

INWARD – OUTWARD INTERNATIONALISATION:

Case of Russian Information Technology Companies

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ABSTRACT

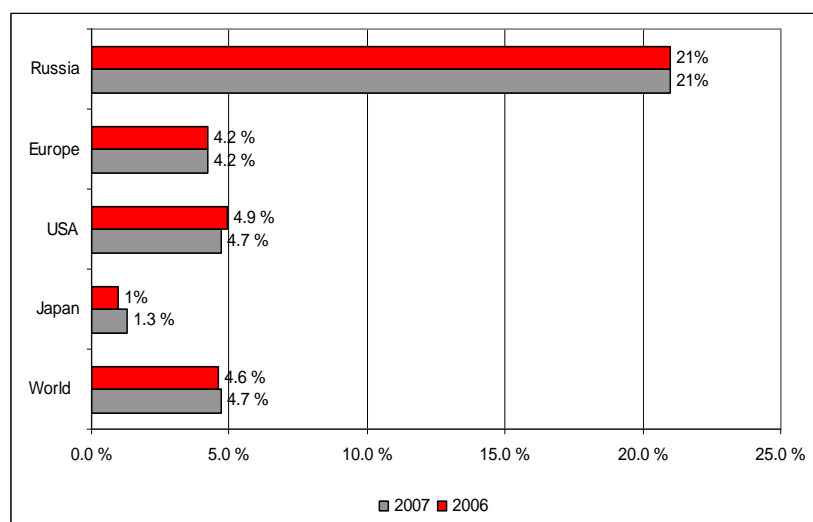
The intensified internationalisation as well as technology development has raised attention to the research on high tech companies' international operations. This paper studies Russian IT companies, describes type of international operations, and underlines the importance of considering inward international operations together with outwards. Authors would like to question traditional internationalisation theories and introduce new perspectives to international operations of Russian IT companies. International operations of 80 largest Russian IT companies are studied in this paper.

Results show that Russian IT companies tend to internationalise first to closest and most familiar markets – CIS countries. Both inward and outward internationalisation were detected in the study. Companies with international operations tend to be more effective than domestic companies. The hope is that the outward internationalisation of Russian IT companies will positively influence the Russian export structure in the long run and will start positioning the country as a high tech producer instead of the current image of a raw materials supplier.

INTRODUCTION

The new Russian IT companies have started to become more active and recognised in the international cooperation and technology exchange. The size of the IT market in Russia has grown from 6.0 bill USD in 2000 to 12.6 bill USD in 2006 (Cnews, 2007). Leonid Reiman, Minister of IT and Telecommunications of Russia, forecasted market size of 13.6 billion USD in 2007 (CeBIT, 2007). The growth of the IT industry as a whole decreased compared to the previous booming years (35 % - 40 %) and achieved 21 % in 2006 (Figure 1). The growth of Russian IT market looks tremendous compared with other countries, however it is decreasing and many experts forecasting that it will reach the more realistic figures in the nearest future.

Figure 1. The growth of IT market in Russia and worldwide

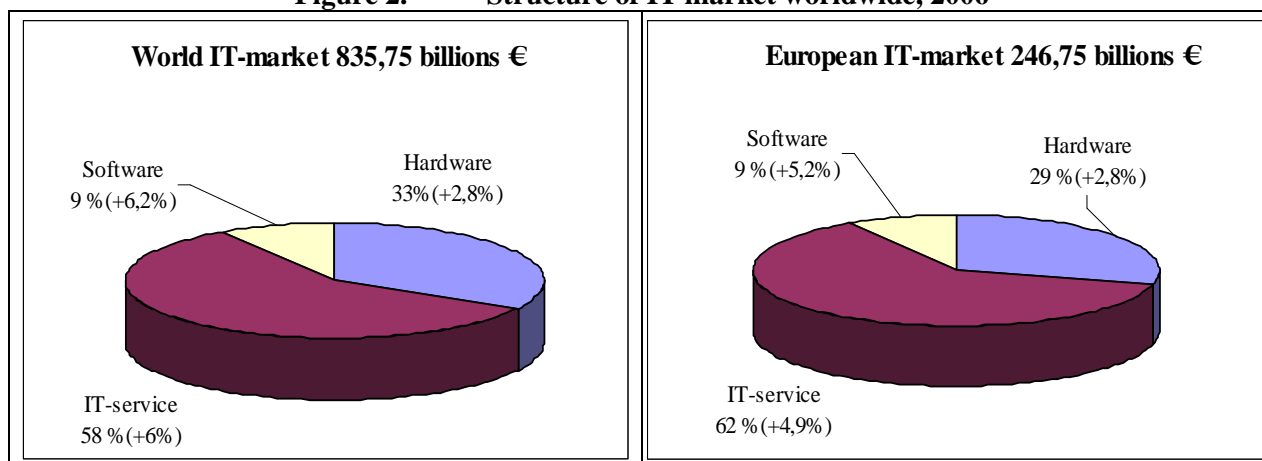


Source: EITO, Deutsche Bank, 2006, Verrysell presentation, 2007

The structure of Russian IT market is also different from international one (Figure 2). The hardware production and sales is dominating in the market (69 %), compared to 29 % in Europe and 33 % worldwide. The share of IT services in Russia is relatively modest (21 %) compared with 62 % in Europe and 58 % worldwide. It is expected that demand for software products and IT services continues growing in Europe in 2007. European Information Technology Observatory predicts IT market growth of 4.4. % and volume of market will reach 320 billion Euro (www.osp.ru).

