OUTSOURCING WHITE PAPER

A Practical Approach to IT Outsourcing

enfoss

EUROPEAN NETWORK FOR OUTSOURCING SOFTWARE SOLUTIONS

Contents

Introduction

As IT corporations have always searched for ways to reduce software development costs in order to improve business efficiency and survive the fierce competition, they begin to look for alternative solutions, considering that the traditional way of using their internal resources for software development and maintenance tasks is no longer compatible with the "new economy" model. They discovered that tradition proves now to be a serious drawback when it comes to overall business efficiency, due to high cost levels and the everlasting problem of finding highly trained IT personnel. So things had to be changed. Software corporations worldwide extended their search for IT talents and resources beyond the known frontiers of traditional IT arena and turned their attention on key areas beginning to emerge on IT map as very attractive targets. Their quest for skilled IT professionals and business partners ready to offer their resources at a very affordable price led them to the East, and what they found there was simply the birth certificate of a new business: outsourcing.

What is Outsourcing?

Dictionary.com provides the following definitions for the term "outsourcing":

1. outsourcing (*noun*) **out·sourc·ing** (out´sôr´sĭng, -sōr´-)

The procuring of services or products, such as the parts used in manufacturing a motor vehicle, from an outside supplier or manufacturer in order to cut costs.

Source: The American Heritage® Dictionary of the English Language, Fourth Edition
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2. outsource (*transitive verb*) **out·source** (out´sôrs´, -sōrs´)
Inflected forms: **out·sourced, out·sourc·ing, out·sourc·es**

To send out (work, for example) to an outside provider or manufacturer in order to cut costs.

Source: The American Heritage® Dictionary of the English Language, Fourth Edition
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3. outsourcing (*noun*) **outsourcing** ⟨business⟩

Paying another company to provide services which a company might otherwise have employed its own staff to perform, e.g. software development.

Source: The Free On-line Dictionary of Computing, © 1993-2001 Denis Howe

Investorwords.com provides the following definition for the term "outsourcing":

Outsourcing: Work done for a company by people other than the company's full-time employees.

Other sources define outsourcing as "*the strategic use of outside resources to perform activities traditionally handled by internal staff and resources*".

According to the context, sometimes the meaning of the term "Outsourcing" may overlap with another term – "**offshore programming**", which is mainly used for denoting an outsourcing activity centered on providing various IT services, such as business software development or web oriented services.

Outsourcing is not something new, as larger companies have always considered using outside resources for performing particular tasks instead of resorting to their own workforce. As a result, many small companies based in a low-cost climate have entered into long term partnerships with western corporations that have realized that **going beyond national boundaries** to search for cost-effective, highly skilled workforce is the way to success. But since in the early days **cost** was considered the only reason for hiring outside contractors, nowadays there's a turn, as companies become more and more aware of the rest of the advantages outsourcing can bring. Today, most IT managers consider outsourcing to be the most affordable solution for a company interested in becoming more efficient by reducing costs and accessing state-of-the-art technologies without spending additional funds on research and development.

More than that, IT outsourcing is being perceived as the easiest solution to well known problems, such as the growing deficit of skilled IT professionals in western countries, the pressure to cut costs in order to survive competition or the need for additional resources to complement the existing ones. But this is only the tip of the iceberg, as IT companies are now developing complex strategies in order to take full advantage of the outsourcing benefits.

The Driving Force behind Outsourcing

As the **new model of global economy** forces companies worldwide to go beyond national frontiers in search of highly trained human resources, most of the IT companies have turned their attention on East European software development companies in their quest for the ideal balance between high quality programming services and cost-effective solutions. Major IT companies are transferring their software development operations offshore, aiming at what East European outsourcing companies have to offer. Far from being a trend of the moment, the migration to offshore programming opens new possibilities for IT corporations, due to inherent **advantages** of the outsourcing. **The pressure to cut costs** forces companies to search for cost effective solutions for software development projects, so that the price level for a final software product could be lowered, and the company could get a better position on the market. From this point of view, outsourcing can become a very effective weapon for getting in front of the competition.

