

# IT OUTSOURCING PARTNERSHIPS IN BULGARIA: STRATEGIC ORIENTATION

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## **Abstract**

*IT outsourcing is among the prevalent practices in the global business today. It is found that business organizations decide to transfer such kind of services to other firms (identified as “vendors”) mainly because of cost-related advantages. It is still not clear whether the vendors are able to provide comparative advantages from the point of view of economizing costs of the production of these services. The objective of this paper is to identify the main determinants affecting the success of IT outsourcing partnership in Bulgaria on the basis of empirical study. The paper presents selected results from a survey of the outsourcing relations between Bulgarian vendor organizations and their clients (outsourcers) considering the issues of the development of successful strategic partnerships in outsourcing practices. In 2008 an empirical survey of outsourcing partnerships in 28 organizations providing high technology services has been conducted based on cases of Bulgarian vendor organizations. The subject of the study was the analysis of the key determinants influencing the formation and development of strategic outsourcing partnerships between Bulgarian vendor organizations and their clients (foreign companies).*

**Keywords:** IT outsourcing, outsourcing partnership, strategic orientation, Bulgaria.

**JEL classification:** M15, M16, L24.

## **1. INTRODUCTION**

At the current stage of applied research in the area of high technology services outsourcing it is found that business organizations decide to transfer such kind of services to other firms (identified as “vendors”) mainly because of cost-related advantages. It is however questionable whether vendors are able to provide comparative advantages from the point of view of economizing costs of the production of these services. It is valid predominantly for the large organizations having the capacity to organize their own provision of such services on the bases of a particular costs minimization strategy. The contradictory success of outsourcing practices during the last few decades requires a more comprehensive study of the actual value added by vendor organizations through the provision of the transferred services.

As far as outsourcing decisions of a particular business organization and its relations with the vendor organization have been extensively studied in the specialized literature, the point of view of the vendor organization is still not analyzed in adequate extent. It is particularly valid for such organizations in Bulgaria that are positioned on this global market and endeavor to develop their own competitive advantages.

The paper hereafter presents some selected results from a study of the outsourcing relations between Bulgarian vendor organizations and their client organizations (outsourcers) considering the issues of the development of successful strategic partnerships in outsourcing practices. One of the main hypotheses of the study is the existence of an interrelation between the efficiency of business activity of vendor organizations, originating from the economic gains achieved, and the strategic orientation of the outsourcing partnership.

The system of key competences of the vendor appears to be “complementary” in respect of the competences of the client organization. This can be explained by the fact that the vendor organization makes efforts to build own technologic infrastructure, know-how, and capacity by which to substantially increase the efficiency of realization of a set of similar high technology services. A strategic partnership assumes sharing of the value added between the vendor and the client generated through the attainment of the comparative advantages. This is realized by a complex of both formal and informal relations between units of the organizational structures of partner organizations.

Thus, the object of the study is the partner relation between Bulgarian vendor organizations and client organizations (which currently are from USA and EC). The main research thesis is focusing on the assertion that an outsourcing partnership provides benefits for client organizations which they otherwise could not achieve within their own organizational context at the same level of economic, organizational, and technological efficiency. The main risks associated with the realization of outsourcing partnerships as well as the strategic perspectives of these partnerships are identified.

## 2. LITERATURE REVIEW

The literature about IT outsourcing has revealed a tendency for a shift in the leading reason for outsourcing from cost concerns to the strategic dimension related to the importance of the quality of outsourcing relationship. In this respect, IT outsourcing has developed as a highly strategic decision that is based on the creation of value through establishment of outstanding client-vendor cooperation [Quinn & Hilmer, 1994]. In the last 20 years the specialized literature reaches a general consensus about the assertion that core processes should stay “in-house” while non-core processes could be outsourced. In the same time, according to some recent views the differentiation between core and non-core activities is mitigated – companies are increasingly looking for strategic partners that can handle their IT processes (traditionally considered as a core activity) in a framework of shared dependence and long-term cooperation [Di Romualdo & Gurbaxani, 1998].

The main orientation of the research in the area of outsourcing of high technology services are several aspects of vendor-client interrelations. Various studies find a relative parity between the importance of the informal aspects of these relations (e.g. personal trust) and the formal aspects formulated in the outsourcing contract [Poppo, 2002]. In order to achieve strategic partnerships, however, it is necessary that both aspects of these relations are emphasized [Kern & Willcocks, 2001]. According to the study of Kern & Willcocks [2001] the strategic vision and the technical capacity shape not only the formal structuring of contract

relations but also the development of inter-personal relations. As factors influencing the success of the outsourcing partnerships can be highlighted: the high degree of synchronization between the client and the vendor; team working; balance of control function; clear responsibilities of the partners; the degree of flexibility and intensity of the transferred processes [Goles, 2001].