**International Outsourcing Vs. Traditional Internationalization:
Russian Information Technology Companies Experience on Global Markets**

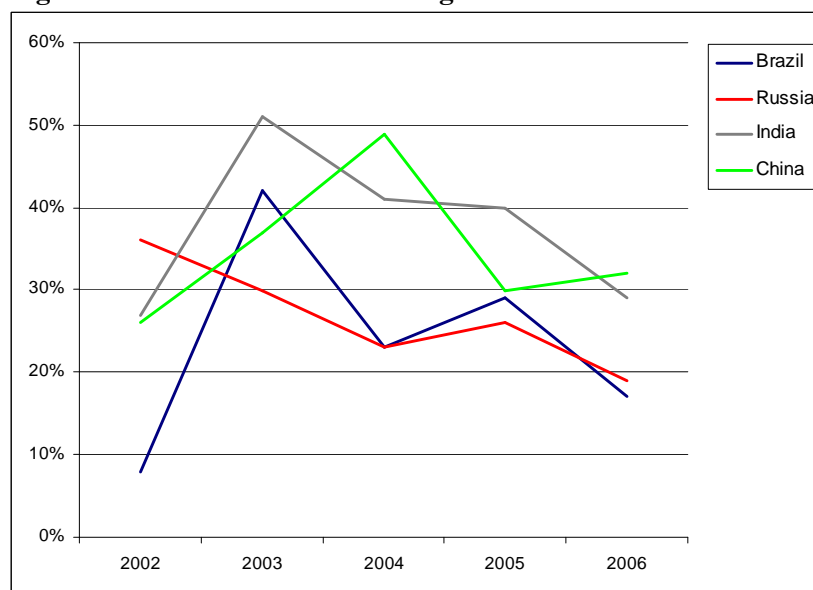
Figure 2. Structure of IT market worldwide, 2006



Source: Linex, 2006

The trend of growth rates slowdown on IT market is observed in the transitional economies such as BRIC-countries (Brazil, China, India and Russia) (Figure 3).

Figure 3. Annual IT market growth rate in BRIC countries



Source: Linex, REAL-IT, 2007

The sharp devaluation of the national currency in Russia in 1998 delivered a stronger than expected boost to the Russian economy. The gross domestic product (GDP) that had continuously fallen since 1990 started to rise in 1999. High world oil prices have also helped to sustain this recovery. These trends, along with a renewed government effort to advance structural reforms, have bolstered business and investor confidence in Russia's economic prospects. It is unlikely that oil prices will fall in the immediate future, which means that

economic stability in Russia should not suffer. However, the current export structure (the exports of oil and natural resources make up 80 % of all exports) is rather dangerous because Russia's economy is now more dependent than before on the international commodities markets. It is necessary for Russia to develop other sectors of its economy to increase the competitiveness of the country. Therefore, the growing ICT sector will play an increasingly important role in the future of Russia's economy.

The ICT market is rather broad and consists of various segments. This article focuses only on one segment known as information technology. It includes hardware (HW) and software (SW) development, and intellectual services (integration, consultancy and outsourcing). The IT segment is the focus of the interest because it is less studied than, for example, telecommunications.

INTERNATIONALISATION OF IT COMPANIES

It is often assumed that internationalisation means a company's expansion, i.e. increasing sales volumes and entering new markets. For many Russian companies internationalisation is associated with increasing effectiveness and competitiveness by attracting experience and resources to different fields of the companies' activities. Often internationalisation is regarded as a strategic choice of a company. After opening up the Russian market in the early 90-s Russian companies faced competition from foreign firms on the home market. Over time competition with foreign producers continued to increase and many Russian companies were forced to start internationalize their procurement, technological and marketing activities in an attempt to compensate for the weakening of position on the home market and to increase competitiveness vis-à-vis foreign manufactures

There is a plenty of literature on the internationalisation of SMEs. Most of them study foreign markets entry modes or decision making in internationalisation process. Companies internationalise for a number of various reasons. Some companies internationalise due to

external reasons, for example their rivals or customers have become globalized (Ohmae, 1990). Other companies internationalize for internally-pushed factors such as to improve the firm's profitability (Gerliner et al., 1989). Johanson and Vahlne (1990) summarize three research areas that have emerged in the literature on internationalization: (1) FDI theory, (2) stage models, and (3) network perspective.

Studying Russian IT companies' internationalization we need to put some limitations to the traditional internationalization theories use.

1. Theories of internationalisation addressed in the modern literature have a limited applicability to the **Russian setting**. The Russian economy is characterized by some specific features influencing the applicability of Internationalisation theories in Russian firms' case. The weakness of the mentioned internationalisation theories when applied to the Russian setting and transition economies at large partly explained by the basic assumptions laying behind them (Pchounetlev, 2000).

However, the stage models indicating that internationalisation is linked with managerial learning, can be tested on Russian companies. Then, Internationalisation is defined as a step-by-step process from the simplest form (export) to manufacturing abroad (Luostarinen, 1994). This process combines getting experience and knowledge and increasing resource commitment to foreign market. Russian IT companies utilize their advantages on the CIS (Commonwealth of Independent States) markets - the nearest and the most familiar markets.

2. The internationalisation of **service companies**, such as IT and software development companies are, obviously, is a specific field due to the different nature of services compared to goods. Lovelock (1983) has described three categories of services: (1) People processing services, (2) Possession processing services and (3) Information based services. Information based services are the most interesting category in the modern high technology linked world. Lovelock and Yip (1996) have divided the services internationalisation drivers to five

categories: (1) Market drivers, (2) Competition drivers, (3) Technology drivers, (4) Cost drivers and (5) Government drivers. There are two major issues companies have to solve when providing services in the international markets: what kind of services to provide and how to create and sustain relationships (networks) with the customers. Selling a service often means personal interaction between the seller and the buyer.

A framework for analyzing the tradability of services has been proposed by Richardson (1987). Some perfectly tradable services can be produced in one country and sold in another; some essentially tradable services have to establish a temporary or permanent commercial presence in order to facilitate their sales; others, exchangeable with more difficulty, require the movement of staff for the delivery; the remaining ones have poor tradability because they can only be developed with the creation of local establishments.

Today, the development of telecommunication technologies has made it possible to sell services distantly, which decreases the cost significantly. A lot of services, considered earlier as exportable with difficulty in the absence of an appropriate network, are today currently exported without any local support (Leo and Philippe, 2001).

Four types of international exchange have been identified, and four types of internationalisation of services can be conceived (Leo and Philippe, 2001): *Cross-border transaction without movement of either the provider or the customer (informational distant services or “tele”-services which use the vectors of telecommunications in order to deliver service; the information and consultation of data bank services; software activities, insurance, banks, computer maintenance); International transaction by movement of the provider to the client’s country in order to deliver the service (consultancy, legal or engineering services, transportation); International transaction by customer’s movement into the provider’s country in order to obtain the delivery (tourism, health and training); International delivery through foreign affiliates.* All services are a priori concerned with this

type of international exchange because the direct investment in the market country becomes a necessity for companies deeply involved in international business. In this category we can find consumer services (restaurants, hairdressing, and beauty salons), mixed services (hotels, cars and equipment renting) and some business-to-business services (legal consultancy, auditing, advertising, and engineering).