Another interesting fact is that during the last years, the IT field witnessed the rise of the Rapid Application Development (or **RAD**). The growth of this particular trend was caused by the continuously higher requests from the software market, demanding shorter development times for software projects. But in order to shorten the development time, the use of RAD environments won't help in absence of a serious training. And a good training requires human resources, money and time: these are exactly the main advantages of outsourcing, as a good outsourcing company offers, besides cost effective solutions, highly qualified personnel performing custom programming tasks. The result is that no training is required, and hiring additional staff in order to shorten development time is usually no problem.

Besides the advantages outsourcing can bring, there are still more important reasons explaining the boom of the offshore programming business: confronted with the **lack of IT professionals**, US and West European software companies simply couldn't afford ignoring the availability of highly trained IT professionals in the East. **Informationweek.com** says that for US IT companies "it's almost impossible to find enough good developers - and even the not-so-good ones cost a

fortune. In contrast, areas such as India and Eastern Europe have access to thousands of programmers, many with Java and other Internet-related skills, available for $20 to $50 an hour." According to Department of Commerce estimates, the shortage of professional programmers in the USA will total some 1.5 million by 2003. That surely explains the interest of the western IT companies in finding reliable outsourcing partners in South East Europe.

On the other hand, the **countries in the South East Europe** have experienced the unstoppable growth of the IT sector, and as a consequence, they have become very attractive targets on the IT scene. Due to the enormous potential behind these recently opened markets, the IT corporations have realized that an outsourcing partnership with local companies acting on these markets can bring them advantages beyond any estimation. The result was that most of the software development companies located in South East Europe are currently working for software corporations abroad, and many of the world's most important software products are developed offshore, either partially or completely.

Under these circumstances, the software corporations worldwide begin to consider **Romanian companies** as highly attractive targets when it comes to finding reliable outsourcing partners able to develop custom software projects and handle maintenance tasks. Their main arguments for outsourcing to Romania? Romanian outsourcing companies achieve an unbeatable balance between the quality of services and the price level. Adding the access to state-of-the-art programming technologies and flexibility in personnel recruiting completes the picture.

One or two years ago there was a general trend to consider India as the "default" outsourcing destination, but now things are changing pretty fast, since most of the Indian services companies begin to rise their price levels as they become more established and accepted. More than that, Indian programmers usually develop a project by strictly following the specifications. When problems occur, they simply report them and wait for further instructions. Romanian programmers rely more on their imagination to clear up the problems they encounter; they look for alternative solutions to speed up the development time and they identify the best way to get the job done. That's way the applications developed by Romanian programmers are usually faster and more flexible than others. It's about using imagination to create something new and finding superior solutions that stand out.

Indian programmers are reliable and skilled technicians, but don't expect them to come up with new solutions or to create a project from scratch. They always need detailed documentation, so they can complete their task according to clear specifications and precise guidelines. On the contrary, Romanian programmers can help you identify new solutions, as they can unlock the full potential of your project by discovering new possibilities you've never thought of. Usually, they only need the general idea behind a certain project in order to create the project specifications and start working from zero. This is really great when you need to develop a project starting from a vague idea – and then let the Romanian programmers develop it and turn it into success.

To conclude, outsourcing as a business has all it takes to be a winner when it comes to software development services. But even under these circumstances, no one can afford ignoring the business **risk**.

Risk: Taking a Few Precautions

When approaching a partnership with an outsourcing company, the overriding goal should be minimizing the risk. That means taking a few precautions before getting involved: clearly defining responsibilities from the very beginning is among the first things to be done, helping both sides to establish a working model that best fits the company goals. By **sharing responsibilities**, the overall business risk is obviously reduced, as both parts work under strict regulations. Ideally, outsourcer's facilities should be visited, because there's no replacement for a personal impression. If this option is out of question for some reason, meeting with a representative of the outsourcing company is the next best thing to do. This is really important, as you have to be sure that your outsourcing partner understands properly your business goals.

