

Emerging Markets Queries in Finance and Business

Outsourcing IT – the alternative for a successful Romanian SME

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Abstract

IT outsourcing is one of the most frequently met action by SMEs in the USA, Australia and Western Europe but, in this respect, Romania is still at the beginning. Regardless of company size, both the structure and functionality of IT systems are much the same, so the main components that SMEs outsource, are: the Internet connection (with sub-web services such as e-mail, browsing), IT infrastructure: hardware component (including servers, workstations, printers, scanners, UPS's) as well as software component that includes a wide range of specialized applications, and also generalized systems such as ERP (Business Management), CRM (Customer Management), SCM (Supply Chain Management), applications for data backup and internal communication. Therefore, within the current research it is our endeavor to identify the IT areas that are fertile for service outsourcing, highlight the future trends, identify the advantages and disadvantages that comes along with the IT outsourcing process and what is Romanian SMEs interest in IT outsourcing.

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1. Introduction

In the recent years, market studies abound in the local market research and it aims to improving business opportunities for SMEs. It is known that outsourcing in general and outsourcing IT in particular, have an essential contribution to reducing both the personnel costs and the purchases of software and IT infrastructure.

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In this context, a study conducted in 2008 by IT Assist (a firm active in the sector of IT outsourcer's) reveals that 41% of firms in Romania turn to a private specialist for configuring and optimizing computer networks and/or workstations, 24 % employ a specialized company (outsource) and only 17 % have an internal employee expert in this field. In general, the trends of IT Assist study were confirmed in the following year when the research and consulting company Ka & Te Associates highlighted that in the IT management, 60 % of SMEs from Romania outsource their services. Thus, only 12,5 % of the SMEs surveyed say they own a specialized employed while 79 % of them do not have their own IT department [Wall-Street, 2009]. Moreover, 60 % of the surveyed companies prefer to entrust the management of their IT infrastructure to companies for which this is the main activity. In 2011, the turnover of Ka & Te Associates outsourcer doubled and thus the trend towards adopting the outsourcing of IT services in Romania was confirmed.

The concept of IT applications outsourcing is referred to in the specialized literature as ITO[†] and it is considered quite an interesting and actual subject. As a result, the small and medium sized enterprises manifest a high interest for ITO and as a consequence, the market provides them with a high variety of services&suppliers. Martorelli [Martorelli, 2007, p.1,7] consider that SMEs are positioning ITO on the first place on the top of the activities that are mostly outsourced. Also, within the widely ITO services [Andone, 2010, p.164] it is placed the management of information applications (which includes application development, software testing, software implementation, application maintenance & support), the management of IT infrastructure, implementation and maintenance of computer networks activities and a broad range of services for: test & validation of IT applications, monitoring & IT security, data recovery, user support throughout help desk service and others.

The proposed article intends to fill the existing gap regarding the lack of specialized studies that present the importance of outsourcing IT in the SMEs domain. Related to the outsourcing of IT, if compared with the developed countries, Romania is very much behind and the main reasons for this state is a repercussion of the fact that SME managers are not familiar with the benefits that derive [Negraru, 2011] from outsourcing. As a consequence, throughout the article we intend to highlight the importance for SMEs to outsourcing their IT service and enlist the offers that exist on the local ITO market.

The research undertaken within the article has a conceptual and methodological nature, illustrating both basic concepts related to outsourcing in general but especially to IT outsourcing. In terms of the research methodology there was used deductive reasoning while the methods used for data collection was the survey, direct observation and documenting.

2. SMEs main characteristics toward outsourcing: a worldwide and local approach

The economic importance of SMEs is undeniable, but should not be generalized. Between large and small or medium companies there is a complementary and interconnectedness relationship, as they complete each other and contributes to the establishment of a rational balance between the proportions demanded by the market economies. SMEs fundamentally contributes to the increase in the volume of consumer goods and services, both for the population and for export, they make “small” products that, when are lacking, become “big”. The large companies are, among others, the leading IT outsourcing market for SMEs.

The economic and financial crisis situation we globally face at present, primarily affects SMEs although from them it is expected a revival of the economy in order to emerge from this difficult period. Such revival can be attained by taking measures at the strategic level such as: reducing costs, eliminating the expenses of services that are provided by third parties, effective use of labor and customer loyalty. We strongly believe that

[†] Information Technology Outsourcing

the above measures can be implemented through the decision of computerizing certain business processes within SMEs activity. Such a decision would drive to the following results: lower prices for raw materials, lower prices on goods storage, labor efficiency, and openness to a global market that will bring new customers, thus a high cash flow which reduces the likelihood of the company to attain the impossibility of payments. The optimal solution for SMEs computerization is outsourcing.