The above four types of exchange concern not only service firms but also manufacturing companies when they sustain the commercialization of their goods through services (services associated to goods). In the companies' current life, relations with customers may appear on many occasions (prospecting, presence on the market, service delivery) and they take these various forms (Leo and Philippe, 2001).

3. *New small high tech companies*. Software development is truly international business: customers and development companies are scattered around the world. Many of Russian software development companies are operating globally / internationally from its establishment. Therefore, it can be justifiably described as a "born global" (Knight and Cavusgil 1996), a phenomenon rather typical for high-technology firms.

The definition put forward by Knight and Cavusgil (1996) states that born global are "technology-oriented companies that operate in international markets from the earliest days of their establishment". However, Schmid and Schmidt-Buchholz (2002) point out that the term born global is misleading in that few companies actually operate all over the world. Instead, their activities are usually restricted to certain countries or regions. Therefore, they suggest that "born international" would actually be a more appropriate conceptual definition.

In addition to "born global" and other concepts have been used to describe similar phenomenon embodied in the international business literature. McDougall et al. (1994) define an international new venture to be a "business organisation that, from inception, seeks to derive significant competitive advantage from the use of resources and the sale of outputs in

multiple countries.” It has been argued that traditional internationalisation models cannot be applied to born globals, which speed up their internationalisation process and do not follow conventional market entry patterns (see e.g. Andersen 1993; Bell 1995; Madsen and Servais 1997). Born global internationalisation is especially common among small firms that target narrow, highly specialized global market niches and operate in small, open economies with small domestic markets (Bell et al. 2001).

Jones (1999) lists a number of factors that encourage the rapid internationalisation of knowledge-intensive firms in particular. These include shortening product life cycles, a drive for innovation, the need for technology transfer, and the rapid development of information technology and global telecommunication. Preece et al. (1999), for their part, also identify three main drivers for rapid internationalisation. Firstly, SMEs that operate in high-technology sectors often concentrate on a narrow market niche. Therefore, the home market is small and there is a need for international expansion in order to achieve adequate growth. Secondly, R&D costs are high and have to be borne before any income is received to finance them. Therefore, the initial expenses need to be covered quickly through growth. Thirdly, competition is very intense and products become obsolete quickly. Therefore, firms need to penetrate several markets at once instead of expanding incrementally from one market to another.

The above-mentioned factors did not contribute towards internationalisation unless a firm had an internationally-experienced founder or manager. This is in line with the observation made by Preece et al. (1999) that small-business managers play a more important role in company growth than often assumed. Hawk and McHenry, 2004 defined the elements influencing competitiveness of software industries. The main elements are *demand* (demand from abroad for offshore work, domestic demand for software), *international linkages and trust* (trust – development of relationships, common culture, language; marketing and in-country

representation; piracy and copyright- effective laws, protection of intellectual property); *software industry characteristics* (competition – spurring quality, efficiency, etc.; clustering – co-location of several firms; collaboration – through industry associations, etc.); and *domestic Input Factors/ Infrastructure* (human capital – technical skills, education, experience, English; technological infrastructure; capital; R&D).

From authors point of view, the network perspective would bring good conceptual framework for analysing Russian IT companies. It draws on the theories of social exchange and focuses on firm behaviour in the context of interorganizational and interpersonal relationships. It emphasizes the role and influence of social relationships in business transactions (Johanson & Vahlne, 1990; 1992). Companies are connected by networks developing the interaction between them. In the network context, internationalisation means that the firm develops business relationship in networks in other countries through international extension, penetration or international integration (Johanson and Mattson, 1988). The network approach is especially important in turbulent, high technology industries (Johanson and Vahlne, 1990). Russian IT companies' explore their external and internal networks when planning its moves towards international customers. This includes also cooperating with "partner" from the target country. Partner can be agent, middleman, or even business partner in joint venture.

PREVIOUS STUDY

The study of 41 Russian Largest IT companies was conducted in 2004. In 2002 sample IT companies employed 11,877 people, and in 2003 this number increased up to 13,842 (15 % growth). Russian business is traditionally concentrated in Moscow and Saint-Petersburg: 75.6 % of the studied companies were located in Moscow. The largest group of firms (34 %) were established between 1992 and 1998. The 1998 financial crisis is a watershed, which changed many economic fundamentals in Russia and made international operations more profitable. It is natural, that these companies have the largest share in total sales. And that's why the

efficiency (in our case, it is sales per employee) is much higher: these companies have better managerial experience, more flexible and have not inherited from the soviet firms' tradition to have more employees than needed.

The biggest IT companies prefer expand into Russian regions with region/local strategy. About 30 % of companies sell on the Commonwealth of Independent States (CIS) market. This approach was called quasi – international strategy. 12 % internationalising companies operate abroad on the base of personal networks, occasionally happened contracts and offers. Only 5 % of companies had outsourcing as the major business operation, they build strategy depending on foreign customers.

RESEARCH QUESTIONS

Based on the theory study, previous research in this field and some case study of Russian IT companies, authors formulate the next research questions:

1. How do Russian It companies internationalise? Define types of cross border transactions and specify their nature. Inward / outward internationalisation
2. Which markets companies go first? Why they choose certain markets?
3. How companies explore their internal and external networks to support international activities?
4. How IT service specific is reflected on companies internationalisation?
5. When companies start internationalisation? Are companies operating globally / internationally from its establishment?

RESEARCH METHODOLOGY AND DATA

The combination of qualitative and quantitative methods was chosen as the research methodology. The sample was formed of 80 largest Russian IT companies according to the rating made by Expert Rating Agency (2007). Data was available for the period 2002 – 2006

and consisting of sales in Russian roubles and in euros, location of the company, number of employees, growth of sales, structure of business operations, contact information.

