11% dintre companiile de software, care dezvolta exclusiv produse, genereaza 30% din cifra de afaceri a sectorului, Market Watch, Nov. 2013 ² Alexander Weigl: There is room for more shared service centers & business outsourcing in Romania, Romania Insider, Apr. 2014 <sup>3</sup> Personal interviews





## The Romanian Business Scene

- >> Nomenclature of Economic Activities NACE Codes
- Romania's IT Market Structure by NACE Codes in 2013 as per the Romanian Trade Register's Data
- >> Romania's IT Market Structure by NACE Codes in 2013 as per TPSoft.ro<sup>1</sup> Data
- Comparability Study by NACE Codes in 2013
- >> Companies with Operational Losses in 2009 2013 by NACE Codes
- Company Size in 2013 by NACE Codes
- Company Revenue in 2013 by NACE Codes
- >> Revenue vs. Staff vs. Efficiency by NACE Codes Maximum Values
- >> Revenue vs. Staff vs. Efficiency by NACE Codes Average Values
- Main Locations in 2013 by NACE Codes
- Main Counties' Market Structure in 2013

**1TPSoft.ro** is an online platform that include financial data of over 100.000 Romanian companies and it allows to perform industry benchmarks. The companies included in TPSoft.ro database meet at least one of the following criteria: (i) 2013 revenue equaled or exceeded EUR 150,000 or (ii) 2013 total assets exceeded EUR 2,000,000 or (iii) had at least 15 employees in 2013.





### Nomenclature of Economic Activities - NACE Codes

#### 58 ACTIVITATI DE EDITARE/ PUBLISHING ACTIVITIES

**>> S829** Activitati de editare a altor produse software/ Other software publishing (i.e. publishing packaged software): publishing of ready-made (non-customised) software, including translation or adaptation of non-customised software for a particular market on own account: operating systems, business and other applications

#### 62 ACTIVITATI DE SERVICII IN TEHNOLOGIA INFORMATIEI/ COMPUTER PROGRAMMING, CONSULTANCY AND RELATED ACTIVITIES

- **Activitati de realizare a soft-ului la comanda (software orientat client)/ Computer programming activities:** designing the structure and content of, and/ or writing the computer code necessary to create and implement: systems software (including updates and patches), software applications (including updates and patches), databases, web pages, customising of software, i.e. modifying and configuring an existing application so that it is functional within the clients' information system environment
- **Activitati de consultanta in tehnologia informatiei/ Computer consultancy activities:** planning and designing of computer systems which integrate computer hardware, software and communication technologies. Services may include related users training.
- Activitati de management (gestiune si exploatare) a mijloacelor de calcul/ Computer facilities management activities: provision of on-site management and operation of clients' computer systems and/ or data processing facilities, as well as related support services
- **Alte activitati de servicii privind tehnologia informatiei/ Other information technology and computer service activities:** computer disaster recovery services, installation (setting-up) of personal computers, software installation services

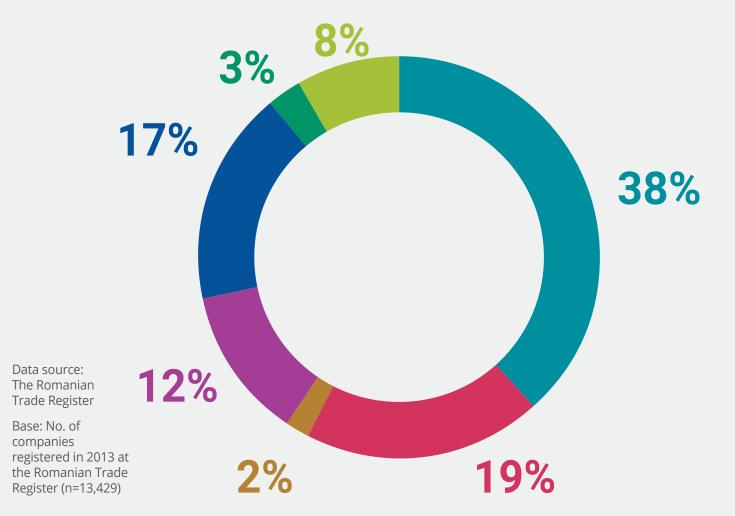
#### 63 ACTIVITAȚI DE SERVICII INFORMATICE/ INFORMATION SERVICE ACTIVITIES

- Prelucrarea datelor, administrarea paginilor web si activitati conexe/ Data processing, hosting and related activities: provision of infrastructure for hosting, data processing services and related activities, specialized hosting activities such as: Web hosting, streaming services, application hosting, application service provisioning, general time-share provision of mainframe facilities to clients, data processing activities: complete processing of data supplied by clients, generation of specialized reports from data supplied by clients, provision of data entry services
- **Activitati ale portalurilor web/ Web portals:** operation of web sites that use a search engine to generate and maintain extensive databases of Internet addresses and content in an easily searchable format, operation of other websites that act as portals to the Internet, such as media sites providing periodically updated content