For example, the interrelations based on the orientation to the utilization of advantages originating from technological leadership of vendor organization (regarding the contracted service) for increasing the efficiency of IT operations of the client organization could provide a higher value added only if *sustainable strategically-oriented partnership relations* have been established. For the development of such kind of partnership relations various successfully applied approaches are known, e.g. realization of pilot projects for cooperation; contracts with multiphase realization and evaluation of intermediate results; precise choice between flexible contracting and contracting at fixed conditions; contracting mechanisms with a bilateral risk sharing; establishment and bilateral promotion of partners reputation, etc. [Barthélemy, 2003].

In another case the increase of IT operations efficiency could be achieved by the establishment of another type of relations with the vendor organization, namely the “pay-per-service” scheme, when the vendor offers a wide range of services and accessible capacity of resources, but is not a technological leader in the branch. From the point of view of developing partnerships of that type, the preferred principles of the negotiations are: short-term contracting; simultaneous provision by few vendors (i.e. maintaining a competitive environment), clear criteria for stimulation and sanctioning, etc. [Lacity & Willcocks, 1998; Currie, 1998].

Although IT outsourcing practices are broadly studied from various points of view, relatively little attention in research literature is paid on the characteristics of the vendor organization having significant relation to the process of value adding by the outsourcing partnership. For example, on the basis of theoretical hypotheses Goles [2001] derives several important factors characterizing the vendor organization: technical competencies; knowledge of the subject area and the specifics of client’s operations; competences for coordination and management of partner relations. Albeit the interest about these characteristics is growing there is a scarcity of empirical evidence for the specifics and the degree of their impact on the success of the partnership.

### **3. GLOBAL IT OUTSOURCING MARKET TENDENCIES AND RECESSION IMPACT**

Recent evaluation by Gartner Group experts show that the worldwide IT services market has a potential to grow from \$761 billion in 2009 to \$912 billion in 2013. The share of globally delivered services (i.e. through outsourcing) is estimated to 9% of total IT services market (or about \$70 billion) and by 2013 this share can reach 13% to 16.5% of this market (or about \$120-150 billion). The major tendencies of this near future perspective can be outlined as follows [Pring, 2010]:

- Hypercompetition – it is driven mainly by cost reduction decision-making (due to budget restrictions on IT costs), however, the real opportunity for the clients is to select strategic providers that can offer not only competitive prices but also adequate quality and stability for a longer period.

- Market consolidation – expanded acquisition deals are expected because the development of vendor capacities was found to be insufficient to attain the required targets. A future trend is outlined regarding the so called “cloud skills” acquisition.
- Innovation – a key focus of the current trends is put on the innovation capacities of the vendors, e.g. intense investments to acquire top-level competence and to reposition to the new industrialized services (cloud and grid computing, utility models, etc.).

One of the leading trends in current IT outsourcing development is related to the cloud computing services [Motahari-Nezhad et al., 2009]. Recent estimates of specialized analysts show that up to year 2020 these services market could reach \$240 billion as compared to its 2011 level of about \$40 billion [Hill, 2011]. According to the same research the highest potential for growth can be attributed to SaaS (Software-as-a-Service) market segment that can increase for 5 years from \$21 billion in 2011 to \$93 billion in 2016. The other segments – as IaaS (Infrastructure-as-a-Service) and PaaS (Platform-as-a-Service) – are also expected to grow worldwide where IaaS could reach \$6 billion in 2014 and PaaS could exceed this level. A further trend is expected for the fourth segment BpaaS (Business-processes-as-a-Service) that has a potential to develop as PaaS but in a later period (2015-2020). Cloud computing is still entering Bulgarian IT outsourcing market where only two large companies have contracted such services (Tchelopech Mining and Unimasters Logistics).

The trends in IT outsourcing market development in Central and Eastern Europe /CEE/ have been reviewed by various authors and organizations [e.g. PMR, 2009; UHTI, 2008]. A clear insight on the position of various countries on this market can be obtained from the respective country indicators (table 1).