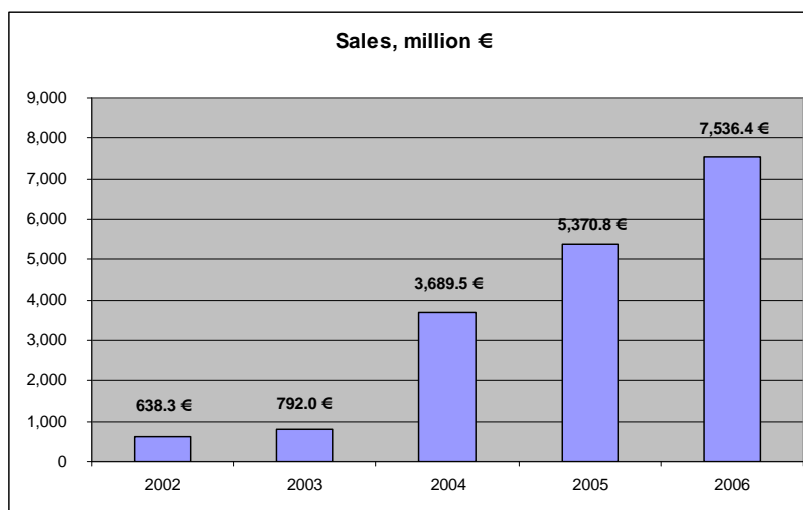
The additional data was collected by authors using companies web pages and other sources: availability of English language company's web page, year of company's establishment, location and number of company's offices and affiliates – Moscow, Saint-Petersburg, regions of Russia, in CIS and abroad; international distribution of companies, availability of outsourcing, which countries companies are selling its products and services. The efficiency of companies as sales per employee was calculated.

FINDINGS

The Largest Russian IT Companies

The study was made based on 81 IT companies presented in the Expert rating for largest Russian IT companies in 2006. Annual sales of IT companies participating in rating increased 28 % (32 % in 2004, 28 % in 2005) and achieved 7.5 billion Euros in 2006 (Figure 3).

Figure 3. Sales of Russian IT companies



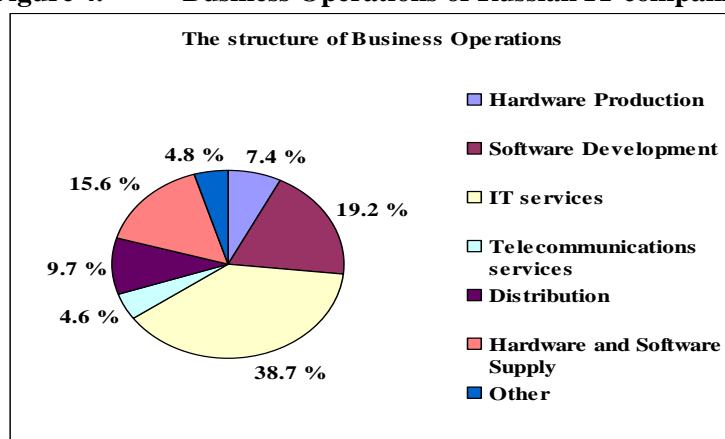
Source: RAExpert rating, authors calculations

The structure of business operations of biggest Russian IT companies are presented in the Table 1 and in the Figure 4 and represent the situation on the Russian IT market. The demand is higher for IT services: 38.7 % (43 % in 2004) of companies have IT services as major

business operation. 19.2 % (22 % in 2004) of companies are specialised in software development, and 15.6 % (21 % in 2004) in hardware and software supply.

Table 1. Structure of sales of the Russian IT companies, mln Euro

	2006	2005	2004	2003	2002
IT services	2914.0	2076.5	1383.5	254.0	223.1
Software Development	1445.9	1104.6	762.8	169.3	125.6
Hardware and Software Supply					
Supply	1176.4	933.0	595.9	169.0	0.0
Distribution	734.0	522.9	400.6	35.5	0.0
Hardware Production	556.3	323.2	221.1	75.2	115.2
Other	364.9	179.0	145.0	58.1	142.8
Telecommunications services	344.9	231.5	180.6	30.9	31.6
Total	7536.4	5370.8	3689.5	792.0	638.3

Figure 4. Business Operations of Russian IT companies

Russian IT business traditionally very concentrated in Moscow (capital city) and other large cities like Saint-Petersburg, Yekaterinburg, and Novosibirsk. The same situation is reflected in sample companies (Table 2): the biggest amount of IT companies of Russia are located in Moscow – 64.2 % (75.6 % in 2003) and in Saint-Petersburg 13.6 % (12.2 % in 2003).

Table 2. Sample Companies by Location, 2006

Location	Number of companies	% of total	Sales, mln Euro	Employees	Sales per person, 1000 euro	Sales growth, %
Moscow	52	64.2	6997.2	32144	217.9	37.4
Saint-Petersburg	11	13.6	251.2	2148	116.9	41.4
Yekaterinburg	3	3.7	49.4	878	56.3	37.5
Novosibirsk	3	3.7	99.7	2326	42.9	34.6
Perm	3	3.7	43.6	507	85.9	89.5
Kazan	1	1.2	28.4	609	46.6	34.4
Vladivostok	1	1.2	8.2	267	30.7	14.6
Vladikavkaz	1	1.2	0.8	19	41.7	27.7
Murmansk	1	1.2	4.8	65	74.0	26.8
Naberegnye Chelny	1	1.2	21.6	267	81.0	15.5
Nignii Novgorod	1	1.2	23.3	850	27.5	2.0
Irkutsk	1	1.2	4.7	103	45.5	19.5
Petrozavodsk	1	1.2	1.8	126	14.2	

*International Outsourcing Vs. Traditional Internationalization:**Russian Information Technology Companies Experience on Global Markets*

Tolyatti	1	1.2	1.6	91	17.7	18.3
TOTAL	81	100.0	7536.4	40400	64.2	38.1

Source: Companies' data, authors' calculations

However, the closer analysis shows that regional companies have some significant specific features: IT firms in smaller cities employ higher number of workers, and have relatively higher sales figures and sales per employee indicator. In case larger samples of regional IT companies would be available, it would be possible to compare the effectiveness of the Moscow and regional companies.