# Romania's IT Market Structure by NACE Codes in 2013 as per the Romanian Trade Register's Data



Other software publishing, i.e. Packaged software publishing (1083 companies)

On demand computer programming activities (5151 companies)

Computer consultancy activities (2509 companies)

Computer facilities management activities (333 companies)

Other information technology and computer service activities (1607 companies)

Data processing, hosting and related activities (2340 companies)

6312 Web portals (406 companies)





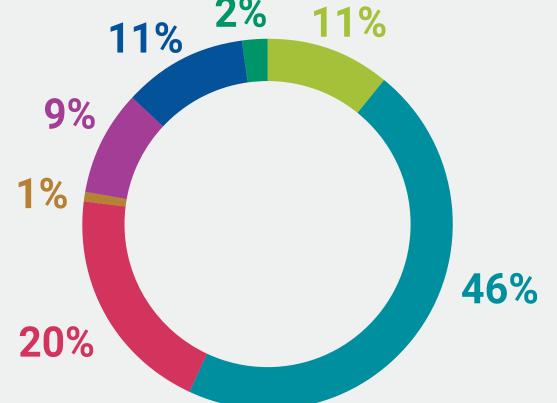
# Romania's IT Market Structure by NACE Codes in 2013 as per TPSoft.ro

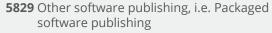
More than half of the companies meeting the criteria to be included in TPSoft.ro database\* have as main activity either on-demand computer programming or computer consultancy activities. Publishing packaged software (NACE 5829) is the main activity for only 11% of the companies.



Base: No. of companies meeting the criteria\* (n=1801)

\*The companies included in TPSoft.ro database meet at least one of the following criteria: (i) 2013 revenue equaled or exceeded EUR 150,000 or (ii) 2013 total assets exceeded EUR 2,000,000 or (iii) had at least 15 employees in 2013.





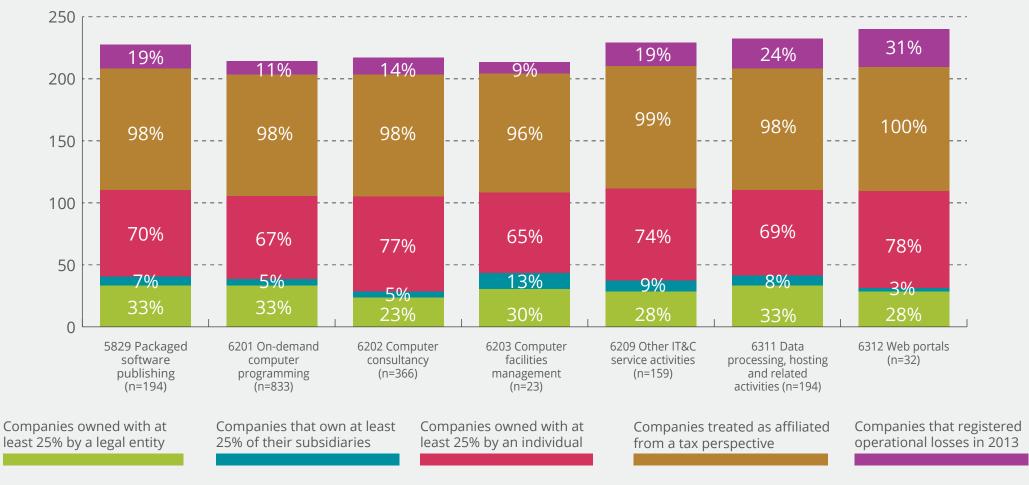
- **6201** On demand computer programming activities
- **6202** Computer consultancy activities
- **6203** Computer facilities management activities
- **6209** Other information technology and computer service activities
- **6311** Data processing, hosting and related activities
- **6312** Web portals





## Comparability Study by NACE Codes in 2013

More than 95% of the companies **meeting the criteria**\* are affiliates, irrespective of their main activity.