Worldwide, SMEs account for over 98 % of the existing businesses and are significantly contributing to the reduction of unemployment and to the economic benefit of the European and U.S economies [Popescul, 2008, p.10]. Currently, in the European Union, there are about 23 million SMEs (99 % of the existing business) with about 100 million employees (70 % of GDP and employed force) and represents an important source of entrepreneurship and innovation that is essential for the competitiveness of European companies [EU Parliament, 2008]. A more detailed analysis [CE, 2008] at the European level reveals that SMEs count for: 99,8 % of all European businesses, 67,1 % of private sector employment and 80 % of employment in industries, construction and furniture sectors. In Japan, the trend is very similar to Europe as more than 99 % of all businesses are small or medium enterprises. Most of these companies are not as well known as the giants in Japan, but they form the backbone of service sector and are an essential part of the chain of production and export [Blair, 2010]. In Romania, SMEs totals 600.000 of all companies, accounts for almost 80 % of GDP and ensures 60 % of the employment force [Hodorogel, 2011].

Regardless of activity carried out, firm size and level of technology, the positive effects of the SME sector are manifold, the most popular being: improving competition(1), creating opportunities for development and adaptation of new information technologies to address a concrete needs(2), filling market niches that are unattractive for large enterprises and their effective exploitation as real opportunities(3), anchoring in local economies through local resources - financial, material, labor, and informational(4).

Generally speaking, due to the positive effects, both economic and social, SMEs represent a domain of strategic interest for any economy. Information Society offered and still offers new opportunities for SME development, among which: e-commerce which has a major impact on commercial transactions between businesses and customers by developing software solutions ERP (Enterprise Resource Planning) covering all departments within an enterprise in a single system [Grama, 2007]. Although at first ERP solutions have been designed especially for medium and large enterprises (as such software were considered large-scale applications) lately they are addressed to SMEs as well, due to the advantages offered by ERP solutions: managing all activities of the company, reducing costs of production and inventory, shorten waiting time, reducing the possibility of human error [Hurbean et al, 2013].

3. Information technologies - a catalyst for SMEs development in the global crisis

During the last decades there has been an ongoing process of dragging the world economy from one developed on traditional factors (material resources, labor and capital) to one based on knowledge where intangible goods such as education, technological knowledge, innovation, information management growth are the main factors contributing to an increased productivity of the traditional factors of production, whose quantitative contribution becomes secondary.

The emergence of new technological waves causes a profound change in the environment in which SMEs operate. To survive, they must adapt to the changes involved by the appearance of the new information and communication technologies (ICT). European Commission considers that one of its most important tasks is to promote the competitiveness of the ICT industry and services and to support the implementation of these technologies in European SMEs. ICT is one of the European most important economic sectors and leads to growth in the following ways: (1)among European Union, the ICT sector share of total economic added value is 8,5 % and furnish 3 % of the employment of the EU; (2)the vital advantage given by ICT derives from its

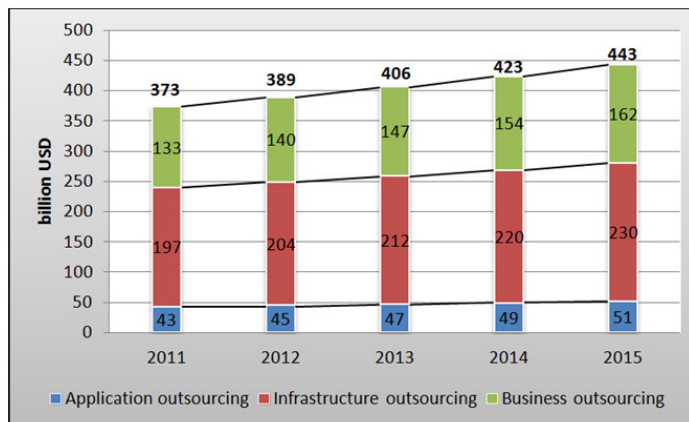
current usage while the investments in ICT conducts to a high productivity; (3) the use of ICT within the value chains allow organizations to raise their general efficiency and thus making it more competitive.