After the dissolution of the Soviet Union in 1991 number of Russian companies started to increase dramatically. The active establishment of new companies continued in the few next years. In order to study the influence of the establishment year of the company into its effectiveness, we specify 4 time periods. The result of the companies' analysis is put into the Table 3. The first group of 15 companies, created before year 1991 (in the Soviet time) accumulate 18.8 % of the total number of companies. The second largest group of 43 companies created in 1991-1995, just after the dissolution of USSR, represents about 53.8 % of the sample. The third group is formed of 11 firms (13.8 %) established between 1996 and 2000 in the period of intensive growth of Russian economy. The rest 11 companies appeared after 2000 and can be considered as relatively young players in the IT business.

Table 3. Sample Companies by Year of Establishment and by Location

	Companies	before 1991	1991-1995	1996-2000	After 2000
Moscow	52	12	26	10	4
Saint-Petersburg	10		7		3
Yekaterinburg	3	1	1		1
Novosibirsk	3		2		1
Perm	3		1		2
Other cities	9	2	6	1	
Total	80	15	43	11	11

Source: Companies' data, authors' calculations

Naturally, companies from the second group have the largest share in total sales (Table 4) – 50.2 % and the biggest number of workers. The efficiency (in our case, it is sales per employee) of these companies is also twice higher than in the first group, and 3 or 4 times

higher than younger companies. These companies have better managerial experience, more flexible and have not inherited from the soviet time any “bad” habits.

Table 4. Sample Companies by Year of Establishment and economic Indicators

	before 1991	1991-1995	1996-2000	after 2000	Total
Number of Companies	15	42	13	10	80
Sales, mln EUR	3016.6	3786.3	483.2	250.1	7536.2
%of Total	40.0 %	50.2 %	6.4 %	3.3 %	100%
Number of Employees	10684	22964	4013	2722	40383
% of Total	26.5%	56.9%	9.9%	6.7%	100%
Sales per employee; 1000 EUR	686.4	1292.5	315.0	412.4	

Source: Companies' data, authors' calculations

The sales of the largest Russian IT companies were 7.5 billion euros in 2006 (Table 5), what is 38 % more than in year 2005. The average sales amount per company was 94.2 million euros. The sample data includes few companies having rather extremely low or extremely high sales figures. This kind of extreme figures could distort the whole picture. By exclusion of the minimum and the maximum figures the average sales per company would be 85.4 million euros in 2006.

Table 5. Sales of Russian Biggest IT companies, 2002 - 2006

	2006	2005	2004	2003	2002
Sales, mln EUR	7536.4	5370.9	3689.5	792.0	638.3
Average	94.2	89.5	76.9	29.3	33.6
Average excluding min and max	85.4	81.5	69.5	26.3	37.7

Source: Companies' data, authors' calculations

The effectiveness (sales per employee) is analysed in the Table 6. The average sales per employee in 2006 were 158 970 Euro, what is 0.5% less than in 2005 (159 840 Euro per person). However, if to exclude the maximum and minimum meanings, the change is positive. The average sales per employee in this case have increased on 2.7 % compared with year 2005.

Table 6. Sales per employee, 2003 – 2006, 1000 Euro

	2006	2005	Growth, % 2006/2005	2004	Growth, % 2005/2004	2003	Growth, % 2004/2003
Average Sales per employee	159.0	159.8	-0.5 %	182.7	-12.5 %	101.0	80.9 %
Average excluding min and max	155.1	151.0	2.7 %	169.7	-11.1 %	90.7	87.0 %

Source: Companies' data, authors' calculations

Sales data we put into 4 groups according to the scale presented in the Table 7. This shows that 26 companies have sales lower than 10 million euros and have the lowest rate of

International Outsourcing Vs. Traditional Internationalization:**Russian Information Technology Companies Experience on Global Markets**

efficiency –sales of 71.5 thousand euros per employee. In the same time 10 companies, with sales over 200 million euros make 64 % of total sales, employ large number of workers and much more efficient (more that 358 600 Euro per person).

Table 7. Sales per category, 2003 - 2006

	Less than 10 mln EUR	10-50 mln EUR	50-200 mln EUR	More than 200 mln EUR
Number of Companies	26	28	17	10
Sales 2006, mln EUR	126.2	672.0	1929.1	4809.0
% Total	1.7 %	8.9 %	25.6 %	63.8 %
Sales 2005, mln EUR	117.0	394.8	1218.2	3640.8
% Total	2.2 %	7.4 %	22.7 %	67.8 %
Sales 2004, mln EUR	73.4	294.3	1129.8	2192.0
% Total	2.0 %	8.0 %	30.6 %	59.4 %
Sales 2003, mln EUR	54.0	253.5	484.5	
% Total	6.8 %	32.0 %	61.2 %	
Growth 2006/2005 %	34.0%	41.3%	45.3%	26.6%
Number of Employees, 2006	3563	10303	11526	15008
% of total	8.8 %	25.5 %	28.5 %	37.1 %
Sales per employee, 1000 EUR	71.5	106.7	236.1	358.6

Source: Companies' data, authors' calculations

Number of employees in the IT sector in Russia increased by 37 % in 2006 compared with previous year. In 2002 41 largest IT companies employed 11877 people; in 2003 this number increased up to 13842 (15 %). In 2006 number of workers achieved 40383 people. About 36 % of the sample companies (Table 8) employ less than 200 people; about 35 % have from 200 to 500 employees, and about 22 % - from 500 to 1500 people. And only 7.4 % of companies employ more than 1500 people.

Table 8. Number of Employees, 2006

	less than 200	200-500	500-1500	Over 1500
Number of Companies	29	28	18	6
% of total	35.8 %	34.6 %	22.2 %	7.4 %
Sales 2006; mln EUR	314.3	1375.9	3115.2	2730.9
% of total	4.2 %	18.3 %	41.3 %	36.2 %

Source: Companies' data, authors' calculations

The Internationalisation of Largest Russian IT Companies

Based on the available information and authors' previous studies, three types of internationalisation were detected – inward, outward or inward-outward internationalisation.

Inward internationalisation is defined that company is enrolled into international distribution as importing equipment, spare parts and reselling or reprocessing / assembling and distributing inside Russia and possibly in CIS countries.

Outward internationalisation means companies with foreign affiliates, outsourcing companies, companies going to international markets through middlemen or agencies or foreign partners.