After clearly establishing responsibilities for both parts, it is recommended to test the capabilities of the outsourcing company. The experience level, the performance level and the quality level are usually tested by delivering the specifications for a **pilot project**. Starting with a small, non-critical project is essential, because it helps testing the overall skill level of the outsourcing company while minimizing the risk as much as possible. You must carefully evaluate the results of this pilot project development and, if the results are corresponding to your standards, you may proceed with more complex projects and start building a partnership that could be considered rewarding for both parts.

Do not hesitate to ask for a **dedicated project manager** to be assigned to your project, because you must know for sure who is in charge of your project. A dedicated project manager helps minimizing business risk by sharing responsibilities for a certain project. This person will be in contact with you using commonly established **dedicated communication channels** such as telephone, fax, email, instant messaging or other possible options. Being in touch with the outsourcing company managers is essential for the success of the partnership. You can hold online conferences as often you want, in order to track the evolution of your project and make changes, if necessary. Exact dates for reports should be established as well, in order to make sure that your project development is going on just fine.

To sum up, your outsourcing experience has better chances for turning into success if you know exactly who you're dealing with: all the advantages outsourcing can bring are useless in the absence of mutual trust.

European Network For Outsourcing Software Solutions: Our Approach to Outsourcing

▸ **The first contact** is the critical point, as a good start of a business relation it's essential for the entire partnership. We believe that the personal impression is decisive, so we encourage our customers to pay a short visit to one of our European based offices and discuss project and contract details personally. However, as this depends entirely on customer's wish, it can be done via communication channels as well if direct contact is impossible for some reason. The most important thing about the first contact is clearly defining the responsibilities for each part. We believe this kind of approach helps us keeping things simple, which is best for everyone.

▸ The first contact is usually followed by a **pilot project:** this is a small, non-critical task meant for testing the experience level of our programmers. Nevertheless, the pilot project should be complex enough to give the customer a clear idea of the performance level of our programmers.

▸ Before getting on to the development stage, some procedures need to be discussed: the first thing is establishing **dedicated communication channels** (phone, fax, email, chat or others) in order to keep the customer informed daily. After receiving the project specifications, the time schedule must be approved by both parts, and a dedicated project manager will be assigned to be permanently in contact with the customer. The **project manager** will be in charge of the project during the development stage until final delivery, he will clear up the problems (if any) and he will make sure that the project will meet the deadline successfully. If the project requires a more complex approach, it's recommended to divide it into phases, so that the customer can monitor each step and make changes, if necessary.

▸ **The development** stage: This is the point where real work begins: the project manager handles the coordination between the programming teams, sends daily reports, clears the problems and makes sure that everything is going on just smoothly, according to plan.

▸ **Testing & bug fixing**: This is the phase where the project is prepared for the final release: our programmers are testing it to make sure it complies with all quality standards and it is fully functional. Part of the beta testing phase is the integration with various platforms or existing applications (if necessary). The overriding goal is to eliminate all possible problems, so we can guarantee that the final version is 100% bugfree and fully functional.

▸ **The final delivery**: Here's the point where the final version of the product is delivered to the client, with all source codes documented in English. The project is considered done only after the customer approves the product quality.

Know Your Advantage

▸ **Cost**: Providing cost-effective solutions was the starting point of outsourcing as a business, and it still remains among its most important advantages. By hiring an outsourcing company located in Romania, for instance, you can expect a savings level up to 75% comparing to a western development team. This is pretty self-explanatory for the unstoppable growth of the outsourcing business in the last years.

▸ **Shorter development time**: If necessary, projects can be developed considerably faster by hiring additional personnel. Due to the fact that outsourcing companies are more experienced in recruiting qualified staff, this is usually no problem. More than that, many outsourcing companies are willing to do that, since it's a fact that in Romania, for example, the IT job supply is much higher than needed, and by hiring more programmers, new job opportunities are opened. On the other hand, for any IT company, a shorter development time is another effective weapon for getting in front of its competitors.

▸ **Knowledge**: A partnership with an outsourcing company means access to the latest programming technologies without spending on research. As a consequence, any IT company can broaden its knowledge base while keeping expenses low; from this point of view, outsourcing is the most affordable way of keeping up with the pace of technological change.