*Table no.1 Selected indicators of the IT outsourcing market in CEE countries, 2007.*

Country	Value of the market (mln.EUR)	Number of IT outsourcing companies	Number of IT outsourcing employees
Ukraine	320	800	16,000
Poland	270	400	9,000
Czech Republic	211	300	8,000
Hungary	188	360	7,500
Romania	164	600	10,500
Bulgaria	75	400	5,000
Slovakia	62	170	3,000
<b>Total CEE</b>	<b>1290</b>	<b>3030</b>	<b>59,000</b>
Russia	1040	1000	52,000

*Source: [PMR, 2009]*

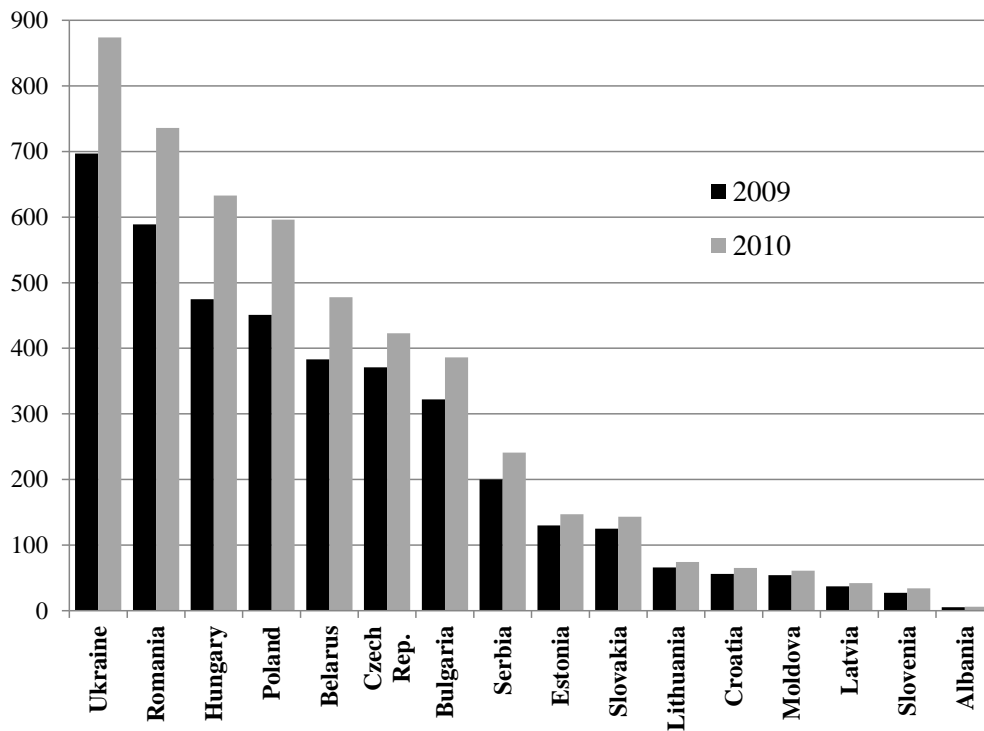
As a general reflection, a clear advantage of Central and Eastern Europe /CEE/ is the availability of adequately educated multilingual “pool of talent” that is geographically close and can be recruited at relatively low cost. Successful IT outsourcing in CEE has also been intensified by the overall progress of the economic conditions related to the EU integration of some CEE countries [PMR, 2009]. According to Mesnita & Dumitriu [2005] the “new model of global economy” pushes the companies all over the world to search the optimal balance between the quality of human capital and the cost level. This way, many companies from the developed countries turned their attention on CEE high-tech providers, particularly software developers and information system companies. Albeit India is still the most attrac-

tive outsourcing destination, CEE companies emerge as increasingly attractive IT service vendors [Mesnita & Dumitriu, 2005, p.19-20].

After the initial expansion of IT outsourcing in CEE countries since the end of 1990s the global financial crisis has dampened the trend of growth of this sector. Client organizations have identified the cuts in IT outsourcing as a reasonable tool for saving some expenditures. They preferred to restrain their new outsourcing intentions and related projects opting to leave into operation only the basic functionalities. In the same time, survey data obtained by PMR have shown that IT outsourcing vendors still rely on the stable and even increased demand of their services by financial intermediaries, telecoms, retail, industrial and utility companies for the period 2008-2010. These expectations are additionally supported by the strategic orientation of the EU funding towards the development of high-tech and IT sectors which can considerably mitigate the adverse crisis impact [PMR, 2009].