Inward-outward internationalisation is defined as combination of inward internationalisation and outward internationalisation, it is often observed in Russian IT holding structures, where company is formed of few companies.

As the initial goal of the study was to analyse the internationalisation of the Russian IT companies, authors have analysed some additional data about the regional and international sales. According to analysis there are three groups of companies based on their head office location:

1. *Local companies* (Table 9) with only 1 office in Moscow, Saint-Petersburg or in regional cities. There are 24 *local* companies and their sales are less than 10 % of total sales.

Table 9. Local Companies

	Number of companies	% of sales	Sales per employee, 1000 Euro
Moscow	17	8.8%	180.4
Saint-Petersburg	1	0.1%	43.6
Region (1-2 offices)	6	0.6%	35.0
Total	24	9.4 %	86.3

Source: Companies' data, authors' calculations

2. *Regional companies* (Table 10) are oriented for sales in regions of Russia and do not have any foreign affiliates. 25 companies have offices in Moscow and wide net of affiliates in regions, what is almost 30 % of total sales. There are also 4 regional companies with no office in Moscow; however their sales are roughly only 1.6 % of total. Regional companies are more effective (sales per employee) than local companies.

Table 10. Regional Companies

	Number of companies	% of sales	Sales per employee, 1000 Euro
Moscow + Regions	25	30.0%	181.4
Regions	4	1.6%	31.3

International Outsourcing Vs. Traditional Internationalization:**Russian Information Technology Companies Experience on Global Markets**

Total	29	31.6%	116.4
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Source: Companies' data, authors' calculations

3. *International companies* (Table 11) are the majority sales wise – almost 60 %. 14 companies have offices in CIS countries (Commonwealth of Independent States) and their sales are of almost 40 % of total. 4 companies have offices in CIS and other countries (sales of almost 18 %). And 5 companies have offices in Europe and some other countries (sales – 1 %). International companies are more effective (sales per employee) than regional companies.

Table 11. International Companies

	Number of companies	% of sales, mln Euro	Sales per employee, 1000 Euro
CIS	14	39.7%	234.9
CIS+EU	2	8.4%	222.9
CIS+others	1	7.7%	184.5
CIS+EU+others	1	0.8%	26.8
EU	3	0.2%	41.8
EU+others	2	0.8%	102.3
Others	4	1.4%	89.1
Total	27	59.1 %	142.9

Source: Companies' data, authors' calculations

International companies have offices in CIS (Ukraine, Kazakhstan, Uzbekistan, Belarus, Azerbaijan, Kirgizstan, Turkmenistan, and others). In Europe companies' offices are located in UK, Czech Republic, Hungary, Lithuania, Switzerland, Germany, Spain, France, Netherlands, Belgium, Luxemburg, Poland, Romania, and Sweden. Except these, companies have offices in USA, Japan, China, South Africa, South Korea, and Mongolia. Company „Columbus IT Partner Russia“ is the affiliate of international company with sales worldwide and local offices located in Moscow, Ukraine and Kazakhstan.

The research indicates that IT companies are international by nature. Only 7 companies out of 80 are not enrolled to international business (Table 12). The rest of firms have one of 3 types of internationalisation. 50 % of companies have *inward internationalisation*, which means that they are distributors of imported equipment, spare part or technology, or resellers reprocessed / assembled inside Russia and in CIS countries. Interesting fact is that 23 of

International Outsourcing Vs. Traditional Internationalization:**Russian Information Technology Companies Experience on Global Markets**

these companies were established between 1991 and 1995 – so they are experienced players on the market.

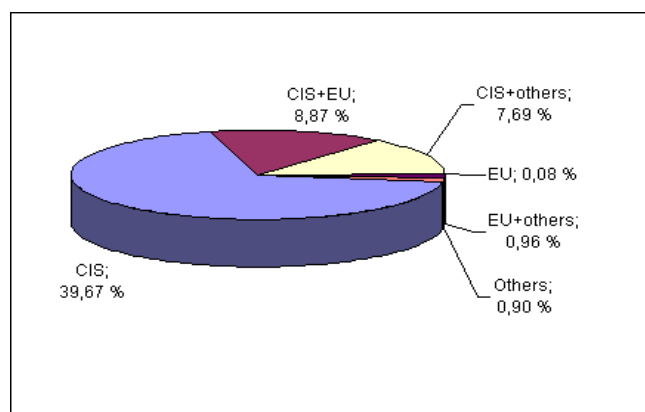
Table 12. Inward / Outward Internationalisation

	before 1991	1991-1995	1996-2000	after 2000	Total
Inward Internationalisation	7	23	5	5	40
Inward / Outward Internationalisation	6	13	4	4	27
Outward Internationalisation	-	3	1	2	6
No Internationalisation	2	4	1	-	7
Total	15	43	11	11	80

Outward internationalisation means – company with foreign affiliates, outsourcing companies, companies going to international markets through middlemen or agencies or foreign partners. There are 6 companies with pure outward operations.

Inward-outward internationalisation means combination of inward internationalisation and outward internationalisation, often observed for holding structures, which means that company is formed of few companies. There are 27 companies with combination of inward and outward international operations. Most of them (13) were also established between 1991 and 1995.

Companies operating on the international markets are specialised in CIS market (Figure 5): almost 40 % of them operate only on CIS market, 9 % more in CIS and in Europe, and 7.7 % more in CIS and in other countries. Roughly 1 % of companies operate on European and other markets, and less than 1% in other countries like USA, Asia, etc.

Figure 5. Countries where Russian IT companies operate

Source: Companies' data, authors' calculations

International Outsourcing Vs. Traditional Internationalization:**Russian Information Technology Companies Experience on Global Markets**

The more detailed analysis of Russian IT companies with solely outward international operations is presented in the Table 13. There are data on company's location, sales, year of establishment, country of operation, availability of outsourcing operations, number of offices and affiliates abroad and location of affiliates.