▸ **Human resources**: The outsourcing companies located in the South East Europe have build their reputation by taking full advantage of their well known educational system. Romania is maybe the best example, since Romanian programmers are acknowledged worldwide as highly trained professionals offering innovative and original solutions to the problems they encounter. The result is that most of the Romanian software companies have evolved towards custom software development, relying on their teams of skilled programmers that can handle all kind of software development projects.

▸ **Flexibility**: As outsourcing companies are more experienced with personnel recruiting, they developed policies allowing a better use of human resources. Most of these policies are oriented towards the possibility of hiring additional personnel to accomplish specific tasks, when necessary. As most of the offshore programming companies have several offices scattered across the country, there's no problem in coordinating the programmers teams according to project requirements.

▸ **Shared risk and responsibility**: Hiring an offshore programming company eliminates most of the problems typically involved with software development, as the project manager in charge of the project takes full responsibility and solves all problems. Most of the outsourcing companies are interested in attracting new clients, and sharing responsibilities and minimizing business risk are seen as a policy meant to encourage western companies showing excessive caution when approaching companies located in the South East Europe.

▸ **Software localization projects**: An IT company can considerably broaden its product range by delivering software localization projects to its outsourcing partner. This kind of projects are easily accomplished, as using native speakers is the best way to localize a product.

▸ **Focus on the business part**: With the offshore programming company taking the responsibility for the software development, the customers get rid of the problems usually involved with this kind of projects. This is a great opportunity for customers to focus on the critical areas of their business (the marketing part, for instance) and not on the development process. It is generally believed that concentrating on the core competencies of a business is the best way of reducing business risk.

▸ **Infrastructure**: Hiring an outsourcing company also brings another kind of advantage: using human resources outside the company implies using the outsourcer's equipment as well. This is an advantage not to be left aside, because a programming office must be equipped with computers, scanners, printers, Internet access devices, network equipment and other expensive devices, not to mention the Internet access provider. All these need to be installed, configured, maintained and repaired, if necessary. This is another way of saving time and money, since they are already part of the outsourcer infrastructure and the client is no longer asked to pay for using them.

These are only the most obvious advantages of using an outsourcing partner. Depending on a certain situation and context, other important benefits may emerge as attractive options, certifying the idea that outsourcing is among the best ways of increasing business effectiveness by maximizing the profits while keeping expenses low.

Romania: IT Profile

Romania is the second largest country in the Central East Europe (CEE) after Poland, with a population reaching almost 23 million people. This makes Romania a market with high potential - **the second largest IT consumer market in Eastern Europe.** In spite of having a less developed economy, Romania was among the first European countries to manufacture computers in the early 60's. A group of Romanian IT engineers was responsible for building in 1957 the first Romanian computer called CIFA, followed by MECIPT in 1961 and DACICC in 1962.
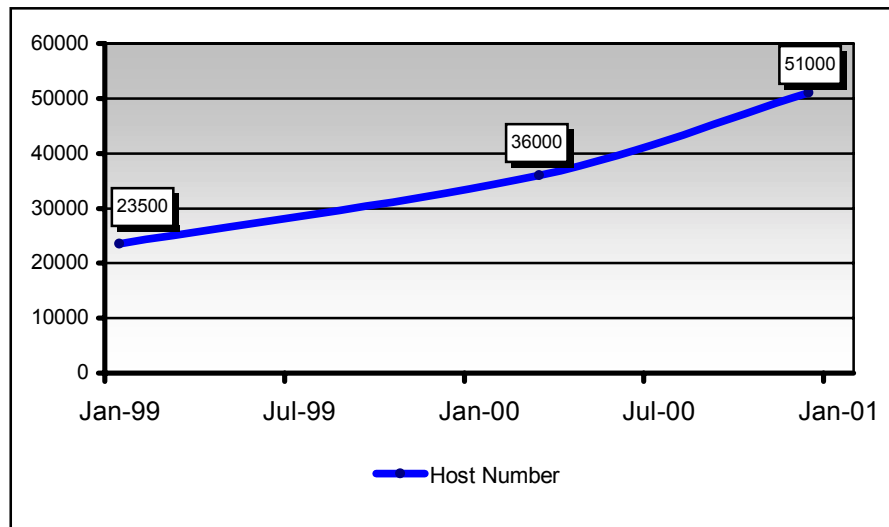
The result was that this "**IT tradition**" was reflected on the educational system, which started producing IT specialists to work in the newly created industry. There were two consequences, equally important: in the present, the IT branch of the **Romanian educational system** takes full advantage of this long-established tradition, being widely appreciated for its value. The second consequence is the highly trained IT workforce, which makes Romania one of the most valuable resources for IT personnel in the offshore programming arena. The following facts about the Romanian educational system are most impressive: at the ACM University Competition involving 20,000 university teams, the Romanian students won the first prizes in the last few years. In 2000, Romania won the second place at the World School Competition, while at the Mathematics Olympics, Romania won the first prizes almost all the time.