Recent developments of IT outsourcing market in CEE countries have been studied by the Central and Eastern European Outsourcing Association [CEEEOA, 2010]. According to this Report, IT outsourcing services provider industry in CEE effectively overcame the major challenges of the 2008 recession and resurrected its previous growth patterns. As main drivers of this process have been identified the largest software developers who have contracted strategically oriented long-term agreements with big clients. Since 2009 the latter have transferred numerous software development projects to the CEE outsourcing vendors.

Survey data showed that during the global crisis of 2008-2009 there were no significant failures or closures of IT outsourcing companies. Moreover, the outsourcing industry utilized the recession period to reorganize its internal business processes to achieve costs optimization. On this basis, improved operational management processes have been achieved which allowed quite fast a recovery of the IT outsourcing industry and renewal of its earlier growth rates. This justified the stable prospects of the business model that was established by CEE outsourcing companies as the basis of their strategic development [CEEEOA, 2010].



Source: [CEEEOA (2009). The data for 2010 are estimates]

Figure no. 1 Market volume of IT outsourcing

According to the evaluation provided by CEEEOA (2010) “the total volume of IT outsourcing and custom software development services exported from the CEE region reached USD \$4 billion in 2009”. The highest growth rates were estimated for Romania and Ukraine that have shown intensified market growth (fig.1). Other well-performing countries are Hungary, Poland, Belarus, Czech Republic and Bulgaria. This evaluation was conducted on the basis of a range of objectively observed indicators, as:

- number of specialists involved in software development industry and IT outsourcing services;
- average remuneration rates by country;
- staff workloads;
- amount of offshore projects in the revenue structures of these companies.

More comprehensive results indicate that the costs of IT outsourcing services provided by CEE vendor companies are not so sensitive to the global economic crisis. The main reason for this effect is, firstly, the fact that labor has a substantial share in the total service costs and, secondly, during the recession labor costs did not change significantly from the level of 2008. The only period of some reduction is the end of 2008 – beginning of 2009 when the service prices have been somewhat decreased with the purpose of keeping the current clients. However, since the mid-2009 an increased demand for IT outsourcing services was observed which brought about stabilization and even some new growth in the industry.

#### 4. EMPIRICAL STUDY OF HIGH-TECH OUTSOURCING SERVICES PARTNERSHIPS

##### 4.1. Main hypotheses

In year 2008 a questionnaire survey of outsourcing partnerships in the area of high technology services has been conducted based on cases of Bulgarian vendor organizations. The subject of the study was the analysis of the key determinants influencing the formation and development of strategic outsourcing partnerships between Bulgarian vendor organizations and their clients (foreign companies). This analysis is structured in the framework of a specifically developed model of factors impact which reflects the current understandings and contemporary achievements of research in IT services outsourcing [Barthélemy, 2003; DeLone & McLean, 2003; Goles, 2001; Kern & Willcocks, 2001]. Such a model provides an abridged presentation of the interrelations between the key characteristics of IT outsourcing partnerships which determine its success or failure. In the same time, the model has also practical implications since it helps the applied researches and IT managers to identify which determinants are most influential in respect of the overall success of the IT outsourcing partnership.

The model of determinants facilitating the success of the partnership between a client and vendor organization (in the process of outsourcing of high technology services) assumes a clarification of the interrelations between a complex of determinants and a response variable capturing the level of success of the outsourcing partnership. The model incorporates the following key determinants:

1) Bidirectional transfer of knowledge /BTK/

BTK emerges when optimal (as a quantity and quality) information necessary for the realization of the service is provided through the channels of effective communication between the partners. The knowledge could have two forms: implicit /informal, tacit/ and explicit /formal/ [Nonaka & Takeuchi, 1995]. Special attention should be put on the way which organizations “learn” from their partners as this appears to be one of the means for development of key competences. The following research hypothesis is raised in respect of this determinant:

*H1. The degree of success of outsourcing partnership is positively related to the degree of effectiveness of BTK.*

The operationalization of the BTK in the framework of the study is realized on the basis of four primary measures that capture the extent of:

- 1.1. the exchange of organizational knowledge about key business processes;
- 1.2. the exchange of information about the impact of business environment factors;
- 1.3. incorporation of bilateral information exchange in the business planning of organizations;
- 1.4. incorporation of bilateral information exchange in the technological development of organizations.