There is only one company from Moscow in the list, 3 from Saint-Petersburg and 2 regional. Only 2 companies have outsourcing operations. 3 companies (50 %) working through own affiliates abroad and other half work through agents and partners networks. *Kaspersky Laboratory* is large international company, located in Moscow, developing antivirus software. It has 10 affiliates in UK, Germany, France, USA, Japan, South Korea, China, Netherlands, Poland and Romania. *Prognoz* company is software producer and outsourcer to USA and China. *Mirex* produces CDs and distributes them via 55 partners in CIS and in Russia. *Monolit* sells own technology in Russia and CIS countries through offices in Belarus, Kazakhstan and Uzbekistan.

Table 13. Outward Internationalisation

Company	Location	Sales, mln Euro	Year of Establishment	Country	Outsourcing	Offices abroad	Where?
Kaspersky Laboratory	Moscow	31.6	1997	EU, USA, Asia	no	10	EU, USA, Asia
Prognoz	Perm	21.7	1991	USA, China	yes	2	USA, China
Mirex	Ekaterinburg	15.0	2003	CIS	no	0	0
Askon Group	SPb	11.3	2003	CIS	no	4	CIS
Digital Design	SPb	7.6	1992	Eu	yes	0	0
Monolit-Info	SPb	3.1	1991	CIS	no	0	0

Source: Companies' data, authors' calculations

Companies with inward – outward international operations are presented in the Table 14. There are data on company's location, sales, year of establishment, and country of operation, availability of outsourcing operations, number of offices and affiliates abroad and location of affiliates. These companies mostly combine outward operations, like outsourcing and sales abroad, with inward – distribution of imported products and technologies.

IBS Group is few companies, including Luxsoft – large software developer, is mainly specialised in international distribution.

**International Outsourcing Vs. Traditional Internationalization:
Russian Information Technology Companies Experience on Global Markets**

Table 14. Inward / Outward Internationalisation

Company	Location	Sales, mln Euro	Year of Establishment	Country	Outsourcing	Offices abroad	Where?
Lanit	Moscow	668.9	1989	EU, CIS	no	2	Kazakhstan, Ukraine
IBS Group	Moscow	579.6	1992	USA, Canada, UK, Ukraine, Mongolia	yes	5	USA, Canada, UK, CIS, Mongolia, Ukraine, Kazakhstan, Czech republic,
Kvazar-Micro	Moscow	447.1	1990	CIS and East Europe	yes	7	Lithuania, Hungary,
Versell Group	Moscow	360.2	1990	CIS	no	1	Kazakhstan, Ukraine
Krok	Moscow	354.7	1992	CIS	yes		
I-Teko	Moscow	235.0	1997	CIS	yes	1	Kazakhstan
Optima Group	Moscow	173.6	1990	CIS, EU, Africa, Asia	yes		
Compulink Group	Moscow	168.2	1993	CIS, EU	yes	2	Ukraine, Kazakhstan, Ukraine, Kazakhstan,
Infosystem Jet	Moscow	138.3	1991	CIS	no	3	Azerbaijan
NVision Group	Moscow	112.0	2001		no	1	Kazakhstan
IT Group	Moscow	86.3	1990	CIS	no	2	Ukraine, Kazakhstan, Ukraine, Kazakhstan, Azerbaijan, Belarus, Uzbekistan,
Softline Trade	Moscow	77.7	1993	CIS	yes	7	Kirgizstan, Tajikistan, Belarus, Ukraine,
EPAM Systems	Moscow	61.6	1993	CIS, Eastern Europe, EU	yes	9	USA, UK, Germany
Amphora Group	Moscow	31.6	1995		yes	2	Spain, USA
Berkut	Saint-Petersburg	26.4	2001	CIS, EU, Africa, Asia	yes	1	South Africa
Galaktika Corporation	Moscow	26.2	1987		no	1	Ukraine, Kazakhstan, Belarus
Informzatsita	Moscow	25.4	1995	CIS	no	0	0
TelmaSoft	Nizhniy Novgorod	23.3	1991				
Parma Telecom	Perm	19.0	2005	Japan, USA, Cyprus, South America, EU,	yes	0	0
Columbus IT				CIS	yes	0	0
Partner Russia	Moscow	10.8	1997	worldwide	yes	2	Ukraine, Kazakhstan
Reksoft	Saint-Petersburg	9.2	1991	Eu, CIS	Yes	1	Sweden
Ronda Limited	Vladivostok	8.2	1995	USA, India, EU, China, Brazil, Korea	yes	0	0
Gars Telecom	Moscow	7.3	1999	EU, post soviet countries	yes	0	0
Aladdin Software				CIS, Baltic countries	no	2	Kazakhstan, Ukraine
Security R. D.	Moscow	6.3	1995		no	2	Kazakhstan, Ukraine
NetSL	Murmansk	4.8	1991	Sweden	yes	1	Sweden
Naumen	Moscow	4.1	2001	CIS	yes	0	0
InfoIndustries Group	Moscow	1.4	2000	EU	yes	2	UK, France

Amphora Group has started business in 1995 first abroad, and then in 1998 came to Russian market. Galaktika corporation with partners network is distributing own software in 78 towns in Russia and CIS. Informzatsita has 220 partners in distribution in Russia and CIS. Columbus IT Russia is part of large international company. Ronda Limited realise all its international activities just for Motorola company in different countries.

CONCLUSIONS

The goal of the study was to analyse the internationalisation of the 80 largest Russian IT companies. After analysing company data and additional data about the regional and international sales, companies were classified into three groups based on their offices location:

1. *Local companies* (Table 9) with only 1 office in Moscow, Saint-Petersburg or in regional cities. There are 24 *local* companies and their sales are less than 10 % of total sales.

2. *Regional companies* (Table 10) are oriented for sales in regions of Russia and do not have any foreign affiliates. 25 companies have offices in Moscow and wide net of affiliates in regions, what is almost 30 % of total sales. There are also 4 regional companies with no office in Moscow; however their sales are roughly only 1.6 % of total. Regional companies are more effective (sales per employee) than local companies.

3. *International companies* (Table 11) are the majority sales wise – almost 60 %. 14 companies have offices in CIS countries (Commonwealth of Independent States) and their sales are of almost 40 % of total. 4 companies have offices in CIS and other countries (sales of almost 18 %). And 5 companies have offices in Europe and some other countries (sales – 1 %). International companies are more effective (sales per employee) than regional companies.