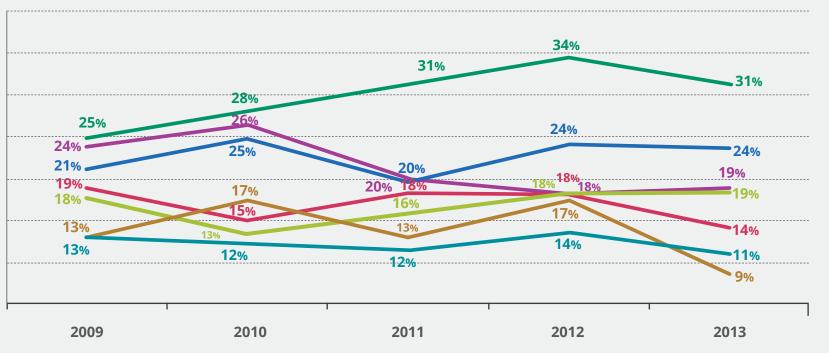
Data source: TPSoft.ro





## Companies with Operational Losses in 2009 – 2013 by NACE Codes

Unlike other sectors, the share of companies involved in on-demand computer programming that registered operational losses between 2009 and 2013 has been steady and was also the lowest during this period. At the other end are web portals companies, the proportion of which increased from 2009 to reach the pick in 2012, but started their recovery in 2013.



**5829** Packaged software publishing (n=194) **6201** On-demand computer programming (n=833) **6202** Computer consultancy (n=366) **6203** Computer facilities management (n=23) **6209** Other IT&C service activities (n=159) **6311** Data processing, hosting and related activities (n=194) **6312** Web portals (n=32)

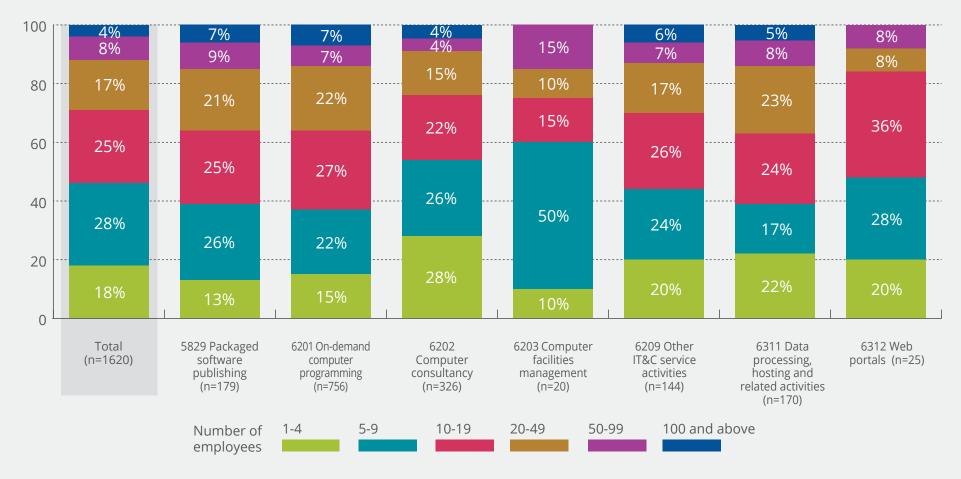
Data source: TPSoft.ro





### Company Size in 2013 by NACE Codes

The average size of the Romanian software companies meeting the criteria\* is between 5 and 19 employees. Companies specialised in computer consultancy are more likely then the rest to have 1 to 4 employees.