Statistics say that in 2000, there were about 100,000 IT specialists working in Romania - from a 22.5 million population.

According to sources *(IDC, World Bank, WITSA, ESIS II - Romania, National Commission of Statistics – Romania)*, in Bucharest, the first IT companies achieve more than 50% of the IT revenue in Romania, which says a lot about the presence of the Romanian software development companies.

According to the ESIS II Report, "*Information Society Indicators in the CEE Countries*", by the end of the year 2000, Romania was accounted for 7% of the CEE total of 9,467 million Internet users; Hungary and Slovenia got the same percentage. The same report stated that 3,1% of the Romanian population has access to the Internet using one of the 194 Internet Service Providers. At the end of the year 2000, from a total of 1144 Internet Service Providers from the CEE countries, 17% were Romanian companies. When speaking about the Internet growth in Romania, the following figures are pretty self-explanatory: in January 1999, the there were about 23500 hosts; in March 2000, the host number reached 36000, while at the end of December 2000, the host number exceeded 51000.
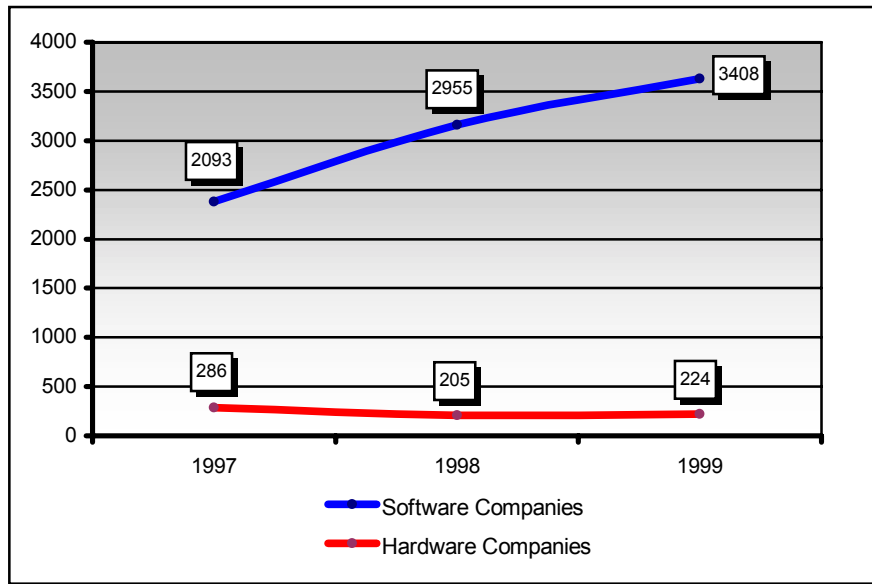
Host Number Growth

Source: ESIS II Report, "Information Society Indicators in the CEE Countries"

Under these circumstances, many Romanian IT companies focused on software development as their primary business goal, as they can rapidly develop and export their services with little capital investment; most of them become outsourcing partners with large software companies located in USA, Europe or Israel.