International companies have offices in CIS (Ukraine, Kazakhstan, Uzbekistan, Belorus, Azerbaijan, Kirgizstan, Turkmenistan, and others). In Europe companies' offices are located in UK, Czech Republic, Hungary, Lithuania, Switzerland, Germany, Spain, France, Netherlands, Belgium, Luxemburg, Poland, Romania, and Sweden. Except these, companies have offices in USA, Japan, China, South Africa, South Korea, and Mongolia.

The research indicates that many Russian IT companies are international by establishment as expected in hypothesis 4. Only 7 companies out of 80 are not enrolled to international business (Table 12). The rest of firms have one of 3 types of internationalisation as tested in

hypothesis 3. Out of this group 50 % of companies have inward internationalisation, what means that they are distributors of imported equipment, spare part or technology, or resellers reprocessed / assembled inside Russia and in CIS countries. Interesting fact is that 23 of these companies were established between 1991 and 1995 – so they are experienced players on the market.

Outward internationalisation means – company with foreign affiliates, outsourcing companies, companies going to international markets through middlemen or agencies or foreign partners. There are 6 companies with pure outward operations.

Inward-outward internationalisation means combination of inward internationalisation and outward internationalisation, often observed for holding companies, when company is formed of few companies. There are 27 companies with combination of inward and outward international operations. Most of them (13) were also established between 1991 and 1995 also early years of economic transition.

Companies operating on the international markets are specialised in CIS market (Figure 5): almost 40 % of them operate only on CIS market, 9 % more in CIS and in Europe, and 7.7 % more in CIS and in other countries. Roughly 1 % of companies operate on European and other markets, and less than 1% in other countries like USA, Asia, etc. Thus it seems as expected in hypothesis 1 that Russian service companies tend to internationalise first to closest and most familiar markets – CIS.

The more detailed analysis of Russian IT companies with outward international operations are presented in the Table 13. There are data on company's location, sales, year of establishment, country of operation, availability of outsourcing operations, number of offices and affiliates abroad and location of affiliates.

It seems that Russian IT companies are growing fast and are becoming more globalised in their business operations. Three kind of internationalisation can be detected – inward, outward

and inward-outward. Companies established in early 90's are leading this trend. The development has been very fast when considering that first companies were established less than twenty years ago. It will be interesting to see when the first truly global players will emerge in Russian ICT business.

We can make assumption that stages model can be applied for analysing of some Russian IT companies internationalising because they mainly internationalise to the nearest and the most familiar market for them - CIS.

Russian IT companies explore also external and internal networks when planning its moves towards international customers. This includes also cooperating with "partner" from the target country. Partner can be agent, middleman, or even business partner in joint venture.

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Cnews agency ratings and publications, 2003 – 2007, www.cnews.ru

Appendix 1. Contact Information of Companies, English web page

Name	email	web
National Computer Corporation (NCC)	question@ncc.ru	www.ncc.ru
IBS Group	consulting@ibs.ru	www.ibs.ru
TechnoServ A / C Group	tsas@technoserv.ru	www.technoserv.ru
R-Style Group	project@hq.r-style.ru	www.group.r-style.ru
Kvazar-Mikro	forinfo@kazar-micro.com	www.kvazar-micro.com
Verysell Group	pr@verysell.ru	www.verysell.ru/
Krok	croc@croc.ru	www.croc.ru
I-Teko	income@I-teco.ru	www.I-teco.ru
Otkrytyeologii-98	info@ot.ru	www.ot.ru
NVision Group	info@nvisiongroup.ru	www.nvisiongroup.ru
Business Computer Center (BCC)	office@bcc.ru	www.bcc.ru

International Outsourcing Vs. Traditional Internationalization:**Russian Information Technology Companies Experience on Global Markets**

B. A. C.	info@bacint.ru	www.bacint.ru/
Inline technologies Group		www.itgrp.ru/
IT Group	info@it.ru	www.it.ru
SoftLine Trade	info@softline.ru	www.softline.ru
TopC Business Integrator	info@topsbi.ru	www.topsbi.ru
EPAM Systems	info@epam-group.ru	www.epam-group.ru
Center of Financial technologies	market@cft.ru	www.cft.ru
FORS Holding	develop@fors.ru	www.fors.ru
Prime Group	info@primegroup.ru	www.primegroup.ru
Sibintek	info@sibintek.ru	www.sibintek.ru
RTSoft	rtsoft@rtsoft.msk.ru	www.rtsoft.ru
Organizatsionno-technologicheskie Resheniya	sev@o-t-r.ru	www.o-t-r.ru
Kaspersky Laboratory	info@kaspersky.com	www.kaspersky.ru
Computer Mechanics	computer@mechanics.ru	www.mechanics.ru
ICL-KPO BC	info@icl.kazan.ru	www.icl.kazan.ru
Berkut	info@bercut.com	www.bercut.com
Dialog Seti	reception@dialogseti.ru	www.dialogseti.ru
Galaktika Corporation	market@galaktika.ru	www.galaktika.ru
Telma Soft	contacts@telma.ru	www.telma.ru
Prognoz	prognoz@prognoz.ru	www.prognoz.ru
Mirex	info@mirex.ru	www.mirex.ru
Askon Group	kompas@ascon.ru	www.ascon.ru
Columbus IT Partner Russia	marketing@columbus.ru	www.columbus.ru
Elvis Plus	press@elvis.ru	www.elvis.ru
Reksoft	info@reksoft.ru	www.reksoft.ru
Ronda Limited	natchi@rhonda.vl.ru	www.rhonda.ru
MCFR Consulting	cons@msfr.ru	www.mcfr-consulting.ru
Digital Design	info@digdes.com	www.digdes.ru
Gars Telecom	info@garstelecom.ru	www.garstelecom.ru
Aladdin Software Security R. D.	aladdin@aladdin.ru	www.aladdin.ru
NetSL	info@netsl.ru	www.netsl.ru
Monolit Info	info@monolit.com	www.monolit.com
Computer Systems for Business (CSBI)	info@csbi.ru	www.csbi.ru
Neosystems Group	info@neosystems.ru	www.neosystems.ru
Info Industries Group	: info@iig.ru	www.iig.ru
Global Alania	office@globalalania.ru	www.globalalania.ru
InformZathsita	market@infosec.ru	www.infosec.ru