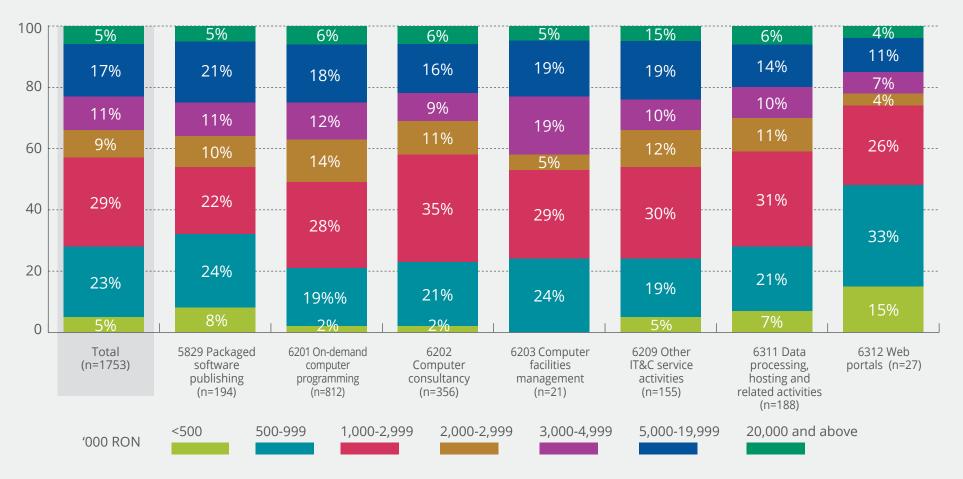
Data source: TPSoft.ro





### Company Revenue in 2013 by NACE Codes

Half of the software companies meeting the criteria\* earned between RON 50,000 and 3,000,000 in 2013, only 5% of them exceeding RON 20,000,000.



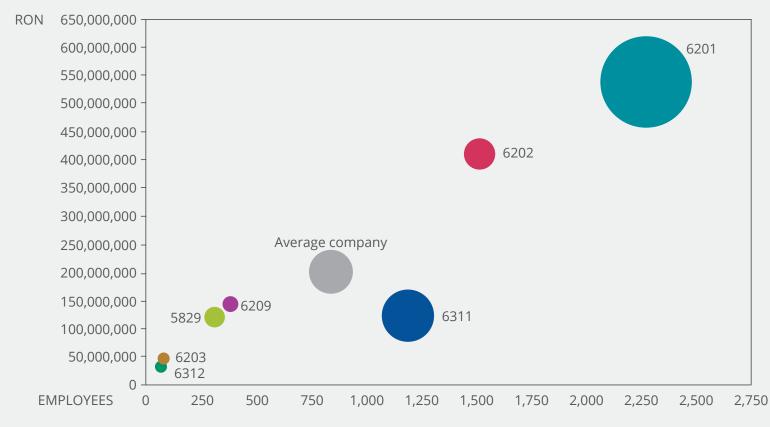
Data source: TPSoft.ro





## Revenue vs. Staff vs. Efficiency by NACE Codes – Maximum Values

The highest values for all three indicators are registered in the on-demand computer programming subsector (6201). Although the greatest revenue earned by IT consultancy agencies (6202) and number of employees exceed the levels of companies involved in data processing and hosting (6311), the latter had a higher earnings per employee in 2013.



Data source: TPSoft.ro

**X AXIS:** NUMBER OF EMPLOYEES

Y AXIS: REVENUE (RON)

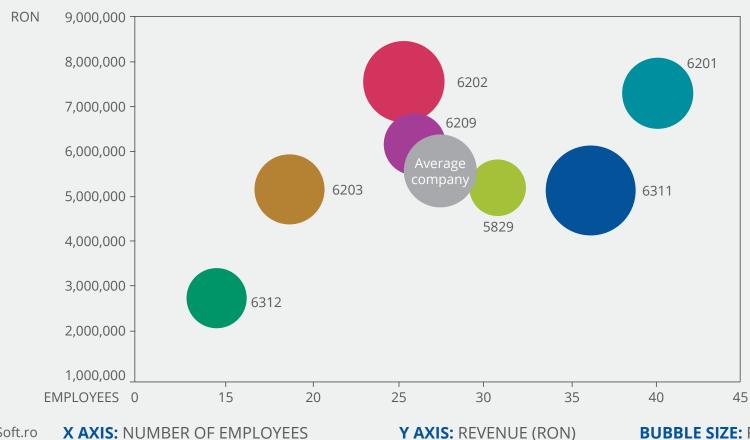
**BUBBLE SIZE:** REVENUE/ EMPLOYEE





## Revenue vs. Staff vs. Efficiency by NACE Codes -**Average Values**

The IT consultancy subsector (6202) has been the most successful in 2013; with an average of 25 employees per company, the average revenue is the highest in the industry, resulting in the second highest efficiency level, just after the data processing and hosting subsector (6311).