According to *ANCI* and *ATIC*, by the end of 1999 there were about 1200 Romanian companies working in the IT&C field, most of them offering software development services. By the end of 2000, this number has doubled: up to 2500 Romanian companies were working in the IT&C field, and the annual revenue from IT services was about 30 million USD. The same sources mention that at the end of 2000, there were about 40,000 specialists working in the IT services field, and 20,000 skilled programmers. Up to 75% of the software development companies were located in Bucharest. From this point of view, the Romanian market is continuously growing, as more and more Romanian IT companies are turning to custom software development as their primary object of activity with western IT companies.
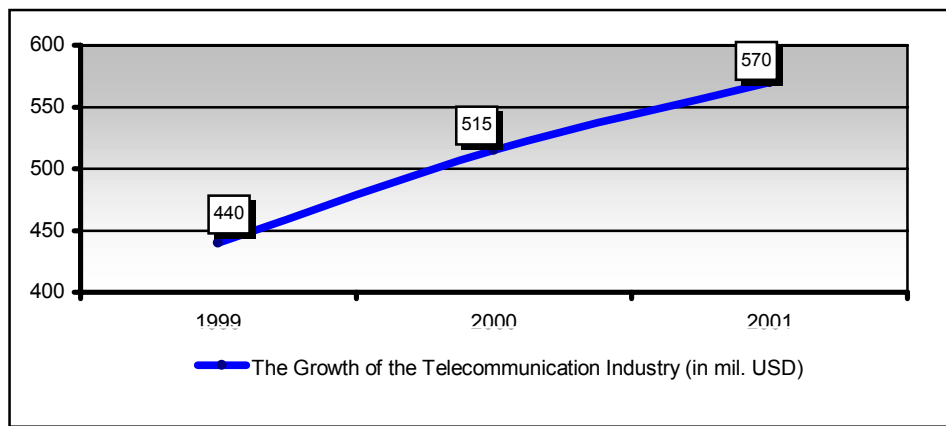
The Number of IT Companies in Romania

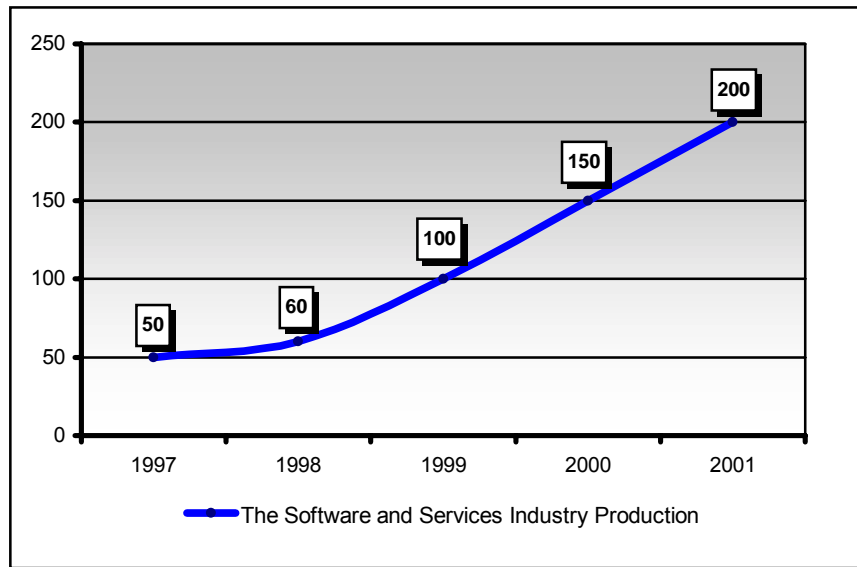*Source: Trade Registry Romania, 2000*

According to *ARIES* statistics, "the size of the telecommunications industry was estimated at 515 million USD in the year 2000, compared with 440 million USD in 1999". For 2001, estimations point to an impressive value of 570 million USD.