2) Achievement of the contracted goals as results of outsourcing partnership

Another key determinant in the model is the degree of achievement of results set as contract goals in the outsourcing agreement. This degree should reflect the divergence between actual benefits and relative costs that client organization would have to spend without the realization of the particular partnership [Anderson & Narus, 1990]. A research hypothesis regarding this determinant is also raised:

*H2. The degree of success of outsourcing partnership is positively related to the degree of achievement of contracted goals.*

3) Mutual trust

The third key determinant reflects the intensity of the informal relations between partner organizations having in great extent a psychological dimension. The degree of trust between the partners compensates any eventual drawbacks of the formal contracting and the lack of strong defense clauses in outsourcing agreement [Lee & Kim, 1999]. This determinant reflects the flexibility of the cooperation and the orientation to mutual correctness based on the understanding that the interests of the partner organization should be respected (as far as “the success of the partner works for our own success”). The following research hypothesis is raised in respect of this determinant:

*H3. The degree of success of outsourcing partnership is positively related to the degree of mutual trust between the partners.*

4) Security assurance of outsourcing partnership

The existence of security assurance is an important determinant of the success and sustainability of outsourcing partnership that is likely to provide strategic nature of the partnership. Unlike the mutual trust (that is of informal nature) the availability of security assurance has entirely formal character as far as it is incorporated in the outsourcing agreement. These warranties should be provided by special clauses in the contract. As a base precondition for the provision of reliable assurance is a targeted negotiation process before the finalization of the contract (i.e. the decision to form the outsourcing partnership). The following research hypothesis regarding this determinant is raised:

*H4. The degree of success of outsourcing partnership is positively related to the degree of security provided in the agreement.*

5) Interdependence between client and vendor organization

This determinant reflects the degree of dependency of the activities of client organization from the operations of the vendor organization supplying a high technology service as a subject of the outsourcing agreement. This interdependence has a clear bidirectional nature – often in practice the vendor organization is strongly dependent on the realization of contracted service. It is particularly valid in cases when the vendor is serving one key client or diversification of the vendor services/client was not achieved.

The model assumes that the impact of this determinant is moderated by the effect of the levels of mutual trust and security assurance (warranted by the outsourcing agreement). It is hypothesized that if there is a positive impact of at least one of these (conditionally defined as “moderating”) determinants, a positive relation can be observed between the success of partnership and the level of vendor-client interdependence. In the same time, having a situation characterized by a lack of trust and low security guarantees, the effect of the mutual interdependence should be negative. Thus, the research hypothesis regarding this determinant is raised as follows:

*H5. The degree of success of outsourcing partnership is positively related to the degree of interdependence between the operation of the client and the vendor organization, with a moderating effect of the determinants “mutual trust” and “security assurance of the agreement”.*

6) Shared values within the outsourcing partnership

The sustainability and the strategic nature of outsourcing partnerships are expected to reflect the sharing of common values, principles, and cooperation ideas as elements of the organizational cultures of partner organizations. As a result of the formation of the outsource-



ing partnership transformations of organizational cultures have often taken place in both client and vendor organizations.

Along with the direct net benefit of the agreement having immediate effect on the economic status of the partner organizations, the sharing of common values and the exchange of organizational and managerial know-how has a significant (although indirect) long-term effect on the operation of the organizations. The research hypothesis regarding this potential determinant states that:

*H6. The degree of success of outsourcing partnership is positively related to the degree of sharing of common values between the partner organizations.*

7) Level of risk

A key determinant of the success of the outsourcing partnership is the level of risk associated with the process of realization of the contracted high technology service. This risk has a complex character with various sources. The contracted relations in the outsourcing partnership assume identification, evaluation, and comprehensive analysis of the potential sources of risks that can lead to obstruction and blockage of the service itself, considerable financial losses, worsening of the reputation of the partners, and even to failure of the business [DeLoach, 2000].

*H7. The degree of success of outsourcing partnership is negatively related to the degree of risk associated to the outsourcing partnership.*

8) Other characteristics of the organizations that should be controlled for in the analysis of the interrelations (as key features of the outsourcing partnership) are embraced in the profile of the respondent organizations. Such variables are: total duration of the activities of the organization (year of establishment); size of the organization (number of employees); sector / branch of the main activity; experience in outsourcing (duration); type of outsourced services / ICT functions.