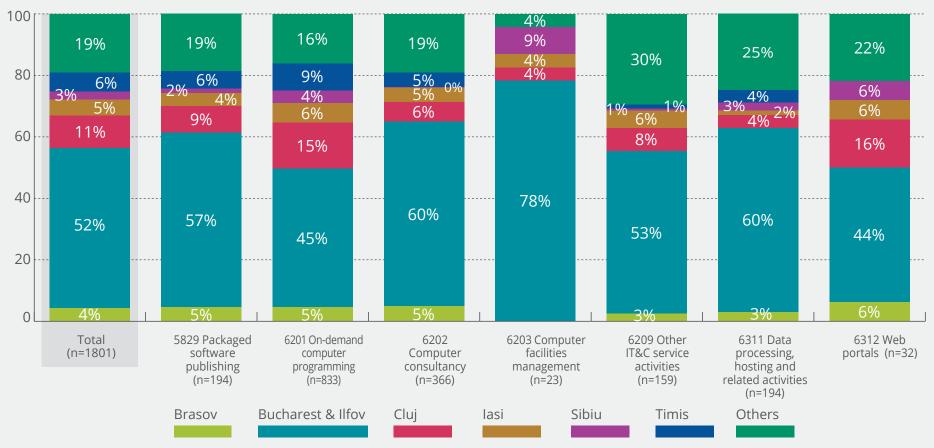
**BUBBLE SIZE: REVENUE/ EMPLOYEE** 





### Main Locations in 2013 by NACE Codes

Overall, more than 80% of the companies meeting the criteria\* are spread over these six counties, with Bucharest & Ilfov being a popular location for all sectors. This is followed by Cluj in case of Packaged software publishing, On-demand computer programming companies and Web portals and by Sibiu for providers of Computer facilities management services.



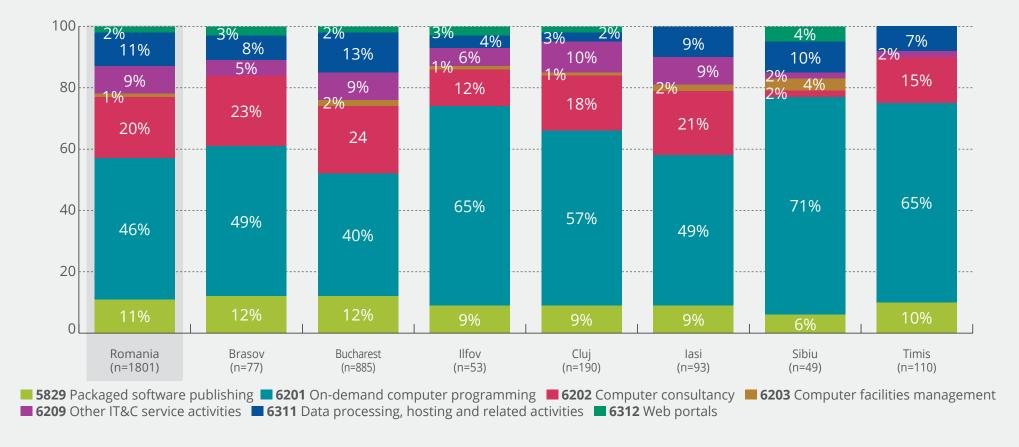
Data source: TPSoft.ro





### Main Counties' Market Structure in 2013

The shares of on-demand computer programming companies meeting the criteria\* are the highest in Ilfov, Cluj, Sibiu and Timis, in contrast with Bucharest. The activity of publishing packaged software is carried out in all main counties, but it is quite limited. Computer consultancy is provided more in Brasov, Bucharest and lasi and is rare in Sibiu.



Data source: TPSoft.ro





## **Tax Challenges and Opportunities**

#### TRANSFER PRICING

Transfer pricing is currently the hottest tax challenge for software companies that are part of a group.

The expected minimum mark-up by the tax authorities is around 10% on top of the operating expenses for captive software developers and around 7% for IT support services.

During the last four years we have witnessed many transfer pricing audits for software companies. These cases brought forward the transfer pricing complexities surrounding the captive software service providers. The aggressiveness and detailed investigation performed by the tax authorities during the process informally imposed standards regarding the expected profitability of the local captive service providers (i.e. companies that provides services for their related parties and act as cost centres).

As the margins within this sector are quite high, the local companies that have recorded losses or are at breakeven during the last two financial years are the first to be investigated from a transfer pricing perspective.