Europe 2020 Strategy and the European economy are based to a large extent on the potential available to SMEs. Consequently, there was developed a policy framework of the EU Small Business Act (SBA), designed to strengthen SMEs so that they can grow and create jobs. Even though most of the SBA initiatives have been triggered, a review of the current state of implementation reveals that more needs to be done in order to help SMEs. In this regard, we mention that ICT innovations can help SMEs by solving their problems. Thus, activities such as outsourcing and cloud computing can substantially contribute to reducing costs, increasing productivity and, finally, by strengthening the cohesion at team level. Unfortunately, the potential of ICT - based innovation and new business models is still under-exploited by Romanian SMEs and one of the causes is represented by the current economic environment that dramatically limits their resources.

Therefore, it can be said that developing and supporting SMEs activity have become a necessity, as such organizations are a very important component in the economy of a state, with opinions that those entities are the main factor of economic growth.

4. The benefits, offer and future market share projections of ITO

Usually organizations decide to outsource the more routine jobs or, sometimes, even entire business functions (such as accounting, IT services) to other companies. For instance, in 2008, the global market for outsourcing was \$326 billion [Information Services Group, Statista 2013], and was projected to be worth more than \$412 billion by the end of 2010 [Valacich, 2012, p.16]. The projection for 2010 was not reached and a study published in 2011 by Gartner forecasts a growth of 4% annually for the 2011-2015 periods within the outsourcing market. Thus, as seen in fig.1, the prediction outsourcing market for 2013 is about \$406 billion. When SMEs choose to outsource their business activities they have different motives and, among the most widely ones are [King, 2003]: the control or diminishing overall costs; release of internal organization resources; accede to high knowledge access to through experts; increase potential of business revenue; trim down the time to market; increase process efficiencies; focus on business basic competencies; make up for the short of skills or expertise on a certain field.



Comments [Volek, 2012]:

1. The grow of client demand results from the change in the model delivery for ITO (cloud, consumerization, industrialization and others) which accelerate the grow rate of ITO;
2. The innovation opportunities by ITO engagements will potentially conduct to an enrichment or change in initiatives and leads to incremental spending;
3. An increase of BPO deals getting completed while the economic growth within the developed markets improves. Also, the transaction volume expected to carry over from 2010 will increase, as well.

Source: Gartner, Inc., 2008-2015 Forecast of IT Services, 2Q11 Update, June 16, 2011

Fig. 1. Forecast of Global Outsourcing Market size in 2011-2015,

ITO basically refers to outsourcing all or parts of IT functions to an external party and can be seen as a subset of Business Process Outsourcing (BPO). In the specialized literature, this term can also be met as IT Enabled Services (ITES) Outsourcing. For the reason of offering a better understanding regarding to the importance, benefits and drawbacks of ITO for SMEs, in the following paragraphs we would address pertinent questions and try answer it.

Why would SMEs be in advantage if adopts ITO? Mainly because ITO can help SMEs by reducing the IT costs and also by allowing it to access new technologies in a cheaper and faster manner. Therefore, it is important to comprehend the advantages of outsourcing the management of some IT operations throughout a different company that can be either an off-shore or on-shore outsourcer. There can be several reasons why SMEs are outsourcing all or parts of the IT operations. Some of them could be: (1) *reducing the costs of owning & managing IT assets*, (2) *relieve the pressure* when IT is not the core activity of SMEs, (3) *acceding to the newest industry techniques & processes*, and bringing operational effectiveness, (4) *improve the SMEs time to market* for innovative products & services, and (5) *better service quality* brought by outsourcing a series of activities as billing and/or customer support.

Which are the major disadvantages that come with ITO? When SMEs turn to ITO, it should be aware that there can be several potential weak points to outsourcing an activity as it involves a partial loss of control on the outsourced activity. The literature mentions that 50% of IT outsourcing projects fails due to various reasons. For instance, if SMEs decide to outsource the external support of Information Technology, their relationship with the customers may be damaged if the outsourcer (provider of service) is not offering a quality service. Consequently, it may conduce to a lower elasticity of the received services. In the majority of cases, the SMEs may have to invest time in the management of the service provider relationships.

What are the IT activities that SME's mostly outsource? Once an SME decide the operations and/or department that shall be provided via a third party, will prepare a proper business folder, and the following action would be to find an outsourcing provider that has the desired qualities (such as comfortable working with, possessing the desired level of expertise, offering the proper costs).