The degree of success of outsourcing partnership is the main dependent (response) variable in the model. It is however commonly considered as quite difficult for operationalization and empirical measurement as far as it is of multidimensional nature. For example, Lee & Kim [2003] define the success of partnership as the degree of satisfaction of the needs of client organization from the services provided by the vendor organization. Other points of view are also applicable, e.g. that which characterizes the outsourcing partnership success by the degree of achievement of overall (pan-organizational) comparative advantage through outsourcing of all or part of ICT functions of the client organization.

In the specialized literature two dimensions of the success are considered – “net benefit” and “service quality” [Lee & Kim, 2003]. Generally, the outsourcing decision is motivated by the endeavor to realize strategic, economic, and technologic benefits [Grover et al., 1996]. In the same time, of considerable importance for this success is the level of quality of the service supplied [DeLone & McLean, 2003]. Here one should have in mind that the evaluation of the quality level might diverge from the different points of view of the vendor and client organization, where different operational measures could be adopted for capturing the service quality level [Jiang et al., 2003].

#### *4.2. Methodology of the study*

The provision of the information for the study of outsourcing partnerships in Bulgaria, and about the determinants that are expected to influence the success and its strategic dimensions, is conducted by the method of personal interview. Object of the study were 28

Bulgarian vendor organizations in the branch of high technology services having two or more outsourcing projects realized (or currently working for 2+ international client organizations). Because of the specific character of these organizations the sample was selected by the purposive sampling method where the potential of the Internet, information and communication network of Bulgarian Investments Agency was utilized. Unlike quantitative research approach which typically utilizes data from random samples, primary data provision in a qualitative type of research is often performed by such a purposive sampling [Kuzel, 1992].

The respondents in respective organizations have key managerial positions at various levels and are directly responsible for the realization of the outsourcing partnerships. Most of the questionnaires (21) are filled by the “face-to-face” interview method and the rest by self-interviewing using electronic questionnaire form. For this purpose, a specialized instrument for empirical study of outsourcing partnerships (realized by Bulgarian vendor organizations) was developed as a questionnaire for structured interview. The emphasis is put mainly on the characteristics of the partnership itself rather than on the characteristics of these organizations. The questionnaire was used to record the individual information and contains 20 questions directed to the respondents. These questions are targeted in the operationalization of the response variable and the determinants of outsourcing partnership as defined in the model. The concept indicators extracted by specific sets of items (taken from the questionnaire) have been verified and prepared for further data processing and analysis of results.

The operationalization of the concept indicators is performed through a multivariate (multi-item) method where for each determinant 1 to 4 questions are utilized. For the standardization of primary data a unified 7-rank Likert scale for the answers was adopted which allows the summarization of the answers on the items to extract one empirical measure (variable) for each concept indicator. Rank 7 codes the opinion expressed at the maximum of the scale (e.g. maximum degree of agreement with the respective statement) and with rank 1 respectively at the minimum of the scale.

The current survey can be treated as a first step in the probation of a methodology through which a reliable and justified evaluation of the characteristics of outsourcing partnerships in Bulgaria can be obtained. Along with the evaluation of the status of these partnerships, the development and application of this methodology could support the identification of the perspectives for development of the outsourcing of high technology services in the country as well as to provide a basis for comparison of Bulgarian practices with the world experience in this area.

## **5. MAIN RESULTS FROM THE SURVEY**

### *5.1. Main characteristics of respondents*

For each of the organizations interviewed a set of characteristics is obtained in order to describe their profile – legal status (type of firm), size, type of the main activity, foreign participation in the capital, etc. According to their legal status, shareholding and limited responsibility companies prevail (almost 40% for each of them) and about one fifth are the single-owner limited responsibility companies. A variety is observed also about the size of organizations captured by the number of the employees – almost one third (32%) are big enterprises (over 250 persons according to Bulgarian Law on SMEs) and only 11% are micro-

enterprises (up to 10). The rest of respondents are from the category “Small and Medium Sized” enterprises. However, about two thirds of the respondents declare that they regularly hire part-time personnel.

According to the presence of foreign shareholders about one fourth of the firms involved in the survey are “mixed ownership” enterprises and about 11% are companies entirely owned by a foreign investor. This undoubtedly provides these organizations with options for transfer of contemporary managerial and technological know-how in the area of high-tech business. And almost two thirds of the interviewed are fully domestic companies.