Transfer prices are investigated during the general tax audit. In order to assess the arm's length nature (i.e. market value) of the intra-group transactions, the tax authorities have the right to ask for the transfer pricing documentation file (please click the link for the content of the file and other useful information).

If the profitability of the tested company is below the inter-quartile range determined for independent companies (i.e. the range between the lower and the upper quartile), the tax authorities have the right to perform transfer pricing adjustments to the median of the range. The inter-quartile range is determined by performing a benchmarking study on the local market (i.e. Romania) and it represents an important section of the transfer pricing documentation file.







## **Tax Challenges and Opportunities (1)**

#### WITHHOLDING TAX ON NON-RESIDENTS INCOME

In practice, a classification issue appears in connection with the payments made for software. Depending on the rights transferred over the software, the related payments might be classified either as royalties or as services.

#### Examples:

- >> Payments made for the acquisitions of all rights over a software would not be considered royalties;
- **>>** Payments made for the use or right to use of algorithms, programming languages, logical structures, represent royalties.

Classification is important, as the taxation for the related payments is different. Thus, in case of services, the tax is generally due in the residence country of the service provider, while in case of royalty payments the tax is due at source by withholding it, with a potential tax credit in the residence country of the software provider.



#### PERMANENT ESTABLISHMENT

Foreign IT companies frequently employ software developers from Romania. The individuals are performing their work from a fixed place in Romania, via internet connections. Due to the fact that the individual would perform the activity of the non-resident from a fixed place in Romania, the non-resident would be seen as having a permanent establishment in Romania. In such case the profit allocated to this permanent establishment is taxable in Romania.

#### **DEDUCTIBILITY OF SERVICE EXPENSES**

Deductibility of expenses and VAT related to intra-group services, in general, and management services, in particular, received by the Romanian companies is frequently challenged by the Romanian tax authorities on various ground such as lack of proper fiscal and accounting documents, services are not effectively rendered, services are not actually needed by the beneficiary, prices charged for such services etc.





## Tax Challenges and Opportunities (2)

#### **INCOME TAX EXEMPTION**

The Romanian software programmers are exempted from the 16% income tax on their salaries. To benefit of this exemption both the employer and the individuals should fulfill certain conditions.

#### TAX INCENTIVES FOR RESEARCH AND DEVELOPMENT

The companies that carried on research and development activities, may benefit of 50% additional deduction for certain expenses. Also, these companies may apply the accelerated depreciation regime for their equipment used in the research and development activities.



#### TAX INCENTIVE FOR REINVESTED PROFIT

Companies reinvesting their profit in new technological equipment, benefit of profit tax exemption. However, in such case the company would not be entitled to apply the accelerated depreciation. There are few conditions to be met to benefit of these exemptions, including allocation of the related profits to the company's reserves without the possibility to distribute the profits (otherwise the profit tax would become due).





## Conclusions

- » BPOs and SSCs\* are the letters that placed Romania on the global software market and, even more, on top of it. However, this is a rapidly changing market, big companies delocate, start-ups rise everywhere, our students win international Olympiads and then go to continue their studies abroad in the best case or are attracted by the main players with a nicely wrapped offer. Being the best in providing low cost labour force is not the ultimate purpose anymore; now, aiming high is differentiating through quality, creativity, innovation, ownership of valuable intellectual property. In addition, proper business and marketing capabilities are essential for the Romanian software companies to succeed.
- » National boarders are inexistent in this market, which makes the opportunity of going international thrilling, but also risky.
- » Because most of them are part of a group (multinational/ national) and their business consists in intangibles (services), the software companies are on the top of the priorities of any fiscal authority, regarding mainly transfer pricing and their collateral fiscal issues. This is also the case in Romania, where detailed investigation performed by the tax authorities during tax audits informally imposed standards regarding the expected profitability of the local captive IT service providers (around 10% on top of the operating expenses for captive software developers and around 7% for IT support services). In this context, a solid knowledge of the market and transfer pricing procedures is essential for minimising potential risks.