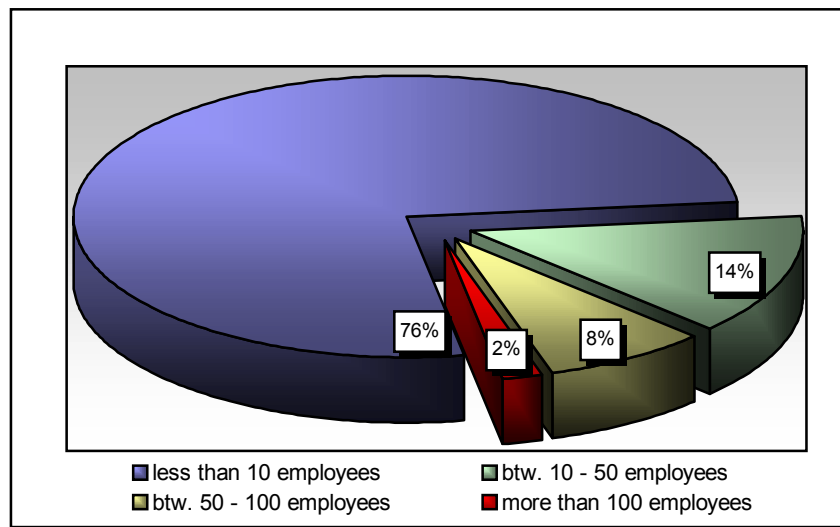## The Growth of the Telecommunications Industry in Romania

Source: ARIES

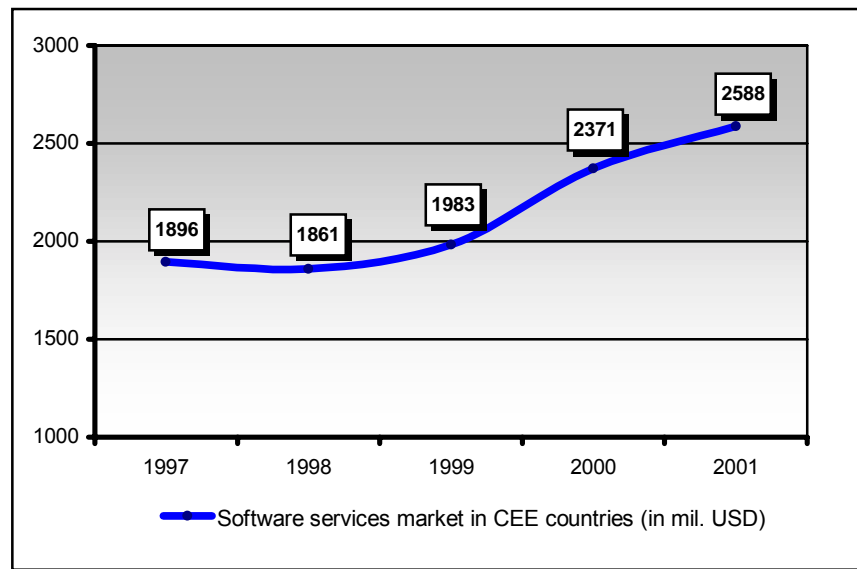IT Industry Production: Software and Services (in mil. USD)

Source: Yearbook of World Electronics / Ministry of Industry & Resources 2001

ARIES revealed that "76% of the firms in the IT services sector have less than 10 employees; 14% of firms have between 10 and 50 employees; 8% of firms have between 50 and 100 employees, and 2% of firms have over 100 employees".
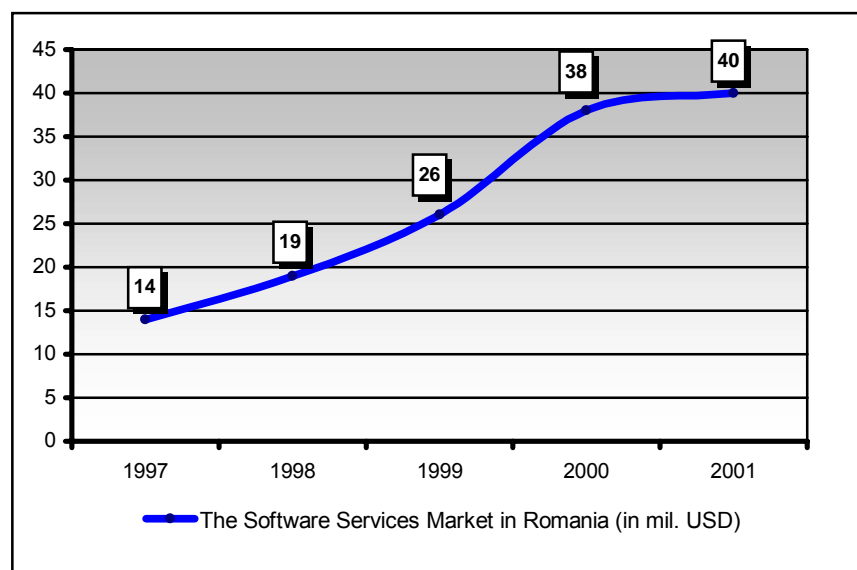