*Table no. 2 Main activities of respondent organizations*

Activity	Share of operations related to outsourcing			Total
	Over 40% to 60%	Over 60% to 80%	Over 80% to 100%	
	<i>57.1%</i>	<i>25.0%</i>	<i>17.9%</i>	<i>100.0%</i>
Telecommunication	18.7%			10.7%
Internet provision	31.3%	42.9%		28.6%
Software development	37.4%	42.9%	40%	39.3%
Database management	6.3%	14.2%		7.1%
Call centers			60%	10.7%
Financial services	6.3%			3.6%
	100.0%	100.0%	100%	100.0%

About 40% of the organizations classify their main activity as being in the software industry (software development and/or implementation-at-client) and almost 30% are providing Internet communication services (table 2). Several organizations identify as their main activity: telecommunications, database management services, call centers as well as financial services. Only 18% of the respondent organizations have predominantly IT outsourcing activity whereas the majority of the respondents (57%) balance between vendor activity and own production. The organizations for which IT outsourcing has the main share of their operations work in the software branch or provide call center services. In respect of the experience of the respondent organizations over 50% operate as vendors for 3 or more years; only 18% of respondents have relatively shorter experience (up to 1 year) where most of which are small Internet provider companies.

### *5.2. Results on the success of outsourcing partnerships*

In this study the success of an outsourcing partnership is evaluated by the degree of matching between goals planned and results actually achieved. This evaluation is required in respect of four key dimensions: the realization of expected financial benefits; complying with the deadlines; successful execution of the tasks; provision of the required service quality.

As already mentioned above, caution should be put here since the evaluation of the results achieved may diverge from the points of view of the vendor and client organizations. In our case the evaluation results obtained by the survey reflect the position of the vendor organizations (it would be of major interest to obtain also the evaluation of the representatives of client organizations). As a whole, the results achieved are favorably evaluated by the representatives of the vendor organizations where we do not observe any “low” and “very low” degree of achievement evaluations.

Table no. 3 Dimensions of outsourcing partnership success

	Degree of matching:			
	1. financial results	2. deadlines fixed	3. tasks executed	4. service quality
1) very low	–	–	–	–
2) low	–	–	–	–
3) moderate (–)	–	14.3	–	–
4) moderate	32.1	17.9	7.1	–
5) moderate (+)	50.0	57.1	28.6	10.7
6) high	17.9	7.1	39.3	60.7
7) very high	–	3.6	25.0	28.6
Total:	100.0	100.0	100.0	100.0

The degree of realization of the financial goals is found to be “moderately high” and “high” for over two thirds of the vendor companies and the almost the same share is observed in respect of the degree of completion of the tasks. Moreover, regarding the latter item about one fourth declare that the degree of achievement of the goals is very high which is comparable with the result on the “service quality” dimension. The lowest level of achievement is evaluated about the compliance with the contracted deadlines where almost two thirds of respondents define the degree as “moderately low” (14%) и “moderate” (19%).

### 5.3. Model of the determinants of outsourcing partnership success

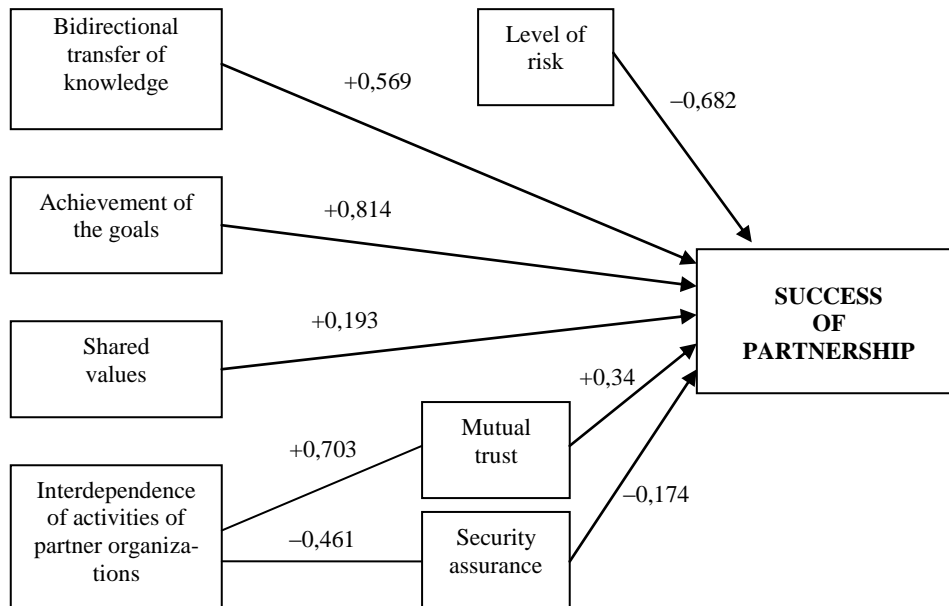
The model of the determinants is depicted on fig.2 where the preliminary results for the correlations between the variables are presented. They are obtained as Pearson correlation coefficients measured for the summarized (composite) success variable and the composite variable for each determinant. Considering the hypotheses raised about the potential interrelation between each determinant in the model and the level of success of outsourcing partnership, the following results were obtained.