\*BPO = Business Process Outsourcing, SSC = Shared Services Centre





- **1.** "Avem programatori buni, dar ne lipsesc oamenii de business". Motivul pentru care industria-vedeta risca sa ramana in urma, www.stirileprotv.ro, Dec. 2014
- 2. 10 Outsourcing Trends to Watch in 2015, CIO, Jan. 2015
- 3. 550 de specialisti in IT din Europa vor participa la cel mai mare proiect de IT al Comisiei Europene, ANIS, Dec. 2014
- 4. A new IT investment hub will be founded at lasi, Outsourcing Advisors, Feb. 2015
- 5. A New Latin Rhythm: The Transformation of the Global Outsourcing Business, KPMG, May 2014
- **6.** Alexander Weigl: There is room for more shared service centers & business outsourcing in Romania, but Govt. support needed, RomaniaInsider, Apr. 2014
- 7. Bucharest City Report Q4 2014, JLL
- 8. Ce strategii are clusterul IT care va aduce la Cluj 300 milioane euro si 20.000 de specialisti, www.clujit.ro, Mar. 2013
- 9. CEE Shared Services and Outsourcing Directory 2014, www.CEEOutsourcingAwards.com
- 10. Cluj Statistici Economie, www.clujbusiness.ro
- 11. Cluj the New IT Innovation Center of Romania, www.outsourcing-journal.org, Feb. 2013
- 12. Cluj-Napoca Office Market, JLL, May 2014
- **13.** Cluj-Napoca, Transylvania: the Heart of Romanian Software Development, Tünde Székely
- 14. CODESPRING TIP: Offshore to Cluj, Codespring
- 15. Competence Call Center plans to hire 270 new employees in Bucharest and Brasov this year, Outsourcing Advisors, Feb. 2015
- **16.** Competitive advantage of Romania as an SSC/BPO location, PwC, March 2015
- 17. Computerworld Forecast Study 2015
- 18. Cu afaceri de peste 26 mil. euro în 2014, iQuest intra pe noi piete în acest an si continua recrutarile, ANIS, Mar. 2015
- **19.** Cum s-ar împarti tara IT-ului în unitati administrative dedicate? Cati "locuitori" ar avea municipiul Bucuresti, aflat pe primul loc în ierarhia orașelor softistilor?, IT Trends, Apr. 2014
- 20. Dell contribuie de zece ani la schimbarea industriei IT din Romania, ANIS, Mar. 2015





- 21. Differentiation in Software product, Software development and services rendered using software, Sanjeev Gupta, Feb. 2015
- 22. Exportación de servicios: ¿cómo lograr ser más competitivos?, El Comercio, Mar. 2015
- 23. Forecast 2015: IT Spending on an Upswing, CIO, Nov. 2014
- 24. GECAD Group investeste în Gluru, un start-up fondat de fosti angajati Google, Amazon, Rackspace si Apple, ANIS
- 25. "How prepared are you for the 5 mega trends disrupting services delivery?, SSON
- 26. În 2014, afacerile producatorului local de software Zitec au urcat cu 50%, ANIS
- 27. Industria de software și servicii din Romania, ANIS, Nov. 2013
- 28. Industria și serviciile din sectorul IT domenii de excelență ale Regiunii Centru, www.adcentru.ro
- 29. Industria software din Romania: producem masiv pentru alţii, dar avem puţina proprietate intelectuala proprie, Adevarul, Nov. 2014
- **30.** Information and Communication Technology Market Research Reports, MicromarketMonitor, 2015
- 31. Inovatia si excelenta "trec pragul" viitorului în afaceri la Timisoara Business Days, ANIS, Mar. 2015
- **32.** INSOFT face performanta în industria IT, ANIS, Feb. 2015
- 33. IT Outsourcing in 2015. What should we expect?, IT Outsourcing News, Mar. 2015
- **34.** IT, Outsourcing Service Shared Centers, BPO and the automotive industry responsible for providing most jobs in 2014, Outsourcing Advisors, Jan. 2015
- 35. Latin America Fastest Growing Outsourcing Destination, Flatworld Solutions
- 36. Latin America: New Land of Outsourcing Opportunity, Customer Experience Magazine, Oct. 2012
- **37.** Main Industries in Cluj, www.clujbusiness.ro
- 38. METRO SYSTEMS Romania sarbatorește 10 ani de IT în industria de retail, ANIS, Jan. 2015
- 39. Oficiul National al Registrului Comertului
- 40. Outsourcing company Computer Generated Solutions hires hundreds of employees in Brasov, Outsourcing Advisors, Mar. 2015
- 41. Outsourcing giant Wipro Ltd plans to expand their business in Romania in 2015, Outsourcing Advisors, Jan. 2015