How much of the IT services should the SME outsource? Though support outsourcing is not an option generally considered by SMEs, it should not be avoided, as it stands for the case when all IT section is managed by a different company. Usually this option is used by the large enterprises and multinationals and by doing so, allow system integrators like CSC, HP or IBM to acquire a larger or smaller control of the SME's in house datacenter. Such an action can lower SME's necessity to uphold a high level of expertise for its work force because the third party (based on an agreement) will take over that task and, as a result, the SLAs (Service Level Agreements) can be more harmful. Often, SMEs outsource [Longbottom, 2011]: (1) the needs considered to be fix (equipment replacement and SLA when unsuccessful); (2) core systems supervision (root cause analysis-RCA and core issues detection and its remediation, if available); (3) and general asset life-cycle administration (the setting up procedures, secure and administration of equipment replacement for a certain length of time).

Is SaaS synonym with ITO? Software as a Service (SaaS) is a web-based hosted software and is not exactly the same with ITO, though they have very much in common [Computer Weekly, 2009]. As an example, a third party provider maintains and manages the computer applications for an SME by accessing it through a computer network and will back up all the data created by SME's activities. SaaS business is based on regularly bills for the used services, and a contract among the SME and the outsourcer will set the usage and service provider's legal liability to the SMEs. The IT activities that are usually offered as on demand SaaS can have a

very broad range of IT services, from emailing, accounting, finance, HR, and SFA[‡] to web-based ERP solutions.

Cloud computing is interfering with ITO providers? Basically, Cloud computing (CC) means applications available at will, accessed whenever and from wherever. For end users, CC enables computing services without requiring a comprehensive understanding of the background technology. For a SME, CC brings consumer and business applications in a direct manner [Manker, 2008]. On short, CC means that clients do not own the infrastructure but they only access and rent it based on a per month agreement and is paid like any other bills. Though at the beginning there was a general concern related to the impact of CC on traditional IT outsourcing providers, over the time it was proved that most leading providers of outsourced IT services adapted fine throughout the mixed of alliances strategy, acquisition, and in house cloud software applications. CC appears to be increasingly well integrated as part of the delivery model for most traditional ITO providers and as a consequence, within the last part of 2011 about 8 % of all ITO services offered by conventional outsourcers (excluding companies that provide SaaS products) incorporated cloud delivery models and/or platforms within their offer [Sengupta, 2012].

What is the ITO offer for SMEs at global and local level? In terms of the ITO offer, the worldwide market refer to the outsourcing leaders such as IBM & Accenture, and a high range of minor and most of the times more specialized IT services firms to select from. A study published by Gartner in 2012 reveals that the ITO market-share increased in 2011 with 7,8 % reaching \$246,6 billion. In Table 1 it is presented the Worldwide top 5 ITO Providers in 2011 [Gartner, 2012].

Table 1. Worldwide Top 5 ITO Providers by Revenue Market Share in 2011 (Mill. USD)

Vendor	Rank in 2011	Rank in 2010	Revenue	Market Share (%)	Revenue Growth 2010-2011 (%)
IBM	1	1	26.923	10,9	7,8
HP	2	2	15.107	6,1	2,0
Fujitsu	3	4	10.981	4,5	10,3
CSC	4	3	10.374	4,2	0,0
Accenture	5	5	6.530	2,6	18,2
Others	-	-	176.640	71,7	8,3
Total market			246.555	100,0	7,8

Source: [Gartner, 2012]

As presented in Table 1, Gartner comments that IBM maintained the 1st position due to the growth of revenues in 2011 by 7,8 percent while its returns counts for 10,9 % of ITO returns. Also, in 2011 IBM was placed on the 1st place on a top for all areas. HP increased its market share but the growth was less than the market growth rate, but still was able to class 2nd on the global market share obtaining 6,1 % of the market share. Fujitsu changed the rank from previous year by overtaking CSC and was placed as 3rd on the 2011 global market share.