H1. The hypothesis for the presence of a positive relation with the effectiveness of the bidirectional transfer of knowledge is confirmed by the observation of a moderate positive correlation (0.57).

H2. The hypothesis for any positive interaction with the degree of achievement of contracted goals is also confirmed, however, at the higher estimated correlation (over 0.8) which provides evidence for the strongest effect of this determinant on the level of partnership success.

H3. As assumed, the degree of success of outsourcing partnership is also positively related to the degree of mutual trust, albeit confirmed by a relatively low correlation (0.34) possibly due to the simultaneous influence and moderating effect of several variables. These effects should be further analyzed by specific multivariate method.

H4. The hypothesis about the relation with formal security assurance is not confirmed – the correlation is not significant and its negative sign (–0.17) could be ignored. At that stage we can conclude that the formal warranties included in the outsourcing agreement do not directly contribute to the level of success of the partnership. The results show that other factors (e.g. informal relations and trust) have strongest impact on the response variable.



**Figure no. 2 Estimated correlation coefficients in the model of determinants of outsourcing partnership success**

H5. The evaluation of the interrelation between the degree of success of outsourcing partnership and the interdependence of the operation of vendor and client organizations is influenced by the moderating effects of two determinants causing a strong multicollinearity. A strong positive correlation is observed between the degree of interdependence and the level of mutual trust (0.7) as well as moderate negative correlation with the level of formal security assurance (-0.46). Here the analysis is to be further clarified in order to derive the net effects of each determinant on the response variable (the level of partnership success).

H6. On the basis of the low correlation (0.19) it can be concluded that the degree of success of outsourcing partnership is not substantially related to the degree of sharing of common values between partner organizations – this aspect of high technology services outsourcing is to be developed still in the process of integration of Bulgarian organizations in the global economy.

H7. The hypothesis about the effect of the level of risk is confirmed in light of one of the highest correlations estimated (-0.68). The degree of success of outsourcing partnership is negatively related to the level of risk associated with the partnership – as it was expected, lower levels of success are evaluated (on average) with highest levels of risk generating an unhealthy environment for the operation of the outsourcing agreement.

## 6. CONCLUSIONS

The development of high technology services outsourcing in Bulgaria is oriented to the options for improvement of internal business processes through formation of managerial

competencies and transfer of managerial know-how from developed business organizations having strategic interests to transfer their own processes in Bulgaria as an appropriate outsourcing destination. This survey certainly provided evidence in support of this assertion showing the validity of such a strategic perspective of IT outsourcing industry.

The influence of IT outsourcing on the development of human resources in the area of high technology services is undoubtedly a basis for improvement of professional qualifications, narrowing of labor specialization, and finally an increase of the importance of strategic alliances. Such a process presumes sustaining the tendency for outsourcing to evolve from a short-term managerial tool to its formation as a long-term perspective that assumes the establishment of strategic partnerships between domestic organizations and foreign companies. This paper contributes to the existing research in IT outsourcing to CEE region by identifying and exploring the main characteristics of outsourcing relationships in respect of their strategic orientation and overall success.

According to the survey results the most influential determinants of IT outsourcing partnership success are the effective transfer of knowledge, low risk, inter-organizational trust, and ultimate achievement of contracted deliverables. There is no doubt that a trustful sharing of information and knowledge between partners can build a competitive synergy for achievement of goals which otherwise cannot be accomplished separately by the organizations themselves. All these determinants contribute to the strengthening of IT outsourcing partnerships and to improving the organizational performance of both partners.

According to the observations of international analysts the IT outsourcing industry has a potential to provide a sustainable source of economic growth, however, the revealed mismatch of IT workers supply and demand could be problematic if CEE governments do not emphasize on this source of growth [UHTI, 2008, p.9]. Affirmative policies need to be implemented that should provide stronger incentives to knowledge-based businesses, better targeting of public education policies, and other preconditions and stimulus for the development of strategic outsourcing partnerships.

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