Source: ARIES

Software services in CEE countries (in mil. USD)

Source: Source: Electronics Yearbook 1998 / European IT Observatory 2000
* Poland, Czech Republic, Slovenia, Hungary, Russia and Romania

According to same sources, "the IT services market in Central and Eastern Europe was valued at 2.37 billion USD in 2000, representing 12.3% of IT spending in the region". According to *European Information Technology Observatory*, "IT services will represent one of the most dynamic ICT market segments over the next several years in terms of growth potential."

Romania: Software Services Market (in mil. USD)

Source: ARIES

Success stories

Informationweek.com: General Electric uses four major Indian partners with dedicated facilities that employ 3,200 people who develop and maintain GE's systems, says Farley Blackman, a former director of offshore development at GE who's now CEO of outsourcing consulting firm StrategIM Corp. By 1999, "GE accounted for 8% of India's $4 billion software export business," Blackman says. In India IT exports have grown more than 55% a year for the past five years and are expected to reach $87 billion by 2008, according to a report McKinsey Group published last December.

Mr. Pat Dittmar, CEO of Bettor Information, Inc., speaks about the outsourcing partnership with the ENFOSS company: "…These guys have really worked out well for me. They have expertise in every area imaginable. The link below shows general abilities and if you click on one of the many general areas it gets specific. They will work by the hour and better yet will do fixed price work and you don't have to pay until they are done. They stand behind their work and do all fixes asap and minor updates on the house.

http://www.enfoss.com/itdevelopment.html

Besides being nice guys they have demonstrated competence and integrity at every turn. Even if it takes a little bit of extra effort to get started I strongly recommend that you figure out a piece you would like done and estimate the hours it should take one of our people to do it and let me pass it on to them." Bettor Information, Inc., a software company based in Las Vegas, Nevada, is a leading provider of data based solutions in the field of sports and racing betting software products.

Mr. Rudolf Philipse, CEO of Spinware Solutions, speaks about the partnership with the European Network For Outsourcing Software Solutions:

We feel this is the beginning of a long and rewarding business relation, as we already reduced our costs by delivering several software development projects to our Romanian partner. The results speak for themselves, telling us that we did the right thing… Romanian programmers are very different from others: they use their programming knowledge to create something new, I mean they find solutions no one could have ever thought of… They treat problems as challenges, and they won't give up until the job is done… They're simply amazing!

The European Network For Outsourcing Software Solutions has been a great partner with the development of our CRM application. We experienced that the European Network For Outsourcing Software Solutions has very motivated and very qualified personel to get the job done within the timeframe as agreed. Spinware Solutions has outsources several critical project to the European Network For Outsourcing Software Solutions; the results have been nothing but excellent.

We believe that this partnership will dramatically reduce the costs usually involved with software development and maintenance and will help us concentrate more on the core competencies of our business. This partnership with our friends from the European Network For Outsourcing Software Solutions was definitely a smart move.

Conclusion

At present, most of the world famous software companies are relying on outsourcing to minimize software development costs and get access to highly trained IT workforce. In the near future, outsourcing may become the only efficient way of developing custom software applications and performing various maintenance tasks, as more and more outsourcing companies will emerge as world class service providers.

In the end, after considering the most important aspects involved with outsourcing, one may conclude that the key to successful outsourcing is identifying a reliable partner, which has the knowledge and resources (both human and material) needed to accomplish the specified tasks and get the job done well. Due to inherent factors like distance, language and cultural differences, an outsourcing partnership is very different than other business relations, as it must be founded on mutual trust. In the hands of a reliable partner, outsourcing can be a highly effective weapon for getting in front of competition and a pleasant business experience as well.