5. The particularities of ITO for the Romanian SMEs

Without pretences of being exhaustive, within the research it was performed a brief study based on a web analysis among local ITO providers, and the results reveal that there are several IT heterogeneous outsourcers

[‡] SFA-Sales Force Automation

which are presented in Table 2. Besides those, one of the top Romanian ITO providers is *Ka&Te* which, in addition to the basic IT services offered by the great majority of outsourcers, also provides Web development and any type of on-demand software solutions which are developed based on SME's needs. Consequently, their offer comprise the following software solutions whose names are quite suggestive: HR Executive (HR management), AsigExpert and Home Wallet (software solutions for brokers and insurance agencies), eProgramari (clients and employee management), MedicalRecords (management of medical records), eReviste (development and management of electronic documents), CMS Content Management System (Content Management website System), microERP (micro integrated system), LabSuite (management of activities for medical analysis laboratory), and soon ClinLite (designed for SMEs that are performing on the area of micro-manufacturing on demand). Another ITO successful locally provider is *IT Assist* which, based on their mission statement, is the only local company that provides IT services containing a comprehensive set of procedures and tools offering services to the highest standards of both quality and efficiency.

Table 2. Local ITO Providers

Vendor name	Services offered	Website
BIT Consulting	Troubleshooting computer network problems, Help Desk, assistance and technical consultancy, Computer Service, Install OS and servers, Configuration and maintenance of Servers and Computers, Installation and configuration software, Troubleshooting software / hardware computer systems / peripherals, Specialized technical staff support Help Desk, IT Consulting for acquisitions and development	www.externalizare-it.ro
SoftLine	Network Infrastructure Design, Installation and configuration of server, operating system installation, antivirus, security software, firewall, peripherals, Assembling PC, and others	www.softline.ro/servici i/servicii/outourcing-it
Computer Expert	Audit and IT consulting, Remote backup, Electronic communications, Content distribution, System maintenance, network and server administration, server services, equipment and peripherals acquisition	www.externalizare- it.com.ro

Source: a brief literature review based on web direct observation

In 2012 we conducted another study designed for all size Romanian enterprises based on questionnaire in which we intended to identify the interest of organization for purchasing software for a specific financial area. One of the addressed questions was “*Are you interested in buying software for a specific financial area?*” and the results are presented in table 3. We consider this study important for our article as it allows us to extract and point out the opinion of the interviewed SMEs toward their intention on buying instead of developing in-house software for a specific financial area.

Table 3. Distribution of companies by the question: Are you interested in buying such software? and Company size

Count		Company size:			Total
		small	medium	big	
Are you interested in buying software for a specific financial area?	Yes	3	47	13	63
	No	3	0	9	12
Total		6	47	21	75

Table 4. Chi-square test results

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	25.107a	2	.000

The results displayed in table 4 display the obtained value for Sig. As it is <0.05 the result rejects the initial hypothesis according to which we supposed that there are no significant differences between the distributions of the two categories of organizations (SMEs and big companies) in terms of their interest for buying specific software or outsourcing this activity. We intended to find out whether the Small and Medium sized enterprise are interested in ITO. The result allow us to affirm that, with an assumed risk of 5%, it can be inferred that also the 50 Romanian SMEs interviewed (namely the sum of small and medium: 3+47), out of a total of 63 organizations are interested in purchasing specific software applications which are developed by a 3rd party. Therefore, we may affirm that 79,37 % of Romanian SMEs are aware of the importance of outsourcing ITO or of the opportunities of “going on cloud” (if the specific software is delivered this way) and that they would be interested in apply for such an option, if it is available.

6. Conclusions

Though the main advantage that outsourcing brings to a company is the cost diminishing, there are other substantial benefits that accompany this process. Outsourcing always conducts to costs reducing while also diminish the costs of personnel access to high levels of expertise. Thus, employees must participate in training courses on a regular basis and such trainings can be quite expensive. Through outsourcing, their cost is passed on to the outsourcer. Also, through outsourcing, SME's no longer need to keep up with technology and computer infrastructure, which bring a new set of economies, worthy of consideration. During the current research we identified a change toward cloud architectures which will lead to a shift of buyer's portfolio strategies regarding outsourcing and the brief study displayed that Romanian SMEs are interested in ITO. As a result, the cloud services structure will reside in a combination of what usually were called “isolated” silos. Among the European outsourcing trends [Volek, 2012] are identified the following future paths: (1) IT cost diminishing is one of the major aspect that drives outsourcing, while fast entrance to innovative competences will boost organization scalability & flexibility; (2) in previous years, mainly big enterprises were outsourcing their service while now-a-days all size enterprises, with various IT budgets, are being highly interested in outsourcing; (3) in Europe, consumers are not highly contented by their own enterprises' outsourcing governance competencies & skills, in terms of the quality of managing the outsourcer parties.

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