- 42. Outsourcing Trends to Watch in 2015, www.cio.com, Jan. 2015
- 43. Outsourcing, Codespring
- 44. Outsourcing: Skills in demand to fuel service centre boom, Financial Times, Nov. 2013
- 45. Overview of the Romanian Software and IT Services Industry, ANIS, Jun. 2014
- **46.** Parteneriat ANIS Noerr pentru consultanta privind initiative fiscale, legislative si de politici publice, ANIS, Jul. 2014
- 47. Piata de software & servicii în IT ajunge la un miliard de euro, AGERPRES, Nov. 2014
- 48. Planul strategic de dezvoltare economică al municipiului Cluj-Napoca 2014-2020, Grupul de Lucru Dezvoltare Economică Locală
- 49. Reporte semestral sobre el Sector de Software y Servicios Informáticos de la República Argentina, OPSSI, Aug. 2014
- **50.** Republic of Moldova an outsourcing perspective, Outsourcing Advisors, Feb. 2015
- **51.** RO economy info, Outsourcing Advisors
- 52. Romania Outsourcing destination guide, www.outsourcing-destinations.org
- 53. Romania Too large to be ignored, JLL, May 2013
- 54. Romania Among Top 10 Outsourcing Locations Globally, www.outsourcing-journal.org, Aug. 2013
- 55. Romania are nevoie de crestere cu 150% a numarului de specialisti IT, ANIS, Nov. 2014
- 56. Romania as the destination for SSCs and BPO, KPMG
- 57. Romania IT Talent Map, 2014. Facts & figures, Brainspotting
- 58. Romania's Outsourcing Service Industry India's New Rival, Feb 2013
- 59. Romanian IT&C Specialists Defy The Global Recession. Foreign Investors Lead Romanian Software Development Market, www.clipa.com, Oct. 2010
- **60.** Romanian Outsourcing Index 2013, ANIS
- 61. Romanian Software Index 2014, ANIS, Nov. 2014
- **62.** Sectorul IT ar putea beneficia în viitor și de alte facilitați fiscale, www.capital.ro, Mar. 2014
- **63.** Siemens inaugureaza un nou centru regional de cercetare si dezvoltare în Cluj-Napoca, ANIS, Feb. 2015





- **64.** Softelligence a înregistrat o crestere cu 50% a cifrei de afaceri în 2014, ANIS, Feb. 2015
- 65. Softelligence preia dezvoltarea si distributia solutiei Kazier, ANIS, Nov. 2014
- 66. SoftVision reached 1200 employees in Bucharest this year, after tripling this number compared to 2013, Outsourcing Advisors
- 67. Software și servicii IT în România. Studiu asupra stadiului de dezvoltare a industriei de software și servicii IT în România în 2013, ANIS
- 68. Statista
- 69. Stefanini Romania celebrates 10 years of business in our country and plans to hire another 300 employees, Outsourcing Advisors, Nov. 14
- **70.** Stefanini: Romania has no current rival in the region when speaking about the outsourcing market, Outsourcing Advisors
- **71.** Studiu ANIS: 11% dintre companiile de software, care dezvolta exclusiv produse, genereaza 30% din cifra de afaceri a sectorului, Market Watch, Nov. 2013
- 72. The Beauty of Data Visualization, David McCandless, TED Talks
- 73. The Global Information Technology Report 2013, INSEAD, World Economic Forum
- 74. The software market in 2014, TeamNet
- 75. The stories behind the numbers. Research on shared services and outsourcing trends and developments in Central & Eastern Europe, KPMG
- **76.** Top IT Services Trends for 2013, Tholons
- 77. TPSoft.ro baza de date online interactiva pentru studii de piata, analiza competitie si studii de profitabilitate
- 78. Transart aniverseaza 18 ani de business software, ANIS
- 79. Why American firms are more progressive with outsourcing than the Europeans and Asians, www.horsesforsources.com, Apr. 2013
- 80. Why Cluj, Codespring
- 81. Why Romania, Codespring
- 82. Wizrom: Ce aşteptari are mediul de afaceri de la furnizorii de software în 2015, ANIS, Dec. 2014
- 83. XAPT Solutions a încheiat 2014 cu o creştere cu 22% a cifrei de afaceri, ANIS, Feb. 2015





## Thank you for taking your time to go through this report. We welcome your feedback so we can improve!

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